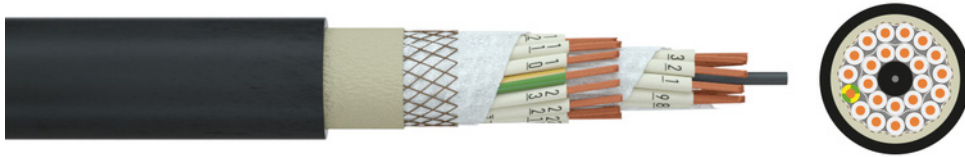


# Cable for festoon application

## BiTcrane<sup>®</sup> (N)3GRD5G-J/O



**Application:** Power and control cable for high mechanical requirements, frequently bendings in only one direction, especially for use in trolley systems, drag chains on moving parts of machines, conveyor facilities. Suitable for dry, humid and wet rooms and for outdoor use.

Bending radius: acc. to VDE 0298-3

Ampacity: 30 °C ambient temperature (acc. DIN VDE 0298-4 table 15)

- single core, free in air
- multi core, on ground

### Construction and technical data:

<b>Standard:</b>	VDE 0250-812 (with reference to)
<b>Conductor material:</b>	copper, bare
<b>Conductor construction:</b>	Class 5 = flexible
<b>Insulation:</b>	HEPR
<b>Material inner sheath:</b>	rubber GM1b
<b>Sheathing material:</b>	rubber 5GM5
<b>Colour of outer sheath:</b>	black
<b>Flame-retardant:</b>	VDE 0482-332-1-2/IEC 60332-1-2
<b>UV-resistant:</b>	yes
<b>Oil-resistant:</b>	EN 60811-404
<b>Max. temperature at conductor, °C:</b>	90 °C
<b>Max. short circuit temperature at conductor, °C:</b>	250 °C
<b>Permitted outer cable temperature, moved, °C:</b>	-35 - +80 °C
<b>Bending radius, fixed installation:</b>	4 x Ø
<b>Bending radius, moving application:</b>	5 x Ø
<b>Maximum tensile strength at the conductor:</b>	15 N/mm <sup>2</sup>
<b>Operating speed festoon, m/min.:</b>	240 m/min.



### BiTcrane<sup>®</sup> (N)3GRD5G-O

<b>Nominal voltage U<sub>o</sub>:</b>	0.6 kV
<b>Nominal voltage U:</b>	1 kV
<b>Maximum permitted operating voltage in three-phase systems:</b>	1.2 kV
<b>Test voltage:</b>	2.5 kV
<b>Protective conductor:</b>	no
<b>Core identification:</b>	numbers

part no.	part name	RI [Ohm/km]	I <sub>bl</sub> [A]	Ø min. [mm]	Ø max. [mm]	Ø [mm]	Fzd [N]	Cu	G [kg]
053614	01X25	0.78	176	12	14	14	375	240	330
053510	01X50	0.386	276	15	17	17	750	480	590
053140	01X70	0.272	347	17	19	19	1050	672	810
053549	01X95	0.206	416	19	21	21	1425	912	1040
053141	01X120	0.161	488	21	23	23	1800	1152	1280
053262	01X150	0.129	566	24	26	26	2250	1440	1580
053945	01X185	0.106	644	26	29	29	2775	1776	1968
053148	06X(2X1)C	19.5	18	26	28	28	180	226	805

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<b>Nominal voltage U:</b>	1 kV
<b>Maximum permitted operating voltage in three-phase systems:</b>	1.2 kV
<b>Test voltage:</b>	2.5 kV
<b>Protective conductor:</b>	yes
<b>Core identification:</b>	green-yellow + numbers

part no.	part name	RI [Ohm/km]	I <sub>bl</sub> [A]	Ø min. [mm]	Ø max. [mm]	Ø [mm]	Fzd [N]	Cu	G [kg]
053539	04G2.5	7.98	30	13.5	15.5	15.5	150	96	290
053511	04G4	4.95	41	15	17	17	240	154	365
053512	04G06	3.3	53	18	20	20	360	230	555
053513	04G10	1.91	74	20	22	22	600	384	770
053540	04G16	1.21	99	24	26	26	960	614.4	1110
053615	04G25	0.78	131	29	32	32	1500	960	1720
053541	04G35	0.554	162	32	35	35	2100	1344	2110
053680	05G4	4.95	41	17	19	19	300	192	477
053142	05G6	3.3	53	20	22	22	450	288	650
053143	05G10	1.91	74	23	25	25	750	480	970
053263	05G16	1.21	99	26	28	28	1200	768	1345
053146	05G25	0.78	131	32	35	35	1875	1200	2110
054410	05G35	0.554	162	36	39	39	2625	1680	2710
053542	07G2.5	7.98	43	18	21	21	262	168	500
053543	12G1.5	13.3	23	18.5	21.5	21.5	270	173	495
053544	18G1.5	13.3	23	21	24	24	405	259	650
053545	18G2.5	7.98	30	24.5	26.5	26.5	675	432	980
053484	12G2.5	7.98	30	21	23	23	450	288	690
053147	24G2.5	7.98	30	29	31	31	900	576	1355
053145	30G2.5	7.98	30	32.5	35.5	35.5	810	720	1708

part no.	part name	RI [Ohm/km]	Ibl [A]	Ø min. [mm]	Ø max. [mm]	Ø [mm]	Fzd [N]	Cu	G [kg]
054573	36X2.5	7.98	30	34	37	37	1350	864	1855
054435	09X(2X1)C	19.5	18	33	36	36	270	363	1365
053791	12X(2X1)C	19.5	18	35.5	38.5	38.5	360	474	1395
054261	03X(2X1.5)C	13.3	23			20.7	135	176	550
054509	06X(2X1.5)C	13.3	23	28	31	31	270	356	986
053550	03x25+3G16/3	0.78	131	30	31	31	1125	873.6	1695
053551	03x35+3G25/3	0.554	162	35	38	38	1575	1248	2340
053552	03x50+3G25/3	0.386	202	35	38	38	2250	1680	2635
053553	03x70+3G35/3	0.272	250	42	45	45	3150	2352	3805

RI	Conductor resistance
Ibl	Ampacity in air (30 °C)
Ø min.	outer diameter min.
Ø max.	outer diameter max.
Ø	outer diameter approx.
Fzd	Tensile strength (dynamic)
Cu	Copper weight (GER)
G	net weight per 1000