



Images not to scale. Follow table for dimensions

APPLICATION

POLY CAB MARINE Single and Multicore core Screened & Armoured VFD cable is suitable to use in sea vessels and offshore platforms where transient voltage occurs in motors during operation i.e. for Variable Frequency drive applications.

CHARACTERISTICS

Voltage Rating

1.8/3.0 (3.6) 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

6500V AC at (20±5)°C

CONSTRUCTION

- Annealed plain stranded flexible copper conductor as per IEC 60228, Class-5 (tinned on request),
- Extruded XLPE Insulation, (Extruded HEPR Insulation available on demand)
- Insulated Cores assembled along with 3 Earth cores together, (Inner covering / fillers optional)
- Copper/Polyester tape Screened,
- Annealed plain Copper Braid Armour,
- Extruded Polyolefin HF-SHF1 Outer Sheath (HF-SHF2 on request),
- 3 core: brown, black, grey;
- Earth core: green/yellow;

Core Identification

OUTSTANDING FEATURES

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

STANDARD FOLLOWS

- IEC 60228:2005
 IEC 60092-350:2020
 IEC 60092-352:2005
 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 |

OUR ACCREDITATIONS



APPROVAL



NOTES

Colour: Black. (others colour on request).

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) |
|---------------------------|--------------|---|--------------------------------|---------------------------|------------------------------|--------------------------------|
| BCIE44CXCBEV03C016SSAXXXP | 3 | 16 | 2.0 | 0.30 | 26.5 | 1080 |
| BCIE44CXCBEV03C025SSAXXXP | 3 | 25 | 2.0 | 0.30 | 29.4 | 1415 |
| BCIE44CXCBEV03C035SSAXXXP | 3 | 35 | 2.0 | 0.30 | 32.2 | 1785 |
| BCIE44CXCBEV03C050SSAXXXP | 3 | 50 | 2.0 | 0.30 | 36.0 | 2675 |
| BCIE44CXCBEV03C070SSAXXXP | 3 | 70 | 2.0 | 0.40 | 40.2 | 3545 |
| BCIE44CXCBEV03C095SSAXXXP | 3 | 95 | 2.0 | 0.40 | 44.5 | 4440 |
| BCIE44CXCBEV03C120SSAXXXP | 3 | 120 | 2.0 | 0.40 | 48.3 | 5385 |
| BCIE44CXCBEV03C150SSAXXXP | 3 | 150 | 2.0 | 0.40 | 51.8 | 6375 |
| BCIE44CXCBEV03C095SSAXXXP | 3 | 95 + 25 | 2.0 | 0.40 | 44.5 | 4535 |
| BCIE44CXCBEV03C120SSAXXXP | 3 | 120 + 25 | 2.0 | 0.40 | 48.3 | 5650 |
| BCIE44CXCBEV03C150SSAXXXP | 3 | 150 + 25 | 2.0 | 0.40 | 51.8 | 6545 |

ELECTRICAL CHARACTERISTICS:

| Conductor cross-sectional area mm ² | Max. Conductor Resistance at 20°C DC Ohm/km | | Current Rating for continuous service Conductor temperature max. +90°C, Ambient temperature max. +45°C Amps |
|--|---|--------|---|
| | at 90°C AC | Ohm/km | |
| 16 | 1.21 | 1.55 | 67 |
| 25 | 0.780 | 0.998 | 89 |
| 35 | 0.554 | 0.709 | 110 |
| 50 | 0.386 | 0.494 | 137 |
| 70 | 0.272 | 0.325 | 169 |
| 95 | 0.206 | 0.263 | 205 |
| 120 | 0.161 | 0.206 | 237 |
| 150 | 0.129 | 0.165 | 272 |

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 |