

BITNER[®] BiTservo[®] MV6



Servo motor cables

Flexible rubber MV motor connection cable for frequency converters (VFD) rated 3,6/6 kV



Technical data:

Thermal parameters:

Operating temperature: -40 °C to 90 °C

Max conductor operating temperature: 90 °C

Max short circuit temperature (max 5 sec.): 250 °C

Electrical parameters:

Operating voltage: 3,6/6 kV

Test voltage: 11 kV

Mechanical parameters:

Min. bending radius: 10 x Ø

Design:

Conductors: plain copper conductors, multi-stranded, class 5 acc. to EN 60228

Screen of power conductors: special semi-conductive rubber compound

Insulation of power conductors: special EPR compound with increased electrical parameters, neutral color

Screen on insulation of power conductors split in 3 elements:

special semi-conductive rubber, semi-conductive tape, tinned copper wire braid plus additional protective conductors (bare)

Separator: semi-conductive tape
Outer sheath: special flame retardant rubber compound with LOI>29, oil resistant; colour: red

Application:

For installation in power networks and power supply for high power engines through medium-voltage frequency converters (VFD). Cables classified according to **EN 50575 (CPR)**.

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]	Conductor resistance at 20 °C [Ω/km]	Capacitance [nF/km]	Inductance [mH/km]	Current-carrying capacity *) [A]
IP4500	3x16+3x16/3	42,5	2540	1,24	340	0,39	109
IP4501	3x25+3x16/3	46,0	3185	0,795	390	0,37	141
IP4502	3x35+3x16/3	48,2	3555	0,565	440	0,34	174
IP4503	3x35+3x25/3	48,2	3575	0,565	440	0,34	174
IP4504	3x50+3x25/3	52,6	4335	0,393	490	0,33	215
IP4505	3x70+3x35/3	56,5	5300	0,277	560	0,31	266
IP4506	3x95+3x50/3	60,2	6500	0,210	640	0,30	318
IP4507	3x120+3x70/3	63,8	7600	0,164	690	0,29	367
IP4508	3x150+3x70/3	68,7	8790	0,132	770	0,28	418
IP4509	3x185+3x95/3	74,5	10520	0,108	840	0,27	477

*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