

BiTmining® NTSCGEWOEU-W .../3

RoHS 2015/863/EU

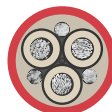
CPR

CPR 305/2011

24 months warranty

Mining cables

Medium voltage, flexible power supply cable for use in water based on DIN VDE 0250-813



open-pit
mining



industrial
application



EN 60332-1-2



high flexibility



UV resistance



oil resistant
EN 60811-404



mechanical
resistance



explosion
hazardous areas

Technical data:

Thermal parameters:

Ambient temperature:

fixed installation: -40 °C to 80 °C

flexible operation: -25 °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 per conductor: 15 N/mm²

Torsional stresses: +/-25 °/m

Bending radius: acc. to DIN VDE 0298-3

Design:

Main cores

Conductors:

tinned copper wires, finely stranded class 5
acc. to DIN EN/IEC 60228

Insulation:

- inner semi-conductive stress control layer
- EPR compound based on DIN VDE 0207-20
- outer semi-conductive insulation shield

Protective conductor:

tinned copper, finely stranded class 5
acc. to IEC 60228, semi-conductive layer
power cores laid-up over a semi-conductive centre
element with protective conductor split into three in the
outer interstices; high performance water blocking element
synthetic rubber compound based on GM1b
acc. to DIN VDE 0207-21, optimized for water application
heavy duty rubber compound, type 5GM3
acc. to DIN VDE 0207-21; colour: red; inkjet marking

Core arrangement:

Inner sheath:

Outer sheath:

Application:

Power supply cable for use in open-pit mining facilities designed for operation in water and exposed to high mechanical stresses, e.g. or connection to dredgers, floating docks, submersible pumps, etc. Cables are suitable to work in sewage, salt and brackish water.

Chemical parameters:

Resistance to oil:

DIN EN/IEC 60811-404

Behaviour in case of fire:

DIN EN/IEC 60332-1-2

Water resistance:

EN-50525-2-21

Weather resistance:

unrestricted use outdoors and indoors, resistant to ozone, UV and moisture

Electrical parameters:

Rated voltage U ₀ /U [kV]		3.6/6	6/10	8.7/15	12/20	14/25	18/30
Maximum permissible operating voltage in AC systems U ₀ /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 ₀ /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 capacity		acc. to DIN VDE 0298-4					

BiTmining® NTSCGEWOU-W .../3

Medium voltage, flexible power supply cable for use in water based on DIN VDE 0250-813

BiTmining® NTSCGEWOU-W .../3 3.6/6 kV

Cat. no	n x mm ²	Outer diameter min. – max. [mm]	Conductor resistance at 20°C [Ω/km]	Inductance [mH/km]	Operating capacitance [μF/km]	Current carrying capacity at 30°C [A]	Permissible short-circuit current (1s) [kA]	Approximate cable weight [kg/km]	Maximum permissible tensile force [N]
BM0001	3x25+3x25/3	45-48	0,795	0,36	0,34	131	3,0	2940	1125
BM0002	3x35+3x25/3	47-50	0,565	0,34	0,38	162	4,3	3670	1575
BM0010	3x50+3x35/3	50-53	0,393	0,32	0,44	202	6,1	4021	2250
BM0003	3x50+3x25/3	50-53	0,393	0,32	0,44	202	6,1	3948	2250
BM0011	3x50+3x50/3	50-53	0,393	0,32	0,44	202	6,1	4127	2250
BM0004	3x70+3x35/3	56-59	0,277	0,31	0,48	250	8,5	5157	3150
BM0005	3x95+3x50/3	60-63	0,210	0,29	0,54	301	11,6	6210	4275
BM0012	3x95+3x70/3	60-63	0,210	0,29	0,54	301	11,6	6383	4275
BM0006	3x120+3x70/3	62-65	0,164	0,28	0,59	352	14,6	7240	5400
BM0013	3x150+3x25/3	69-72	0,164	0,28	0,59	352	14,6	8299	5400
BM0007	3x150+3x70/3	69-72	0,132	0,28	0,64	404	18,3	8651	6750

