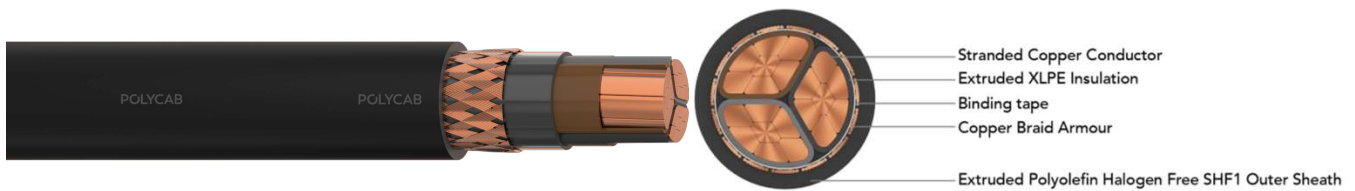


POLYCAB MARINE IEC 60092-353 0.6/1.0 kV ARM

Armoured Power and Control Cable, 0.6/1.0 (1.2) kV AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB MARINE Single and Multicore core Armoured Power and Control cable is suitable to use in fixed installation in power, lighting and control circuits on sea vessels and offshore platforms

CHARACTERISTICS

Voltage Rating

0.6/1.0 (1.2) KV AC

Operation Temperature

-30°C to +90°C

Short Circuit Temp. 250°C

Bending Radius

Min. 6D (8D for sector shaped conductors);

D is cable diameter

Test Voltage

3500V AC at (20±5)°C

OUTSTANDING FEATURES

- Halogen Free
- Reduced Flame Propagation
- Flame Retardant
- Low Smoke Emission

STANDARD FOLLOWS

IEC 60228:2005

IEC 60092-350:2020

IEC 60092-352:

IEC 60092-353:2016

IEC 60092-360:2014

COMPLIANCE

| | |
|----------------------|---------------------------|
| Fire Retardant | IEC 60332-3-22 (Cat.A) |
| Flame Retardant | IEC 60332-1-2 |
| Halogen free | IEC 60754-1 / IEC 60684-2 |
| Corrosivity of Gases | IEC 60754-2 |
| Smoke Density | IEC 61034-1 and 2 |

CONSTRUCTION

- Annealed plain stranded copper conductor as per IEC 60228, Class-2 (Class-5 / tinned on request),
- Extruded XLPE Insulation, (Extruded HEPR Insulation available on demand)
- Insulated Cores assembled together
- Annealed plain Copper Braid Armour / Screen,
- Extruded Polyolefin HF-SHF1 Outer Sheath(HF-SHF2 on request),

Core Identification

- 1 core: black;
- 2 core: brown, blue;
- 3 core: brown, black, grey;
- 3G core: brown, blue, green/yellow;
- 4 core: brown, black, grey, blue;
- 4G core: brown, black, grey, green/yellow;
- 5 core: brown, black, grey, blue, black
- 5G core: brown, black, grey, blue, green/yellow;
- 7 to 37C core: Black/White cores with number printing, except last core i.e. Green-Yellow

OUR ACCREDITATIONS



APPROVAL



NOTES

Colour: Black.(other colours available on request).
Fillers / Inner covering / Binding tape optional)

POLYCARB MARINE IEC 60092-353 0.6/1.0 kV ARM

Armoured Power and Control Cable, 0.6/1.0 (1.2) kV AC

DIMENSIONS AND WEIGHTS:

