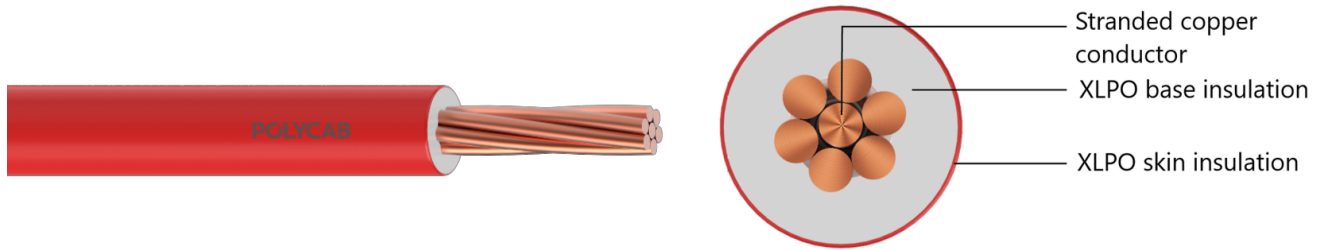


POLYCAB H07Z-R BS EN 50525-3-41

Industrial Cable, 450/750 V AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB H07Z-R BS EN 50525-3-41 SC stranded copper conductor insulated with halogen free cross-linked compound with low smoke emission and corrosive gases when exposed to fire condition, fulfils the requirement of BS EN 50525-3-41. This Cable is intended to use for fixed wiring application in electric panels and switch boards.

CHARACTERISTICS

Voltage Rating
450/750 V

Operation Temperature
Fixed: 0°C to 90°C

CONSTRUCTION

- Annealed stranded copper conductor as per IEC 60228, class 2
- Insulated with cross linked polyolefin material Type EI 5 to EN 50363-5

Core Identification

Black/Blue/Brown/Grey/Orange/Pink/Red /Turquoise/Violet/White

Bending Radius

Fixed installation – 8 x Overall Dia

Test Voltage

2500V AC at (20±5) °C

OUTSTANDING FEATURES

- Highly Flexible
- Good Insulation Resistance
- Halogen Free
- Low Smoke

STANDARD FOLLOWS

IEC 60228
BS EN 50363-5
BS EN 50525-3-41
IEC 60332-1-2

COMPLIANCE

Conductor resistance test - IEC 60228
Insulation resistance - EN 50525-3-41
Smoke emission test - EN 61034-2
Test on vertical flame - EN 60332-1-2

OUR ACCREDITATIONS



APPROVAL



Weight & Dimension Data

| Product Code | Nominal cross sectional area mm ² | Minimum insulation thickness mm | Overall Diameter (Approx.) mm | Weight (Approx.) kg/km | POLYCAB/DOWEL Gland Size |
|----------------------|--|---------------------------------|-------------------------------|------------------------|--------------------------|
| LDBS06CLUALC001C1.5S | 1.5 | 0.7 | 2.99 | 21 | - |
| LDBS06CLUALC001C2.5S | 2.5 | 0.8 | 3.61 | 32 | - |
| LDBS06CLUALC001C004S | 4 | 0.8 | 4.18 | 48 | - |
| LDBS06CLUALC001C006S | 6 | 0.8 | 4.72 | 67 | - |
| LDBS06CLUALC001C010S | 10 | 1 | 6.05 | 112 | DBW - 01SS (UN) |
| LDBS06CLUALC001C016S | 16 | 1 | 7.10 | 169 | DBW - 01SS (UN) |
| LDBS06CLUALC001C025S | 25 | 1.2 | 8.82 | 266 | DBW - 01SS (UN) |
| LDBS06CLUALC001C035S | 35 | 1.2 | 9.96 | 360 | DBW - 01SS (UN) |
| LDBS06CLUALC001C050S | 50 | 1.4 | 11.95 | 514 | DBW - 01SS (UN) |
| LDBS06CLUALC001C070S | 70 | 1.4 | 13.60 | 701 | DBW - 01S (UN) |
| LDBS06CLUALC001C095S | 95 | 1.6 | 15.80 | 952 | DBW - 01A (UN) |
| LDBS06CLUALC001C120S | 120 | 1.6 | 17.41 | 1189 | DBW - 02 (UN) |
| LDBS06CLUALC001C150S | 150 | 1.8 | 19.49 | 1488 | DBW - 02 (UN) |
| LDBS06CLUALC001C185S | 185 | 2 | 21.64 | 1834 | DBW - 02 (UN) |
| LDBS06CLUALC001C240S | 240 | 2.2 | 24.49 | 2371 | DBW - 04A (UN) |
| LDBS06CLUALC001C300S | 300 | 2.4 | 27.3 | 2960 | DBW - 05A (UN) |
| LDBS06CLUALC001C400S | 400 | 2.6 | 31.12 | 3907 | DBW - 06 SP (UN) |
| LDBS06CLUALC001C500S | 500 | 2.8 | 34.67 | 4897 | DBW - 07 SP (UN) |
| LDBS06CLUALC001C630S | 630 | 2.8 | 38.27 | 6123 | DBW - 08 (UN) |

