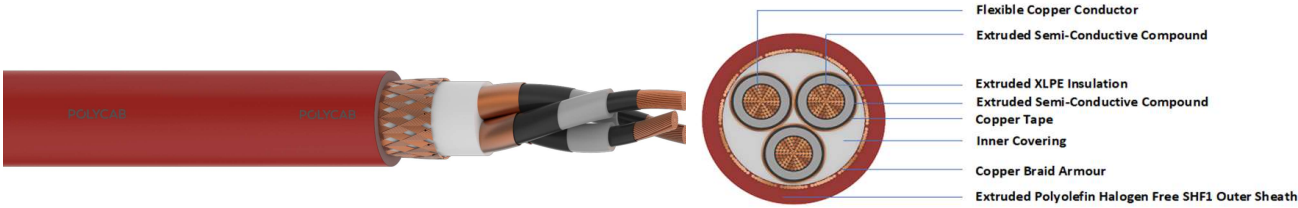


POLYCAB MARINE IEC 60092-354 12/20 kV ARM

Armoured Medium Voltage Cables, 12/20 (24) kV AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB MARINE Single and Multicore Armoured Medium Voltage cable is suitable to use in fixed installation in power circuits on marine vessels and offshore platforms

CHARACTERISTICS

Voltage Rating

12/20 (24) KV AC

Operation Temperature

-30°C to +90°C

Short Circuit Temp. 250°C

Bending Radius

Min. 12D (Single Core); Min. 9D (3 Core);

D is cable diameter

| High Voltage Test (kV AC) | Impulse test Voltage (kV peak) |
|---------------------------|--------------------------------|
| 42 | 125 |

CONSTRUCTION

- Annealed plain copper conductor as per IEC 60228, Class-5 (tinned on request),
 - Extruded Semi-Conductive Tape / Compound,
 - Extruded XLPE Insulation, (Extruded HEPR Insulation available on demand)
 - Extruded Semi-Conductive Compound,
 - Copper Tape,
 - Insulated Cores assembled together & provided with Inner covering,
 - Annealed plain Copper Braid Armour / Screen,
 - Extruded Polyolefin Halogen free SHF1 Outer Sheath(HF-SHF2 on request),
- Core Identification**
- 1 core: black;
 - 3 core: brown, black, grey;

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 60092-354:2020

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: Red.(other colours available on request).

POLYCAB MARINE IEC 60092-354 12/20 kV ARM

Armoured Medium Voltage Cables, 12/20 (24) kV AC

DIMENSIONS AND WEIGHTS:

| Product Code | No. of Cores | Cross Sectional Area (mm ²) | Nom. Insulation Thickness (mm) | Cable Overall Dia. (mm) | Cable Weight Approx. (kg / km) |
|---------------------------|--------------|---|--------------------------------|-------------------------|--------------------------------|
| BCIE19CXCBEV001C050SSAXXP | 1 | 50 | 5.5 | 30.0 | 1440 |
| BCIE19CXCBEV001C070SSAXXP | 1 | 70 | 5.5 | 32.0 | 1740 |
| BCIE19CXCBEV001C095SSAXXP | 1 | 95 | 5.5 | 34.0 | 2060 |
| BCIE19CXCBEV001C120SSAXXP | 1 | 120 | 5.5 | 36.0 | 2440 |
| BCIE19CXCBEV001C150SSAXXP | 1 | 150 | 5.5 | 38.0 | 2780 |
| BCIE19CXCBEV001C185SSAXXP | 1 | 185 | 5.5 | 40.0 | 3220 |
| BCIE19CXCBEV001C240SSAXXP | 1 | 240 | 5.5 | 43.0 | 3880 |
| BCIE19CXCBEV003C035SSAXXP | 3 | 35 | 5.5 | 56.5 | 4640 |
| BCIE19CXCBEV003C050SSAXXP | 3 | 50 | 5.5 | 60.0 | 5440 |
| BCIE19CXCBEV003C070SSAXXP | 3 | 70 | 5.5 | 64.0 | 6430 |
| BCIE19CXCBEV003C095SSAXXP | 3 | 95 | 5.5 | 68.0 | 7610 |
| BCIE19CXCBEV003C120SSAXXP | 3 | 120 | 5.5 | 72.0 | 8750 |
| BCIE19CXCBEV003C150SSAXXP | 3 | 150 | 5.5 | 75.5 | 9970 |

ELECTRICAL CHARACTERISTICS:

| Conductor cross-sectional area mm ² | Max. Conductor Resistance | | Current Rating for continuous service | |
|---|---------------------------|------------|---------------------------------------|--------------|
| | at 20°C DC | at 90°C AC | 1C 1.0 * | 3C 0.70 * |
| | Ohm/km | | | Amps |
| 35 | 0.554 | 0.709 | 157 | 110 |
| 50 | 0.386 | 0.494 | 196 | 137 |
| 70 | 0.272 | 0.325 | 242 | 169 |
| 95 | 0.206 | 0.263 | 293 | 205 |
| 120 | 0.161 | 0.206 | 339 | 237 |
| 150 | 0.129 | 0.165 | 389 | 272 |
| 185 | 0.106 | 0.136 | 444 | 311 |
| 240 | 0.0801 | 0.102 | 522 | 365 |

*: Derating factors for No. of Cores

Conductor temperature max. +90°C, ambient temperature max +45°C

Current ratings according to IEC 60092-352 Annex A 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 |