

BITservo® 3GSEGCH 3,6/6 kV



Servo motor cables

Halogen-free medium voltage cable for connections between motor and frequency converter (VFD)



Technical data:

Thermal parameters:

Operating temperature: -30 °C to 80 °C
Min. installation temperature: -5 °C
Max conductor operating temperature: 90 °C
Max conductor temperature during short circuit (max 5s): 250 °C

Electrical parameters:

Operating voltage:** U₀/U = 3,6/6 kV
Test voltage: 11 kV

Mechanical parameters:

Max pulling force during installation [N]: 50*
 S - sum of cross sections of power conductors in mm²
Min bending radius: 12 x Ø

Cross section of Cu tapes on conductors
 (sum of cross sections for 3 conductors)

Cross section of phase conductor	Cross section of Cu tapes
35...120 mm ²	16 mm ²
>120 mm ²	25 mm ²

** on customer's request cables rated 6/10 kV can be produced

Design:

- Conductors:** bare copper conductors, multi-stranded, class 2 acc. to EN 60228
- Semiconductive layer on conductor:** special semi-conductive rubber compound acc. to IEC 60502-2
- Insulation:** EPR rubber acc. to IEC 60502-2
- Outer semiconductive layer:** special semi-conductive rubber compound acc. to IEC 60502-2
- Screen on insulated conductor:** copper tape wrapping on each conductor
- Core identification:** numbers on outer semi-conductive layer
- Filler:** special polymer compound acc. to IEC 60502-2
- Concentric conductor:** copper wires and helically applied copper tape, cross section of concentric conductor equals half of the cross section of phase conductor
- Outer sheath:** special, halogen-free, flame retardant acc. to EN 60332-1-2; colour: red

Application:

BITservo 3GSEGCH 3,6/6kV cables are designed for connection between frequency (VFD) converters and medium voltage motors. They are suitable for installation inside buildings in dry and damp rooms. Cables classified according to **EN 50575 (CPR)**.

Cat. no.	n x mm ²	Outer diameter min. - max. [mm]	Current-carrying capacity *) [A]	Capacitance [nF/km]	Approximate cable weight [kg/km]
IP4150	3x35/18	44-48	169	280	3195
IP4151	3x50/25	48-52	203	300	3946
IP4152	3x70/35	51-55	253	350	4805
IP4153	3x95/50	56-60	306	390	6086
IP4154	3x120/60	60-64	352	420	7250
IP4155	3x150/75	65-69	400	460	8670
IP4156	3x185/95	68-72	451	500	10159
IP4157	3x240/120	75-79	523	560	12711

*) - 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