

BiTcrane[®] (N)TSCGEW0EU-SR PLUS

RoHS 2015/863/EU

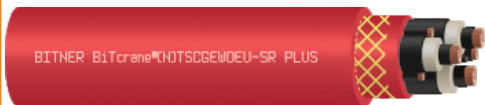
CPR

CPR 305/2011

24 months warranty

Medium voltage, flexible power supply cable for reeling applications based on DIN VDE 0250-813

Crane cables



industrial application



EN 60332-1-2



high flexibility



UV resistance



oil resistant
EN 60811-404



mechanical resistance



low operating temperature



explosion hazardous areas



reeling cable

Technical data:

Thermal parameters:

Ambient temperature:

for fixed installation: -50 °C to 80 °C

reeling operation: -35 °C to 80 °C

Max. permissible conductor temp.: 90 °C

Max. short-circuit temp. at conductor: 250 °C

De-rating factors: acc. to DIN VDE 0298-4

Mechanical parameters:

Max. tensile load on conductor: 20 N/mm²

Torsional stresses: ± 25 °/m

Bending radius: acc. to DIN VDE 0298-3

Min. distance with S-type directional changes: 20 x O.D.

Reeling speed: up to 240 m/min

Design:

Main cores

Conductors:

plain copper wires, finely stranded, class 5

acc. to IEC 60228

Insulation:

- inner semi-conductive stress control layer

- EPR compound with improved electrical and mechanical characteristics based on DIN VDE 0207-20

- outer semi-conductive insulation shield layer

Ground conductor

Conductor:

plain copper wires, finely stranded, class 5

acc. to IEC 60228, semi-conductive layer

Core arrangement:

three main cores laid up with optimised lay length, ground

conductor crss-section split into 3 parts in the outer

interstices

Inner sheath:

extra heavy duty rubber compound, quality 5GM5

acc. to DIN VDE 0207-21, filling the interstices, colour: red

Reinforcement:

braid made of synthetic threads, placed between

inseparably bonded inner and outer sheath, acting as an

anti-twist protection

Outer sheath:

extra heavy duty rubber compound, quality 5GM5

acc. to DIN VDE 0207-21; colour: red; inkjet marking

*other designs, e.g. with cradle separator or according to application available on request

Application:

Flexible reeling cable for power supply with cable guidance in different levels, e.g. reel axis in travel direction. Especially for high and extreme mechanical stress. For connection of large material handling machines in open pit mines, different crane types in harbours, shipyards, stacker/reclaimers in stockyards and other industrial areas.

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_r/U [kV]	3.6/6	6/10	8.7/15	12/20	14/25	18/30
Maximum permissible operating voltage in AC systems U_r/U [kV]	4.2/7.2	6.9/12	10.4/18	13.9/24	17.3/30	20.8/36
Maximum permissible operating voltage in DC systems U_r/U [kV]	5.4/10.8	9/18	13.5/27	18/36	22.5/45	27/54
AC. test voltage acc. to DIN VDE 0250-813 [kV]	11	17	24	29	36	43
Current-carrying capacities in amperes	acc. to DIN VDE 0298-4 table 15					
De-rating factors	acc. to DIN VDE 0298-4					

BiTcrane[®](N)TSCGEWOU-SR PLUS

Medium voltage, flexible power supply cable for reeling applications based on DIN VDE 0250-813

BiTcrane[®](N)TSCGEWOU-SR PLUS 3.6/6 kV

Cat. no.	n x mm ²	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]	Permissible tensile force ¹⁾ static/dynamic [N]
BC00065	3x25+3x25/3	40-43	2400	1125 / 1500
BC00066	3x35+3x25/3	43-46	2940	1575 / 2100
BC00067	3x50+3x25/3	47-50	3580	2250 / 3000
BC00068	3x70+3x35/3	51-54	4500	3150 / 4200
BC00069	3x95+3x50/3	56-59	5650	4275 / 5700
BC00070	3x120+3x70/3	59-62	6740	5400 / 7200
BC00071	3x150+3x70/3	62-65	7800	6750 / 9000
BC00072	3x185+3x95/3	69-72	9520	8325 / 11100
BC00073	3x240+3x120/3	73-76	11660	10800 / 14400