| Product Code | No. of Cores | Cross Sectional Area (mm ²) | Nom. Insulation Thickness (mm) | Nom. Braid Wire Dia. (mm) | Nom. Cable Overall Dia. (mm) | Cable Weight Approx. (kg / km) |
|---------------------------|--------------|---|--------------------------------|---------------------------|------------------------------|--------------------------------|
| BCIE07CXCBEV01C1.5SSAXXXP | 1 | 1.5 | 0.7 | 0.2 | 6 | 60 |
| BCIE07CXCBEV01C2.5SSAXXXP | 1 | 2.5 | 0.7 | 0.2 | 6.4 | 75 |
| BCIE07CXCBEV01C004SSAXXXP | 1 | 4 | 0.7 | 0.2 | 7 | 95 |
| BCIE07CXCBEV01C006SSAXXXP | 1 | 6 | 0.7 | 0.2 | 7.5 | 120 |
| BCIE07CXCBEV01C010SSAXXXP | 1 | 10 | 0.7 | 0.2 | 8.5 | 170 |
| BCIE07CXCBEV01C016SSAXXXP | 1 | 16 | 0.7 | 0.2 | 9.7 | 240 |
| BCIE07CXCBEV01C025SSAXXXP | 1 | 25 | 0.9 | 0.2 | 11.5 | 350 |
| BCIE07CXCBEV01C035SSAXXXP | 1 | 35 | 0.9 | 0.2 | 12.8 | 460 |
| BCIE07CXCBEV01C050SSAXXXP | 1 | 50 | 1 | 0.2 | 14.5 | 625 |
| BCIE07CXCBEV01C070SSAXXXP | 1 | 70 | 1.1 | 0.3 | 17 | 880 |
| BCIE07CXCBEV01C095SSAXXXP | 1 | 95 | 1.1 | 0.3 | 19 | 1150 |
| BCIE07CXCBEV01C120SSAXXXP | 1 | 120 | 1.2 | 0.3 | 21 | 1425 |
| BCIE07CXCBEV01C150SSAXXXP | 1 | 150 | 1.4 | 0.3 | 23 | 1745 |
| BCIE07CXCBEV01C185SSAXXXP | 1 | 185 | 1.6 | 0.3 | 25.4 | 2125 |
| BCIE07CXCBEV01C240SSAXXXP | 1 | 240 | 1.7 | 0.3 | 28.2 | 2700 |
| BCIE07CXCBEV01C300SSAXXXP | 1 | 300 | 1.8 | 0.3 | 31 | 3325 |
| BCIE07CXCBEV02C1.5SSAXXXP | 2 | 1.5 | 0.7 | 0.2 | 9.3 | 125 |
| BCIE07CXCBEV02C2.5SSAXXXP | 2 | 2.5 | 0.7 | 0.2 | 10.1 | 145 |
| BCIE07CXCBEV02C004SSAXXXP | 2 | 4 | 0.7 | 0.2 | 11.3 | 190 |
| BCIE07CXCBEV02C006SSAXXXP | 2 | 6 | 0.7 | 0.2 | 12.5 | 260 |
| BCIE07CXCBEV02C010SSAXXXP | 2 | 10 | 0.7 | 0.2 | 14.4 | 365 |
| BCIE07CXCBEV02C016SSAXXXP | 2 | 16 | 0.7 | 0.3 | 17.2 | 555 |
| BCIE07CXCBEV02C025SSAXXXP | 2 | 25 | 0.9 | 0.3 | 21.1 | 830 |
| BCIE07CXCBEV02C035SSAXXXP | 2 | 35 | 0.9 | 0.3 | 23.4 | 1065 |
| BCIE07CXCBEV02C050SSAXXXP | 2 | 50 | 1 | 0.3 | 27.2 | 1460 |
| BCIE07CXCBEV02C070SSAXXXP | 2 | 70 | 1.1 | 0.3 | 31.3 | 1960 |
| BCIE07CXCBEV02C095SSAXXXP | 2 | 95 | 1.1 | 0.3 | 35 | 2545 |
| BCIE07CXCBEV02C120SSAXXXP | 2 | 120 | 1.2 | 0.3 | 38.8 | 3140 |
| BCIE07CXCBEV02C150SSAXXXP | 2 | 150 | 1.4 | 0.4 | 43.8 | 3995 |
| BCIE07CXCBEV02C185SSAXXXP | 2 | 185 | 1.6 | 0.4 | 48.4 | 4870 |
| BCIE07CXCBEV02C240SSAXXXP | 2 | 240 | 1.7 | 0.4 | 54.1 | 6165 |

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POLYCAB MARINE IEC 60092-353 0.6/1.0 kV ARM

