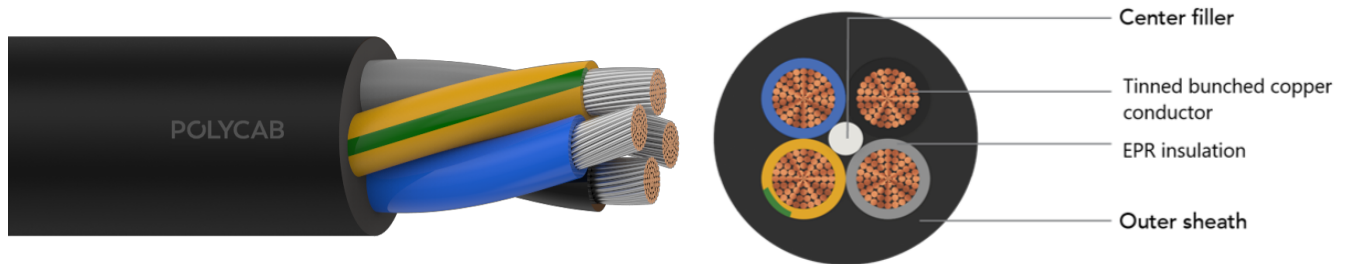


# POLYCAB H07BB-F BS EN 50525-2-21 MC

## Rubber Cable, 450/750 V AC



Images not to scale. Follow table for dimensions

### APPLICATION

POLYCAB H07BB-F heavy-duty cable insulated and sheathed with cross-linked elastomeric compound. This cable fulfils the requirement as per EN 50525-2-21, cables are intended to use for a variety of applications where appliances or equipment, including heavy industrial equipment, require a flexible connection to the power supply.

### CHARACTERISTICS

**Voltage Rating**  
450/750 V

**Operation Temperature**  
Fixed: -15°C to 90°C

### CONSTRUCTION

- Annealed bunched tinned copper conductor as per IEC 60228, class 5
- Insulated with cross-linked elastomeric compound Type EI 6 (EPR) to EN 50363-1.
- Sheath either in a single layer, cross linked elastomeric compound Type EM 6 (EPR) to EN 50363-2-1 or in two layers, with both layers made of cross linked elastomeric compound of Type EM 6 (EPR) to EN 50363-2-1

#### Core Identification

2 core Blue, Brown  
3 core Green/Yellow, Blue, Brown  
4 core Green/Yellow, Brown, Black, Grey  
5 core Green/Yellow, Blue, Brown, Black, Grey

#### Bending Radius

Fixed installation – 8 x Overall diameter

#### Test Voltage

2500V AC at (20±5) °C

### OUTSTANDING FEATURES

- Highly Flexible
- Oil Resistant
- Heat Resistant
- Long Life

### STANDARD FOLLOWS

IEC 60228  
BS EN 50363-1  
BS EN 50363-2-1  
BS EN 50525-2-21  
IEC 60332-1-2

### COMPLIANCE

Conductor Resistance test - IEC 60228  
Insulation Resistance test - EN 50525-2-21  
Test under fire condition - EN 60332-1-2  
Flame retardant properties as per IEC 60332-1-2

