

BITNER BiTcrane®(N)GFLCGOEU-J



Crane cables

Screened, flexible, low voltage flat rubber cables based on DIN VDE 0250-809



Technical data:

Thermal parameters:

Ambient temperature:
 fixed installation: -40 °C to 80 °C
 festoon operation: -30 °C to 80 °C
Max. permissible conductor temp.: 90 °C
Max. short-circuit temp. at conductor: 250 °C

Mechanical parameters:

Max. tensile load on conductor: 15 N/mm²
Trolley travel speed: up to 180 m/min

Design:

Conductors: plain copper acc. to DIN EN/IEC 60228:
 - ≤ 25 mm², class 6 – finest stranded wires
 - ≥ 35 mm², class 5 – fine stranded wires

Insulation: EPR compound type 3GI3 acc. to DIN VDE 0207-20,
 core identification acc. to DIN VDE 0293-308
 tinned copper wire braid, braiding coverage 85%

Screen: heavy duty rubber compound type 5GM3
 acc. to DIN VDE 0207-21; colour: black, inkjet marking

Outer sheath:

Application:

These cables are designed for connection of moving parts of machine tools, conveyors and large equipment, when the cables are subjected to bending in only one plane e.g. festoon systems. Suitable for use in dry, damp and wet rooms as well as outdoors. Individual screening ensures protection against external electromagnetic interferences. In case of high mechanical stresses, e.g. high dynamic tensile forces, permissible loads are to be determined on a case-by-case basis. On the basis of the insulation compound used **BiTcrane®(N)GFLCGOEU-J** can be used with a rated voltage of 1000 V and applied as directed in DIN VDE 0298-3.

Chemical parameters:

Resistance to oil:	DIN EN/IEC 60811-404
Behaviour in case of fire:	DIN EN/IEC 60332-1-2
Weather resistance:	unrestricted use indoors, outdoors, resistance to ozone, UV and moisture

Electrical parameters:

Rated voltage U_0/U [kV]	0.6/1 kV
Max. permissible operating voltage $U_{0,max}$ in AC systems [kV]:	0.7/1.2 kV
Max. permissible operating voltage $U_{0,max}$ in DC systems [kV]:	0.9/1.8 kV
AC test voltage:	3.5 kV/5 min
Current-carrying capacities in amperes:	acc. to DIN VDE 0298-4

Bending radius	Height of cable (mm)	
	up to 12	over 12
Fixed installation	3xH	4xH
Flexible applications (incl. festoon)	4xH	5xH

BiTcrane[®](N)GFLCGOEU-J

Screened, flexible, low voltage flat rubber cables based on DIN VDE 0250-809

BiTcrane[®](N)GFLCGOEU-J 0.6/1 kV

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
IP4170	4x1,5	8 x 19	287
IP4171	8x1,5	7 x 37	527
IP4172	10x1,5	8 x 47	739
IP4173	12x1,5	8 x 56	882
IP4174	4x2,5	9 x 23	395
IP4175	6x2,5	9 x 32	563
IP4176	12x2,5	9 x 62	1149
IP4177	4x4	9 x 27	515
IP4178	4x6	10 x 30	641
IP4179	4x10	11 x 35	884
IP4180	4x16	13 x 40	1205
IP4181	4x25	14 x 47	1819
IP4182	4x35	17 x 54	2375
IP4183	4x50	19 x 62	3179

* thickness $\pm 1,5$ mm; width $\pm 2,5$ mm

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