

## APPLICATION

Single core insulated conductor, without sheath, for general purposes. Suitable for fixed protected installation in, or on, lighting or control gear for rated voltages up to 450/750 V. Installation in surface mounted or embedded conduits, or similar closed systems.

## CABLE DESIGNATION

Cu / PVC: H07V-U · H07V-R · H07V-K

## CONSTRUCTION CHARACTERISTICS

### Conductor

Copper (plain annealed): Solid class 1: (H07V-U)  
Rigid stranded class 2: (H07V-R)  
Flexible class 5: (H07V-K)

### Insulation

PVC (Polyvinyl chloride)

## GENERAL CHARACTERISTICS

|                                                 |                                                                                                               |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| <b>Construction and test standards</b>          | IEC 60228<br>BS 6004                                                                                          |
| <b>Rated voltage <math>U_0/U</math></b>         | 450/750 V                                                                                                     |
| <b>Test voltage</b>                             | 2500 V a.c. 5 minutes                                                                                         |
| <b>Conductor maximum operating temperature</b>  | 70°C                                                                                                          |
| <b>Maximum short-circuit temperature</b>        | 160°C (t ≤ 5s)                                                                                                |
| <b>Minimum bending radius (mm)</b>              | H07V-U (R) 4 x d if d ≤ 8 · 5 x d if 8 < d ≤ 12 · 6 x d if d > 12<br>H07V-K 3 x d if d ≤ 12 · 4 x d if d > 12 |
| <b>Maximum pulling force over conductor (N)</b> | H07V-U (R) 50 x S<br>H07V-K 15 x S<br>recommended not to exceed 1000 N                                        |
| <b>Flame retardant</b>                          | IEC 60332-1-2 · EN 60332-1-2 (cable vertically mounted, length of charred cable ≤ 540 mm)                     |

S – conductor cross-section (mm<sup>2</sup>)  
d – cable outer diameter (mm)



# LOW VOLTAGE CABLES

## GENERAL WIRING CABLES

H07V-U · H07V-R · H07V-K  
Single Core Non-Sheathed - BS 6004

### ELECTRICAL AND DIMENSIONAL CHARACTERISTICS

| Cable composition<br>n.º cond. x cross-section<br>(mm²) | Approximate<br>outer diameter<br>(mm) | Approximate<br>weight<br>(kg/km) | Current carrying capacity<br>One circuit inside embedded conduits T = 30°C<br>(A) |                      |
|---------------------------------------------------------|---------------------------------------|----------------------------------|-----------------------------------------------------------------------------------|----------------------|
|                                                         |                                       |                                  | 2 charged conductors                                                              | 3 charged conductors |
| H07V-U                                                  |                                       |                                  |                                                                                   |                      |
| 1 x 1.5                                                 | 3.0                                   | 20                               | 17.5                                                                              | 15.5                 |
| 1 x 2.5                                                 | 3.5                                   | 30                               | 24                                                                                | 21                   |
| 1 x 4                                                   | 4.0                                   | 45                               | 32                                                                                | 28                   |
| 1 x 6                                                   | 4.5                                   | 65                               | 41                                                                                | 36                   |
| 1 x 10                                                  | 5.7                                   | 91                               | 57                                                                                | 50                   |
| H07V-R                                                  |                                       |                                  |                                                                                   |                      |
| 1 x 1.5                                                 | 3.0                                   | 20                               | 17.5                                                                              | 15.5                 |
| 1 x 2.5                                                 | 3.7                                   | 35                               | 24                                                                                | 21                   |
| 1 x 4                                                   | 4.2                                   | 50                               | 32                                                                                | 28                   |
| 1 x 6                                                   | 5.0                                   | 70                               | 41                                                                                | 36                   |
| 1 x 10                                                  | 6.5                                   | 110                              | 57                                                                                | 50                   |
| 1 x 16                                                  | 7.5                                   | 180                              | 76                                                                                | 68                   |
| 1 x 25                                                  | 9.0                                   | 265                              | 101                                                                               | 89                   |
| 1 x 35                                                  | 10.0                                  | 350                              | 125                                                                               | 110                  |
| 1 x 50                                                  | 11.5                                  | 490                              | 151                                                                               | 134                  |
| 1 x 70                                                  | 13.5                                  | 695                              | 192                                                                               | 171                  |
| 1 x 95                                                  | 15.5                                  | 960                              | 232                                                                               | 207                  |
| 1 x 120                                                 | 17.0                                  | 1180                             | 269                                                                               | 239                  |
| 1 x 150                                                 | 19.0                                  | 1450                             | 300                                                                               | 262                  |
| 1 x 185                                                 | 21.0                                  | 1825                             | 341                                                                               | 296                  |
| 1 x 240                                                 | 24.0                                  | 2395                             | 400                                                                               | 346                  |
| 1 x 300                                                 | 26.5                                  | 3025                             | 456                                                                               | 394                  |
| 1 x 400                                                 | 30.0                                  | 3845                             | 546                                                                               | 467                  |
| 1 x 500                                                 | 34.0                                  | 4830                             | 626                                                                               | 533                  |
| 1 x 630                                                 | 39.0                                  | 6180                             | 720                                                                               | 611                  |
| H07V-K                                                  |                                       |                                  |                                                                                   |                      |
| 1x1.5                                                   | 3.0                                   | 20                               | 17.5                                                                              | 15.5                 |
| 1 x 2.5                                                 | 3.7                                   | 35                               | 24                                                                                | 21                   |
| 1 x 4                                                   | 4.2                                   | 50                               | 32                                                                                | 28                   |
| 1 x 6                                                   | 5.0                                   | 70                               | 41                                                                                | 36                   |
| 1 x 10                                                  | 6.5                                   | 110                              | 57                                                                                | 50                   |
| 1 x 16                                                  | 7.9                                   | 185                              | 76                                                                                | 68                   |
| 1 x 25                                                  | 9.5                                   | 270                              | 101                                                                               | 89                   |
| 1 x 35                                                  | 11.0                                  | 365                              | 125                                                                               | 110                  |
| 1 x 50                                                  | 13.5                                  | 515                              | 151                                                                               | 134                  |
| 1 x 70                                                  | 15.0                                  | 705                              | 192                                                                               | 171                  |
| 1 x 95                                                  | 16.5                                  | 975                              | 232                                                                               | 207                  |
| 1 x 120                                                 | 18.5                                  | 1185                             | 269                                                                               | 239                  |
| 1 x 150                                                 | 20.5                                  | 1455                             | 300                                                                               | 262                  |
| 1 x 185                                                 | 22.5                                  | 1835                             | 341                                                                               | 296                  |
| 1 x 240                                                 | 28.0                                  | 2410                             | 400                                                                               | 346                  |

Other compositions are available, contact [info@fast-cables.com](mailto:info@fast-cables.com) for information.  
Only one circuit is considered.