### OUR ACCREDITATIONS



### APPROVAL



# POLYCAB H07BB-F BS EN 50525-2-21 MC

## Rubber Cable, 450/750 V AC

### Weight & Dimension Data

| Product Code          | Construction (n x mm <sup>2</sup> ) | Overall Diameter (mm) | Weight (Approx.) (kg/km) | POLYCAB/DOWEL Gland Size |
|-----------------------|-------------------------------------|-----------------------|--------------------------|--------------------------|
| RCBS06TRUEARE001C1.5S | 1 x 1.5                             | 5.96                  | 49                       | -                        |
| RCBS06TRUEARE001C2.5S | 1 x 2.5                             | 6.62                  | 65                       | DBW - 01SS (UN)          |
| RCBS06TRUEARE001C004S | 1 x 4                               | 7.56                  | 91                       | DBW - 01SS (UN)          |
| RCBS06TRUEARE001C006S | 1 x 6                               | 8.33                  | 118                      | DBW - 01SS (UN)          |
| RCBS06TRUEARE001C010S | 1 x 10                              | 10.08                 | 183                      | DBW - 01SS (UN)          |
| RCBS06TRUEARE001C016S | 1 x 16                              | 11.32                 | 254                      | DBW - 01SS (UN)          |
| RCBS06TRUEARE001C025S | 1 x 25                              | 13.18                 | 367                      | DBW - 01S (UN)           |
| RCBS06TRUEARE001C035S | 1 x 35                              | 14.78                 | 488                      | DBW - 01A (UN)           |
| RCBS06TRUEARE001C050S | 1 x 50                              | 17.07                 | 677                      | DBW - 01A (UN)           |
| RCBS06TRUEARE001C070S | 1 x 70                              | 19.15                 | 905                      | DBW - 02 (UN)            |
| RCBS06TRUEARE001C095S | 1 x 95                              | 21.74                 | 1202                     | DBW - 02 (UN)            |
| RCBS06TRUEARE001C120S | 1 x 120                             | 23.68                 | 1477                     | DBW - 04A (UN)           |
| RCBS06TRUEARE001C150S | 1 x 150                             | 26.01                 | 1802                     | DBW - 05A (UN)           |
| RCBS06TRUEARE001C185S | 1 x 185                             | 28.69                 | 2235                     | DBW - 05A (UN)           |
| RCBS06TRUEARE001C240S | 1 x 240                             | 31.63                 | 2808                     | DBW - 06 SP (UN)         |
| RCBS06TRUEARE001C300S | 1 x 300                             | 34.67                 | 3478                     | DBW - 07 SP (UN)         |
| RCBS06TRUEARE001C400S | 1 x 400                             | 38.92                 | 4542                     | DBW - 08 (UN)            |
| RCBS06TRUEARE001C500S | 1 x 500                             | 42.74                 | 5600                     | DBW - 09 (UN)            |
| RCBS06TRUEARE001C630S | 1 x 630                             | 46.46                 | 6906                     | DBW - 010A (UN)          |
| RCBS06TRUEARE002C001S | 2 x 1                               | 8.38                  | 91                       | DBW - 01SS (UN)          |
| RCBS06TRUEARE002C1.5S | 2 x 1.5                             | 9.32                  | 116                      | DBW - 01SS (UN)          |
| RCBS06TRUEARE002C2.5S | 2 x 2.5                             | 11.03                 | 168                      | DBW - 01SS (UN)          |
| RCBS06TRUEARE002C004S | 2 x 4                               | 12.72                 | 234                      | DBW - 01S (UN)           |
| RCBS06TRUEARE002C006S | 2 x 6                               | 14.27                 | 308                      | DBW - 01A (UN)           |
| RCBS06TRUEARE002C010S | 2 x 10                              | 19.16                 | 547                      | DBW - 02 (UN)            |
| RCBS06TRUEARE002C016S | 2 x 16                              | 21.64                 | 742                      | DBW - 02 (UN)            |
| RCBS06TRUEARE002C025S | 2 x 25                              | 25.57                 | 1072                     | DBW - 05A (UN)           |

