

# BITNER<sup>®</sup> Bit servo<sup>®</sup> UV 2XSLCYK-J FR



Servo motor cables

Highly flame retardant 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:**  
 $\varnothing < 20$  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

**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 highly flame retardant (as per EN 60332-1-2 and 60332-3-24 cat. C) with oxygen index > 29; colour: black

**Special properties:**

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

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

## Application:

Cables with special construction, used to supply power motors from frequency converters (VFD) while maintaining full electromagnetic compatibility (EMC). The polyethylene insulation ensures 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 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]
IP2120	4G1,5	11,6	23	180
IP2121	4G2,5	13,0	32	230
IP2122	4G4	14,1	42	305
IP2123	4G6	15,5	54	395
IP2124	4G10	18,2	75	605
IP2125	4G16	21,1	100	860
IP2126	4G25	25,7	127	1355
IP2127	4G35	28,5	158	1750
IP2128	4G50	33,1	192	2385
IP2129	4G70	38,2	246	3265
IP2130	4G95	42,8	298	4320
IP2131	4G120	46,5	346	5350
IP2132	4G150	53,2	399	6705
IP2133	4G185	59,6	456	8050
IP2134	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