BiTcrane[®](N)TSCGEWOU-SR PLUS 6/10 kV

Cat. no.	n x mm ²	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]	Permissible tensile force ¹⁾ static/dynamic [N]
BC00080	3x25+3x25/3	42-45	2560	1125 / 1500
BC00081	3x35+3x25/3	44-47	3020	1575 / 2100
BC00082	3x50+3x25/3	48-51	3660	2250 / 3000
BC00083	3x70+3x35/3	53-56	4750	3150 / 4200
BC00084	3x95+3x50/3	57-60	5760	4275 / 5700
BC00085	3x120+3x70/3	60-63	6890	5400 / 7200
BC00086	3x150+3x70/3	65-68	8150	6750 / 9000
BC00087	3x185+3x95/3	70-73	9640	8325 / 11100
BC00088	3x240+3x120/3	74-77	11830	10800 / 14400

BiTcrane[®](N)TSCGEWOU-SR PLUS 8.7/15 kV

Cat. no.	n x mm ²	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]	Permissible tensile force ¹⁾ static/dynamic [N]
BC00095	3x25+3x25/3	42-45	2560	1125 / 1500
BC00096	3x35+3x25/3	44-47	3020	1575 / 2100
BC00097	3x50+3x25/3	48-51	3660	2250 / 3000
BC00098	3x70+3x35/3	53-56	4750	3150 / 4200
BC00099	3x95+3x50/3	57-60	5760	4275 / 5700
BC00100	3x120+3x70/3	60-63	6890	5400 / 7200
BC00101	3x150+3x70/3	65-68	8150	6750 / 9000
BC00102	3x185+3x95/3	70-73	9640	8325 / 11100
BC00103	3x240+3x120/3	74-77	11830	10800 / 14400

BiTcrane[®](N)TSCGEWOU-SR PLUS 12/20 kV

Cat. no.	n x mm ²	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]	Permissible tensile force ¹⁾ static/dynamic [N]
BC00110	3x25+3x25/3	49-52	3260	1125 / 1500
BC00111	3x35+3x25/3	53-56	3920	1575 / 2100
BC00112	3x50+3x25/3	57-60	4630	2250 / 3000
BC00113	3x70+3x35/3	60-63	5620	3150 / 4200
BC00114	3x95+3x50/3	65-68	6910	4275 / 5700
BC00115	3x120+3x70/3	69-72	8120	5400 / 7200
BC00116	3x150+3x70/3	72-75	9200	6750 / 9000
BC00117	3x185+3x95/3	78-81	11050	8325 / 11100
BC00118	3x240+3x120/3	83-86	13280	10800 / 14400

Crane cables

BiTcrane®(N)TSCGEWOU-SR PLUS

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BiTcrane®(N)TSCGEWOU-SR PLUS 14/25 kV

Cat. no.	n x mm ²	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]	Permissible tensile force ^{*)} static/dynamic [N]
BC00235	3x25+3x25/3	55-58	3890	1125 / 1500
BC00236	3x35+3x25/3	57-60	4420	1575 / 2100
BC00237	3x50+3x25/3	61-64	5160	2250 / 3000
BC00238	3x70+3x35/3	66-69	6420	3150 / 4200
BC00239	3x95+3x50/3	70-73	7530	4275 / 5700

BiTcrane®(N)TSCGEWOU-SR PLUS 18/30 kV

Cat. no.	n x mm ²	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]	Permissible tensile force ^{*)} static/dynamic [N]
BC00247	3x25+3x25/3	58-61	4300	1125 / 1500
BC00248	3x35+3x25/3	61-64	4850	1575 / 2100
BC00249	3x50+3x25/3	66-69	5850	2250 / 3000
BC00250	3x70+3x50/3	70-73	7030	3150 / 4200
BC00251	3x95+3x50/3	73-76	8050	4275 / 5700

Cable Factory BITNER reserves the right to modify specifications without prior notification.

^{*)} please contact us if higher loads are required.

Note: on customer's request other cross sections or number of cores can be produced