# POLYCAB H07BB-F BS EN 50525-2-21 MC

## Rubber Cable, 450/750 V AC

| Product Code         | Construction (n x mm <sup>2</sup> ) | Overall Diameter (mm) | Weight (Approx.) (kg/km) | POLYCAB/DOWEL Gland Size |
|----------------------|-------------------------------------|-----------------------|--------------------------|--------------------------|
| RCBS06TRUARE003C001S | 3 x 1                               | 9.04                  | 111                      | DBW - 01SS (UN)          |
| RCBS06TRUARE003C1.5S | 3 x 1.5                             | 10.03                 | 141                      | DBW - 01SS (UN)          |
| RCBS06TRUARE003C2.5S | 3 x 2.5                             | 11.84                 | 206                      | DBW - 01SS (UN)          |
| RCBS06TRUARE003C004S | 3 x 4                               | 13.65                 | 288                      | DBW - 01S (UN)           |
| RCBS06TRUARE003C006S | 3 x 6                               | 15.29                 | 383                      | DBW - 01A (UN)           |
| RCBS06TRUARE003C010S | 3 x 10                              | 20.59                 | 681                      | DBW - 02 (UN)            |
| RCBS06TRUARE003C016S | 3 x 16                              | 23.24                 | 934                      | DBW - 04A (UN)           |
| RCBS06TRUARE003C025S | 3 x 25                              | 27.44                 | 1356                     | DBW - 05A (UN)           |
| RCBS06TRUARE003C035S | 3 x 35                              | 30.61                 | 1777                     | DBW - 06 SP (UN)         |
| RCBS06TRUARE003C050S | 3 x 50                              | 35.51                 | 2458                     | DBW - 08 (UN)            |
| RCBS06TRUARE003C070S | 3 x 70                              | 39.74                 | 3245                     | DBW - 08 (UN)            |
| RCBS06TRUARE003C095S | 3 x 95                              | 45.46                 | 4323                     | DBW - 010A (UN)          |
| RCBS06TRUARE003C120S | 3 x 120                             | 49.38                 | 5269                     | DBW - 010A (UN)          |
| RCBS06TRUARE003C150S | 3 x 150                             | 54.36                 | 6430                     | DBW - 011 SP (UN)        |
| RCBS06TRUARE003C185S | 3 x 185                             | 60.09                 | 7966                     | DBW - 012 (UN)           |
| RCBS06TRUARE003C240S | 3 x 240                             | 67.4                  | 10128                    | DBW - 013 (UN)           |
| RCBS06TRUARE003C300S | 3 x 300                             | 74.74                 | 12624                    | DBW - 014 (UN)           |
| RCBS06TRUARE004C001S | 4 x 1                               | 9.99                  | 137                      | DBW - 01SS (UN)          |
| RCBS06TRUARE004C1.5S | 4 x 1.5                             | 11.05                 | 175                      | DBW - 01SS (UN)          |
| RCBS06TRUARE004C2.5S | 4 x 2.5                             | 13.03                 | 255                      | DBW - 01S (UN)           |
| RCBS06TRUARE004C004S | 4 x 4                               | 15.03                 | 360                      | DBW - 01A (UN)           |
| RCBS06TRUARE004C006S | 4 x 6                               | 17.03                 | 487                      | DBW - 01A (UN)           |
| RCBS06TRUARE004C010S | 4 x 10                              | 22.48                 | 841                      | DBW - 04A (UN)           |
| RCBS06TRUARE004C016S | 4 x 16                              | 25.39                 | 1161                     | DBW - 05A (UN)           |
| RCBS06TRUARE004C025S | 4 x 25                              | 30.43                 | 1722                     | DBW - 06 SP (UN)         |
| RCBS06TRUARE004C035S | 4 x 35                              | 33.91                 | 2259                     | DBW - 07 SP (UN)         |
| RCBS06TRUARE004C050S | 4 x 50                              | 39.3                  | 3126                     | DBW - 08 (UN)            |
| RCBS06TRUARE004C070S | 4 x 70                              | 44.17                 | 4155                     | DBW - 010A (UN)          |
| RCBS06TRUARE004C095S | 4 x 95                              | 50.86                 | 5577                     | DBW - 010A (UN)          |

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# POLYCAB H07BB-F BS EN 50525-2-21 MC

## Rubber Cable, 450/750 V AC

| Product Code         | Construction (n x mm <sup>2</sup> ) | Overall Diameter (mm) | Weight (Approx.) (kg/km) | POLYCAB/DOWEL Gland Size |
|----------------------|-------------------------------------|-----------------------|--------------------------|--------------------------|
| RCBS06TRUARE004C120S | 4 x 120                             | 54.78                 | 6748                     | DBW - 011 SP (UN)        |
| RCBS06TRUARE004C150S | 4 x 150                             | 60.46                 | 8258                     | DBW - 012 (UN)           |
| RCBS06TRUARE004C185S | 4 x 185                             | 66.98                 | 10259                    | DBW - 013 (UN)           |
| RCBS06TRUARE004C240S | 4 x 240                             | 75                    | 13028                    | DBW - 014 (UN)           |
| RCBS06TRUARE004C300S | 4 x 300                             | 83.29                 | 16265                    | DBW - 015 (UN)           |
| RCBS06TRUARE005C001S | 5 x 1                               | 11                    | 146                      | DBW - 01SS (UN)          |
| RCBS06TRUARE005C1.5S | 5 x 1.5                             | 12.13                 | 188                      | DBW - 01SS (UN)          |
| RCBS06TRUARE005C2.5S | 5 x 2.5                             | 14.3                  | 274                      | DBW - 01A (UN)           |
| RCBS06TRUARE005C004S | 5 x 4                               | 16.71                 | 393                      | DBW - 01A (UN)           |
| RCBS06TRUARE005C006S | 5 x 6                               | 18.86                 | 535                      | DBW - 02 (UN)            |
| RCBS06TRUARE005C010S | 5 x 10                              | 24.69                 | 921                      | DBW - 04A (UN)           |
| RCBS06TRUARE005C016S | 5 x 16                              | 28.1                  | 1290                     | DBW - 05A (UN)           |
| RCBS06TRUARE005C025S | 5 x 25                              | 33.6                  | 1908                     | DBW - 07 SP (UN)         |
| RCBS06TRUARE005C035S | 5 x 35                              | 37.21                 | 2493                     | DBW - 08 (UN)            |
| RCBS06TRUARE005C050S | 5 x 50                              | 43.54                 | 3487                     | DBW - 010A (UN)          |
| RCBS06TRUARE005C070S | 5 x 70                              | 49.08                 | 4667                     | DBW - 010A (UN)          |
| RCBS06TRUARE005C095S | 5 x 95                              | 56.18                 | 6227                     | DBW - 011 SP (UN)        |
| RCBS06TRUARE005C120S | 5 x 120                             | 60.33                 | 7521                     | DBW - 012 (UN)           |
| RCBS06TRUARE005C150S | 5 x 150                             | 66.55                 | 9194                     | DBW - 013 (UN)           |
| RCBS06TRUARE005C185S | 5 x 185                             | 73.92                 | 11449                    | DBW - 014 (UN)           |
| RCBS06TRUARE005C240S | 5 x 240                             | 82.69                 | 14535                    | DBW - 015 (UN)           |
| RCBS06TRUARE005C300S | 5 x 300                             | 91.78                 | 18147                    | DBW - 015 (UN)           |