Armoured Power and Control Cable, 0.6/1.0 (1.2) kV AC

| Product Code | No. of Cores | Cross Sectional Area (mm ²) | Nom. Insulation Thickness (mm) | Nom. Braid Wire Dia. (mm) | Nom. Cable Overall Dia. (mm) | Cable Weight Approx. (kg / km) |
|---------------------------|--------------|---|--------------------------------|---------------------------|------------------------------|--------------------------------|
| BCIE07CXCBEV03C1.5SSAXXXP | 3 | 1.5 | 0.7 | 0.2 | 9.8 | 140 |
| BCIE07CXCBEV03C2.5SSAXXXP | 3 | 2.5 | 0.7 | 0.2 | 10.7 | 180 |
| BCIE07CXCBEV03C004SSAXXXP | 3 | 4 | 0.7 | 0.2 | 12.1 | 245 |
| BCIE07CXCBEV03C006SSAXXXP | 3 | 6 | 0.7 | 0.2 | 13.3 | 315 |
| BCIE07CXCBEV03C010SSAXXXP | 3 | 10 | 0.7 | 0.3 | 16 | 500 |
| BCIE07CXCBEV03C016SSAXXXP | 3 | 16 | 0.7 | 0.3 | 18.5 | 710 |
| BCIE07CXCBEV03C025SSAXXXP | 3 | 25 | 0.9 | 0.3 | 22.4 | 1050 |
| BCIE07CXCBEV03C035SSAXXXP | 3 | 35 | 0.9 | 0.3 | 25.1 | 1380 |
| BCIE07CXCBEV03C050SSAXXXP | 3 | 50 | 1 | 0.3 | 28.9 | 1885 |
| BCIE07CXCBEV03C070SSAXXXP | 3 | 70 | 1.1 | 0.3 | 33.5 | 2565 |
| BCIE07CXCBEV03C095SSAXXXP | 3 | 95 | 1.1 | 0.3 | 37.6 | 3360 |
| BCIE07CXCBEV03C120SSAXXXP | 3 | 120 | 1.2 | 0.4 | 42.3 | 4285 |
| BCIE07CXCBEV03C150SSAXXXP | 3 | 150 | 1.4 | 0.4 | 46.9 | 5275 |
| BCIE07CXCBEV03C185SSAXXXP | 3 | 185 | 1.6 | 0.4 | 52 | 6440 |
| BCIE07CXCBEV03C240SSAXXXP | 3 | 240 | 1.7 | 0.4 | 58 | 8185 |
| BCIE07CXCBEV03C300SSAXXXP | 3 | 300 | 1.8 | 0.4 | 64 | 10085 |
| BCIE07CXCBEV03C035SSAXXXP | 3 | 35 * | 0.9 | 0.3 | 20.8 | 1280 |
| BCIE07CXCBEV03C050SSAXXXP | 3 | 50 * | 1 | 0.3 | 23.9 | 1775 |
| BCIE07CXCBEV03C070SSAXXXP | 3 | 70 * | 1.1 | 0.3 | 27.5 | 2420 |
| BCIE07CXCBEV03C095SSAXXXP | 3 | 95 * | 1.1 | 0.3 | 30.5 | 3170 |
| BCIE07CXCBEV03C120SSAXXXP | 3 | 120 * | 1.2 | 0.4 | 34.3 | 4065 |
| BCIE07CXCBEV03C150SSAXXXP | 3 | 150 * | 1.4 | 0.4 | 38 | 5010 |
| BCIE07CXCBEV03C185SSAXXXP | 3 | 185 * | 1.6 | 0.4 | 42.1 | 6150 |
| BCIE07CXCBEV04C1.5SSAXXXP | 4 | 1.5 | 0.7 | 0.2 | 10.5 | 170 |
| BCIE07CXCBEV04C2.5SSAXXXP | 4 | 2.5 | 0.7 | 0.2 | 11.6 | 220 |
| BCIE07CXCBEV04C004SSAXXXP | 4 | 4 | 0.7 | 0.2 | 13.1 | 305 |
| BCIE07CXCBEV04C006SSAXXXP | 4 | 6 | 0.7 | 0.3 | 15.2 | 430 |
| BCIE07CXCBEV04C010SSAXXXP | 4 | 10 | 0.7 | 0.3 | 17.4 | 620 |
| BCIE07CXCBEV04C016SSAXXXP | 4 | 16 | 0.7 | 0.3 | 20.2 | 890 |
| BCIE07CXCBEV04C025SSAXXXP | 4 | 25 | 0.9 | 0.3 | 24.8 | 1350 |
| BCIE07CXCBEV04C035SSAXXXP | 4 | 35 | 0.9 | 0.3 | 27.7 | 1775 |
| BCIE07CXCBEV04C050SSAXXXP | 4 | 50 | 1 | 0.3 | 32.2 | 2450 |

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POLYCAB MARINE IEC 60092-353 0.6/1.0 kV ARM