- DBW – Weather proof series

POLYCAB H07Z-R BS EN 50525-3-41

Industrial Cable, 450/750 V AC

Electrical Characteristics

Current carrying capacity and Max DC conductor resistance.

| Nominal cross sectional area | Reference Method A (enclosed in conduit in thermally insulating wall etc.) | | Reference Method B (enclosed in conduit on a wall or in trunking etc.) | | Reference Method C (clipped direct) | | Reference Method F (in free air or on a perforated cable tray etc horizontal or vertical etc.) | | | Reference Method G (in free air) | | Maximum DC conductor resistance at 20°C | |
|------------------------------|--|---------------------------------|--|---------------------------------|---|--|--|---------------------------------|------------------------------------|---|------------|---|--------|
| | | | | | | | Touching | | | Spaced by one cable diameter | | | |
| | 2 cables, single-phase a.c. or d.c. | 3 or 4 cables, three-phase a.c. | 2 cables, single-phase a.c. or d.c. | 3 or 4 cables, three-phase a.c. | 2 cables, single-phase a.c. or d.c. flat and touching | 3 or 4 cables, three-phase a.c. flat and touching or trefoil | 2 cables, single-phase a.c. or d.c. flat | 3 cables, three-phase a.c. flat | 3 cables, three-phase a.c. trefoil | 2 cables, single-phase a.c. or d.c. or 3 cables three-phase a.c. flat | | | |
| | | | | | | | | | | | Horizontal | Vertical | |
| mm² | Amp. | Amp. | Amp. | Amp. | Amp. | Amp. | Amp. | Amp. | Amp. | Amp. | Amp. | Amp. | Ω/km |
| 1 | 14 | 13 | 17 | 15 | 19 | 17.5 | — | — | — | — | — | — | 18.1 |
| 1.5 | 19 | 17 | 23 | 20 | 25 | 23 | — | — | — | — | — | — | 12.1 |
| 2.5 | 26 | 23 | 31 | 28 | 34 | 31 | — | — | — | — | — | — | 7.41 |
| 4 | 35 | 31 | 42 | 37 | 46 | 41 | — | — | — | — | — | — | 4.61 |
| 6 | 45 | 40 | 54 | 48 | 59 | 54 | — | — | — | — | — | — | 3.08 |
| 10 | 61 | 54 | 75 | 66 | 81 | 74 | — | — | — | — | — | — | 1.83 |
| 16 | 81 | 73 | 100 | 88 | 109 | 99 | — | — | — | — | — | — | 1.15 |
| 25 | 106 | 95 | 133 | 117 | 143 | 130 | 161 | 141 | 135 | 182 | 161 | — | 0.727 |
| 35 | 131 | 117 | 164 | 144 | 176 | 161 | 200 | 176 | 169 | 226 | 201 | — | 0.524 |
| 50 | 158 | 141 | 198 | 175 | 228 | 209 | 242 | 216 | 207 | 275 | 246 | — | 0.387 |
| 70 | 200 | 179 | 253 | 222 | 293 | 268 | 310 | 279 | 268 | 353 | 318 | — | 0.268 |
| 95 | 241 | 216 | 306 | 269 | 355 | 326 | 377 | 342 | 328 | 430 | 389 | — | 0.193 |
| 120 | 278 | 249 | 354 | 312 | 413 | 379 | 437 | 400 | 383 | 500 | 454 | — | 0.153 |
| 150 | 318 | 285 | 393 | 342 | 476 | 4036 | 504 | 464 | 444 | 577 | 527 | — | 0.124 |
| 185 | 362 | 324 | 449 | 384 | 545 | 500 | 575 | 533 | 510 | 661 | 605 | — | 0.0991 |
| 240 | 424 | 380 | 528 | 450 | 644 | 590 | 679 | 634 | 607 | 781 | 719 | — | 0.0754 |
| 300 | 486 | 435 | 603 | 514 | 743 | 681 | 783 | 736 | 703 | 902 | 833 | — | 0.0601 |
| 400 | — | — | 683 | 584 | 868 | 793 | 940 | 868 | 823 | 1,085 | 1,008 | — | 0.047 |
| 500 | — | — | 783 | 666 | 990 | 904 | 1,083 | 998 | 946 | 1,253 | 1,169 | — | 0.0366 |
| 630 | — | — | 900 | 764 | 1,130 | 1,033 | 1,254 | 1,151 | 1,088 | 1,454 | 1,362 | — | 0.0283 |

The ambient temperature is 30°C.
Conductor operating temperature 90°C.
The above table is in accordance with Table 4E1A of BS 7671:2018

De-Rating Factor
De-rating factor for 90°C thermosetting insulated cable

| | | | | | |
|------------------|--------------|------|------|------|------|
| Air Temperature | 35°C to 50°C | 55°C | 60°C | 65°C | 70°C |
| De-Rating Factor | 1 | 0.96 | 0.83 | 0.67 | 0.47 |

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