

# BiTservo® UV 3plus 2XSLCHSWAHK-J



Steel wire armoured halogen-free motor connection cables for frequency converters, with improved current carrying capacity, UV resistant, rated 1,8/3 kV



industrial application



internal application



external application



underground application



EN 60332-1-2



oxygen index



halogen-free  
EN 60754



low smoke emission  
EN 61034



UV resistance



EMC

## 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:**  $U_0/U = 1,8/3$  kV

**Test voltage:** 6500 V

### Mechanical parameters:

**Insulation resistance:** > 200 MΩ x km

#### Capacitance:

Conductor/conductor: 70 to 250 nF/km

Conductor/screen: 110 to 410 nF/km

**Min. bending radius:** 15 x Ø

## 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)

### Screens:

electrostatic screen made of aluminium backed polyester tape and a second screen made of tinned copper wire braid, total screen coverage 100%

### Inner sheath:

special halogen-free compound

### Armour:

round galvanized steel wires with helically applied anti-torsion tape

### Outer sheath:

special halogen-free compound, self-extinguishing and flame retardant (acc. to EN 60332-1-2), UV resistant; colour: black

### Special properties:

- low capacitance
- fulfilment of electromagnetic compatibility (EMC) requirements\*
- self-extinguishing sheath
- UV resistant sheath

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

## Application:

Cables with special construction, used to supply power motors from frequency converters while maintaining full electromagnetic compatibility (EMC). The XLPE insulation ensures low capacitance in comparison to PVC insulated cables. The cables are suitable for fixed installation in industrial equipment, process lines and machines operating in dry and damp rooms. Black UV resistant sheath enables installation outside of buildings. The cable is also suitable for direct burial. Cables classified according to **EN 50575 (CPR)**.

Cat. no.	n x mm <sup>2</sup>	Outer diameter* [mm]	Current-carrying capacity *) [A]	Approximate cable weight [kg/km]
IP2680	3x120+3G16	55,5	346	7650
IP2681	3x185+3G35	67,8	456	11000
IP2682	3x240+3G50	78,2	538	15000

\*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