Armoured Power and Control Cable, 0.6/1.0 (1.2) kV AC

| Product Code | No. of Cores | Cross Sectional Area (mm ²) | Nom. Insulation Thickness (mm) | Nom. Braid Wire Dia. (mm) | Nom. Cable Overall Dia. (mm) | Cable Weight Approx. (kg / km) |
|---------------------------|--------------|---|--------------------------------|---------------------------|------------------------------|--------------------------------|
| BCIE07CXCBEV04C070SSAXXXP | 4 | 70 | 1.1 | 0.3 | 37.1 | 3320 |
| BCIE07CXCBEV04C095SSAXXXP | 4 | 95 | 1.1 | 0.4 | 42.3 | 4480 |
| BCIE07CXCBEV04C120SSAXXXP | 4 | 120 | 1.2 | 0.4 | 46.8 | 5545 |
| BCIE07CXCBEV04C150SSAXXXP | 4 | 150 | 1.4 | 0.4 | 52.2 | 6870 |
| BCIE07CXCBEV04C185SSAXXXP | 4 | 185 | 1.6 | 0.4 | 57.7 | 8400 |
| BCIE07CXCBEV04C240SSAXXXP | 4 | 240 | 1.7 | 0.4 | 64.5 | 10690 |
| BCIE07CXCBEV04C300SSAXXXP | 4 | 300 | 1.8 | 0.4 | 70.9 | 13145 |
| BCIE07CXCBEV04C035SSAXXXP | 4 | 35 * | 0.9 | 0.3 | 24.9 | 1825 |
| BCIE07CXCBEV04C050SSAXXXP | 4 | 50 * | 1 | 0.3 | 28.7 | 2540 |
| BCIE07CXCBEV04C070SSAXXXP | 4 | 70 * | 1.1 | 0.3 | 33.3 | 3485 |
| BCIE07CXCBEV04C095SSAXXXP | 4 | 95 * | 1.1 | 0.4 | 37.8 | 4665 |
| BCIE07CXCBEV04C120SSAXXXP | 4 | 120 * | 1.2 | 0.4 | 40.5 | 5740 |
| BCIE07CXCBEV05C004SSAXXXP | 5 | 4 | 0.7 | 0.2 | 14.3 | 360 |
| BCIE07CXCBEV05C006SSAXXXP | 5 | 6 | 0.7 | 0.3 | 16.4 | 515 |
| BCIE07CXCBEV05C010SSAXXXP | 5 | 10 | 0.7 | 0.3 | 19.1 | 755 |
| BCIE07CXCBEV05C016SSAXXXP | 5 | 16 | 0.7 | 0.3 | 22.2 | 1085 |
| BCIE07CXCBEV05C025SSAXXXP | 5 | 25 | 0.9 | 0.3 | 27.3 | 1650 |
| BCIE07CXCBEV05C035SSAXXXP | 5 | 35 | 0.9 | 0.3 | 31.2 | 2220 |
| BCIE07CXCBEV05C050SSAXXXP | 5 | 50 | 1 | 0.3 | 35.8 | 3030 |
| BCIE07CXCBEV05C070SSAXXXP | 5 | 70 | 1.1 | 0.4 | 41.2 | 4155 |
| BCIE07CXCBEV05C095SSAXXXP | 5 | 95 | 1.1 | 0.4 | 46.1 | 5430 |
| BCIE07CXCBEV05C1.5SSAXXXP | 5 | 1.5 | 0.7 | 0.2 | 11.4 | 200 |
| BCIE07CXCBEV07C1.5SSAXXXP | 7 | 1.5 | 0.7 | 0.2 | 12.5 | 250 |
| BCIE07CXCBEV10C1.5SSAXXXP | 10 | 1.5 | 0.7 | 0.3 | 16.2 | 390 |
| BCIE07CXCBEV12C1.5SSAXXXP | 12 | 1.5 | 0.7 | 0.3 | 16.6 | 435 |
| BCIE07CXCBEV14C1.5SSAXXXP | 14 | 1.5 | 0.7 | 0.3 | 17.6 | 490 |
| BCIE07CXCBEV16C1.5SSAXXXP | 16 | 1.5 | 0.7 | 0.3 | 18.5 | 540 |
| BCIE07CXCBEV19C1.5SSAXXXP | 19 | 1.5 | 0.7 | 0.3 | 19.4 | 610 |
| BCIE07CXCBEV24C1.5SSAXXXP | 24 | 1.5 | 0.7 | 0.3 | 22.6 | 765 |
| BCIE07CXCBEV27C1.5SSAXXXP | 27 | 1.5 | 0.7 | 0.3 | 23 | 830 |
| BCIE07CXCBEV37C1.5SSAXXXP | 37 | 1.5 | 0.7 | 0.3 | 25.8 | 1070 |
| BCIE07CXCBEV05C2.5SSAXXXP | 5 | 2.5 | 0.7 | 0.2 | 12.7 | 265 |

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POLYCAB MARINE IEC 60092-353 0.6/1.0 kV ARM

