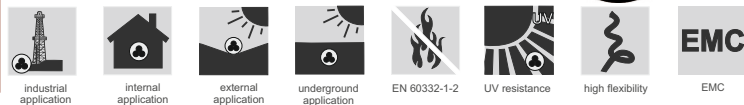


# BITNER<sup>®</sup> UV 2XSLCYK-J



Servo motor cables

Flexible motor connection cables for frequency converters (VFD), with improved current carrying capacity, UV-resistant, 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:

$\varnothing = 12 + 20$  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, green-yellow

### Core arrangement:

cores twisted together

### 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), UV resistant; colour: black

### Special properties:

- low capacitance
- improved current carrying capacity
- fulfilment of electromagnetic compatibility (EMC) requirements\*
- self-extinguishing sheath
- UV resistant 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 circualar 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. Black UV-resistant sheath enables installation outside of buildings. The cable is also suitable for direct underground installations. 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]
IP1600	4G1,5	11,6	23	180
IP1601	4G2,5	13,0	32	230
IP1602	4G4	14,1	42	305
IP1603	4G6	15,5	54	395
IP1604	4G10	18,2	75	605
IP1605	4G16	21,1	100	860
IP1606	4G25	25,7	127	1355
IP1607	4G35	28,5	158	1750
IP1608	4G50	33,1	192	2385
IP1609	4G70	38,2	246	3265
IP1610	4G95	42,8	298	4320
IP1611	4G120	46,5	346	5350
IP1612	4G150	53,2	399	6705
IP1613	4G185	59,6	456	8050
IP1614	4G240	66,7	528	10575

\*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