

BITNER[®] UV 3plus 2XSLCYK-J FR



Highly flame retardant flexible motor connection cables for frequency converters (VFD), with improved current carrying capacity, symmetric construction, 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: $U_i/U = 0,6/1$ 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:

Ø < 12 mm – 5 x Ø

Ø = 12 + 20 mm – 7,5 x Ø

Ø > 20 mm – 10 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%

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 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 (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. 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]
IP2220	3x1,5+3G0,25	10,8	23	155
IP2221	3x2,5+3G0,5	12,0	32	205
IP2222	3x4+3G0,75	13,0	42	270
IP2223	3x6+3G1	14,3	54	345
IP2224	3x10+3G1,5	16,7	75	520
IP2225	3x16+3G2,5	19,3	100	750
IP2226	3x25+3G4	23,2	127	1135
IP2227	3x35+3G6	26,1	158	1525
IP2228	3x50+3G10	30,2	192	2130
IP2229	3x70+3G10	34,7	246	2815
IP2230	3x95+3G16	38,7	298	3725
IP2231	3x120+3G16	42,0	346	4525
IP2232	3x150+3G25	48,3	399	5835
IP2233	3x185+3G35	54,1	456	7100
IP2234	3x240+3G50	60,0	528	9315
IP2235	3x300+3G50	69,5	621	11870
IP2236	3x400+3G70	77,2	700	15450

*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