Armoured Power and Control Cable, 0.6/1.0 (1.2) kV AC

| Product Code | No. of Cores | Cross Sectional Area (mm ²) | Nom. Insulation Thickness (mm) | Nom. Braid Wire Dia. (mm) | Nom. Cable Overall Dia. (mm) | Cable Weight Approx. (kg / km) |
|---------------------------|--------------|---|--------------------------------|---------------------------|------------------------------|--------------------------------|
| BCIE07CXCBEV07C2.5SSAXXXP | 7 | 2.5 | 0.7 | 0.2 | 13.7 | 330 |
| BCIE07CXCBEV10C2.5SSAXXXP | 10 | 2.5 | 0.7 | 0.3 | 18.1 | 515 |
| BCIE07CXCBEV12C2.5SSAXXXP | 12 | 2.5 | 0.7 | 0.3 | 18.6 | 580 |
| BCIE07CXCBEV14C2.5SSAXXXP | 14 | 2.5 | 0.7 | 0.3 | 19.5 | 650 |
| BCIE07CXCBEV16C2.5SSAXXXP | 16 | 2.5 | 0.7 | 0.3 | 20.7 | 730 |
| BCIE07CXCBEV19C2.5SSAXXXP | 19 | 2.5 | 0.7 | 0.3 | 21.7 | 830 |
| BCIE07CXCBEV24C2.5SSAXXXP | 24 | 2.5 | 0.7 | 0.3 | 25.3 | 1040 |
| BCIE07CXCBEV27C2.5SSAXXXP | 27 | 2.5 | 0.7 | 0.3 | 25.8 | 1135 |
| BCIE07CXCBEV30C2.5SSAXXXP | 30 | 2.5 | 0.7 | 0.3 | 26.9 | 1245 |
| BCIE07CXCBEV37C2.5SSAXXXP | 37 | 2.5 | 0.7 | 0.3 | 29.1 | 1495 |

ELECTRICAL CHARACTERISTICS:

| Conductor cross-sectional area mm ² | Max. Conductor Resistance | | Current Rating for continuous service | | | | | | | | | |
|---|---------------------------|------------|--|------|------|------|------|------|------|------|------|------|
| | at 20°C DC | at 90°C AC | Conductor temperature max. +90°C, Ambient temperature max +45°C | | | | | | | | | |
| | | | 1C | 2C | 3C | 4C | 5C | 7C | 12C | 19C | 27C | 37C |
| | | | 1.0 | 0.85 | 0.70 | 0.70 | 0.58 | 0.52 | 0.44 | 0.37 | 0.33 | 0.90 |
| | | | * | * | * | * | * | * | * | * | * | * |
| | Ohm/km | | Amps | | | | | | | | | |
| 1.5 | 12.1 | 15.4 | 23 | 20 | 16 | 16 | 13 | 12 | 10 | 9 | 8 | 7 |
| 2.5 | 7.41 | 9.45 | 30 | 26 | 21 | 21 | 18 | 16 | 13 | 11 | 10 | 9 |
| 4 | 4.61 | 5.88 | 41 | 34 | 28 | 28 | 24 | - | - | - | - | - |
| 6 | 3.08 | 3.93 | 52 | 44 | 36 | 36 | 30 | - | - | - | - | - |
| 10 | 1.83 | 2.33 | 72 | 61 | 50 | 50 | 42 | - | - | - | - | - |
| 16 | 1.15 | 1.47 | 96 | 82 | 67 | 67 | 56 | - | - | - | - | - |
| 25 | 0.727 | 0.927 | 127 | 108 | 89 | 89 | 74 | - | - | - | - | - |
| 35 | 0.524 | 0.668 | 157 | 133 | 110 | 110 | 92 | - | - | - | - | - |
| 50 | 0.387 | 0.493 | 196 | 167 | 137 | 137 | - | - | - | - | - | - |
| 70 | 0.268 | 0.342 | 242 | 206 | 169 | 169 | - | - | - | - | - | - |
| 95 | 0.193 | 0.246 | 293 | 249 | 205 | 205 | - | - | - | - | - | - |
| 120 | 0.153 | 0.195 | 339 | 288 | 237 | 237 | - | - | - | - | - | - |
| 150 | 0.124 | 0.158 | 389 | 331 | 272 | 272 | - | - | - | - | - | - |
| 185 | 0.0991 | 0.126 | 444 | 377 | 311 | 311 | - | - | - | - | - | - |
| 240 | 0.0754 | 0.0961 | 522 | 444 | 365 | 365 | - | - | - | - | - | - |
| 300 | 0.0601 | 0.0766 | 601 | 511 | 421 | 421 | - | - | - | - | - | - |

Current Ratings are in accordance with IEC 60029-352 Table B.4.

Ambient temperature de-rating factors, according to IEC 60092-352 Table-3

| Temperature (°C) | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 |
|------------------|------|------|------|------|------|------|------|------|------|
| De-rating factor | 1.10 | 1.05 | 1.00 | 0.94 | 0.88 | 0.82 | 0.74 | 0.67 | 0.58 |