• DBW – Weatherproof series

**Electrical characteristics**

**Current carrying capacity H07BB-F (1 mm<sup>2</sup> to 2.5 mm<sup>2</sup>)**

| Nominal cross sectional area<br>mm <sup>2</sup> | Current-carrying capacity |                          | Max. DC conductor resistance at 20°C<br>Ω/km |
|-------------------------------------------------|---------------------------|--------------------------|----------------------------------------------|
|                                                 | Single-phase a.c.<br>Amp. | Three-phase a.c.<br>Amp. |                                              |
| 1                                               | 10                        | 10                       | 20                                           |
| 1.5                                             | 16                        | 16                       | 13.7                                         |
| 2.5                                             | 25                        | 20                       | 8.21                                         |

**Current carrying capacity H07BB-F (4 mm<sup>2</sup> to 630 mm<sup>2</sup>)**

| Nominal cross sectional area<br>mm <sup>2</sup> | Single-phase a.c. or d.c.<br>1 two-core cable, with or without protective conductor<br>Amp. | Three-phase a.c.<br>1 three-core, four-core or five-core<br>Amp. | Single-phase a.c. or d.c.<br>2 single-core cables, touching<br>Amp. | Max. DC conductor resistance at 20°C<br>Ω/km |
|-------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------|
|                                                 |                                                                                             |                                                                  |                                                                     |                                              |
| 4                                               | 42                                                                                          | 37                                                               | —                                                                   | 5.09                                         |
| 6                                               | 55                                                                                          | 49                                                               | —                                                                   | 3.39                                         |
| 10                                              | 76                                                                                          | 66                                                               | —                                                                   | 1.95                                         |
| 16                                              | 103                                                                                         | 89                                                               | —                                                                   | 1.24                                         |
| 25                                              | 136                                                                                         | 119                                                              | —                                                                   | 0.795                                        |
| 35                                              | —                                                                                           | 146                                                              | 200                                                                 | 0.565                                        |
| 50                                              | —                                                                                           | 177                                                              | 250                                                                 | 0.393                                        |
| 70                                              | —                                                                                           | 225                                                              | 310                                                                 | 0.277                                        |
| 95                                              | —                                                                                           | 273                                                              | 369                                                                 | 0.21                                         |
| 120                                             | —                                                                                           | 316                                                              | 432                                                                 | 0.164                                        |
| 150                                             | —                                                                                           | 363                                                              | 497                                                                 | 0.132                                        |
| 185                                             | —                                                                                           | 414                                                              | 567                                                                 | 0.108                                        |
| 240                                             | —                                                                                           | 487                                                              | 673                                                                 | 0.0817                                       |
| 300                                             | —                                                                                           | 560                                                              | 773                                                                 | 0.0654                                       |
| 400                                             | —                                                                                           | —                                                                | 924                                                                 | 0.0495                                       |
| 500                                             | —                                                                                           | —                                                                | 1,062                                                               | 0.0391                                       |
| 630                                             | —                                                                                           | —                                                                | 1,242                                                               | 0.0292                                       |

Ambient temperature: 30°C

Maximum conductor operating temperature: 90°C

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The above table in accordance with Table 4F3A & 4F2A of BS 7671

De-Rating Factor

De-Rating factor of 90°C thermosetting insulated cable

|                  |      |      |      |      |      |      |      |      |      |      |      |
|------------------|------|------|------|------|------|------|------|------|------|------|------|
| Air Temperature  | 35°C | 40°C | 45°C | 50°C | 55°C | 60°C | 65°C | 70°C | 75°C | 80°C | 85°C |
| De-Rating Factor | 0.95 | 0.91 | 0.86 | 0.82 | 0.76 | 0.7  | 0.64 | 0.57 | 0.5  | 0.4  | 0.28 |

