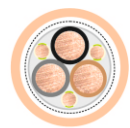


BITservo[®] 3plus 2XSLCY-J

Flexible motor connection cables for frequency converters (VFD), symmetric construction, rated 0,6/1 kV



Technical data:

Thermal parameters:
Operating temperature:
 fixed installation: -40 °C to 80 °C
 flexible connections: -5 °C to 80 °C
Max. conductor operating temperature: 90 °C
Max. conductor temperature in shortcircuit (1 sec.): 250 °C

Electrical parameters:
Operating voltage: $U_0/U = 0,6/1$ kV
Test voltage: 4000 V
Insulation resistance: > 200 MΩ x km
Capacitance:
 conductor/conductor = 70 to 250 nF/km
 conductor/screen = 110 to 410 nF/km

Mechanical parameters:
Min. bending radius:
 $\varnothing < 12$ mm - 5 x \varnothing
 $\varnothing = 12 \pm 20$ mm - 7,5 x \varnothing
 $\varnothing > 20$ mm - 10 x \varnothing

Design:

Conductors: bare copper conductors, multi-stranded, class 5 acc. to EN 60228
Insulation: cross-linked polyethylene (XLPE)
Core identification: black, brown, grey, 3 x green-yellow (3+3PE)
Core arrangement: cores twisted together in symmetric construction, protective earth split into three arranged symmetrically every 120°)
Screens: electrostatic screen made of aluminium backed polyester tape and a second screen made of tinned copper wire braid, total screen coverage 100%
Outer sheath: PVC compound, self-extinguishing and flame retardant (as per EN 60332-1-2); colour: transparent orange
Special properties:
 - low capacitance
 - improved current carrying capacity
 - fulfilment of electromagnetic compatibility (EMC) requirements*
 - self-extinguishing sheath

***Note:** in order to ensure optimal screen earthing and the fulfilment of electromagnetic compatibility (EMC) requirements of the connection, we recommend using metal glands or a different type of circuitual earthing system (360°).

Application:

Cables with special construction, used to supply power to motors from frequency converters (VFD) while maintaining full electromagnetic compatibility (EMC). The XLPE insulation improves current carrying capacity maintaining at the same time low capacitance in comparison to PVC insulated cables. The cables are suitable for both fixed installation and flexible connections in industrial equipment, process lines, and machines operating in dry and damp rooms. The symmetric construction of the cable (3+3PE) ensures symmetry of voltages on motor terminals. Cables classified according to **EN 50575 (CPR)**.

| Cat. no. | n x mm ² | Outer diameter* [mm] | Current-carrying capacity *) [A] | Approximate cable weight [kg/km] |
|----------|---------------------|----------------------|----------------------------------|----------------------------------|
| IP0150 | 3x1,5+3x0,25 | 10,0 | 23 | 135 |
| IP0151 | 3x2,5+3x0,5 | 11,2 | 32 | 180 |
| IP0152 | 3x4+3x0,75 | 12,2 | 42 | 240 |
| IP0153 | 3x6+3x1 | 13,5 | 54 | 315 |
| IP0154 | 3x10+3x1,5 | 15,7 | 75 | 475 |
| IP0155 | 3x16+3x2,5 | 18,3 | 100 | 700 |
| IP0156 | 3x25+3x4 | 22,2 | 127 | 1075 |
| IP0157 | 3x35+3x6 | 24,9 | 158 | 1445 |
| IP0158 | 3x50+3x10 | 29,0 | 192 | 2035 |
| IP0159 | 3x70+3x10 | 33,5 | 246 | 2705 |
| IP0160 | 3x95+3x16 | 37,5 | 298 | 3600 |
| IP0161 | 3x120+3x16 | 40,8 | 346 | 4390 |
| IP0162 | 3x150+3x25 | 46,9 | 399 | 5655 |
| IP0163 | 3x185+3x35 | 52,3 | 456 | 6845 |
| IP0164 | 3x240+3x50 | 58,0 | 528 | 9000 |

*Outer diameter tolerance: +/- 5%
 **) - current-carrying capacity of a single cable in air at a temperature of 30 °C
 Cable Factory BITNER reserves the right to modify the specifications without prior notice
 Note: on customer's request other cross sections or number of cores can be produced