BiTmining® NTSCGEWOU-W .../3 6/10 kV

Cat. no	n x mm ²	Outer diameter min. – max. [mm]	Conductor resistance at 20°C [Ω/km]	Inductance [mH/km]	Operating capacitance [μF/km]	Current carrying capacity at 30°C [A]	Permissible short-circuit current (1s) [kA]	Approximate cable weight [kg/km]	Maximum permissible tensile force [N]
BM0015	3x25+3x25/3	46-49	0,795	0,37	0,31	131	3,0	3087	1125
BM0025	3x35+3x16/3	48-51	0,565	0,35	0,35	162	4,3	3378	1575
BM0016	3x35+3x25/3	48-51	0,565	0,35	0,35	162	4,3	3467	1575
BM0026	3x35+3x35/3	48-51	0,565	0,35	0,35	162	4,3	3540	1575
BM0017	3x50+3x25/3	53-56	0,393	0,33	0,39	202	6,1	4339	2250
BM0027	3x50+3x50/3	53-56	0,393	0,33	0,39	202	6,1	4518	2250
BM0018	3x70+3x35/3	57-60	0,277	0,31	0,43	250	8,5	5362	3150
BM0028	3x95+3x35/3	61-64	0,210	0,30	0,49	301	11,6	6303	4275
BM0019	3x95+3x50/3	61-64	0,210	0,30	0,49	301	11,6	6409	4275
BM0020	3x120+3x70/3	65-68	0,164	0,29	0,53	352	14,6	7723	5400

BiTmining® NTSCGEWOU-W .../3 8.7/15 kV

Cat. no	n x mm ²	Outer diameter min. – max. [mm]	Conductor resistance at 20°C [Ω/km]	Inductance [mH/km]	Operating capacitance [μF/km]	Current carrying capacity at 30°C [A]	Permissible short-circuit current (1s) [kA]	Approximate cable weight [kg/km]	Maximum permissible tensile force [N]
BM0030	3x25+3x25/3	53-56	0,795	0,39	0,25	139	3,0	3825	1125
BM0029	3x25+3x16/3	53-56	0,795	0,39	0,25	139	3,0	3736	1125
BM0031	3x35+3x25/3	55-58	0,565	0,37	0,28	172	4,3	4236	1575
BM0032	3x50+3x25/3	59-62	0,393	0,35	0,31	215	6,1	4934	2250
BM0033	3x70+3x35/3	62-65	0,277	0,33	0,34	265	8,5	5974	3150
BM0034	3x95+3x50/3	68-71	0,210	0,32	0,39	319	11,6	7367	4275

BiTmining® NTSCGEWOU-W .../3

Medium voltage, flexible power supply cable for use in water based on DIN VDE 0250-813

BiTmining® NTSCGEWOU-W .../3 12/20 kV

Cat. no	n x mm ²	Outer diameter min. – max. [mm]	Conductor resistance at 20°C [Ω/km]	Inductance [mH/km]	Operating capacitance [μF/km]	Current carrying capacity at 30°C [A]	Permissible short-circuit current (1s) [kA]	Approximate cable weight [kg/km]	Maximum permissible tensile force [N]
BM0040	3x25+3x25/3	57-60	0,795	0,41	0,22	139	3,0	4334	1125
BM0039	3x25+3x16/3	57-60	0,795	0,41	0,22	139	3,0	4245	1125
BM0041	3x35+3x25/3	60-63	0,565	0,39	0,24	172	4,3	4765	1575
BM0042	3x50+3x25/3	65-68	0,393	0,37	0,27	215	6,1	5768	2250
BM0048	3x50+3x35/3	65-68	0,393	0,37	0,27	215	6,1	5841	2250
BM0043	3x70+3x35/3	69-72	0,277	0,35	0,30	265	8,5	6857	3150

BiTmining® NTSCGEWOU-W .../3 14/25 kV

Cat. no	n x mm ²	Outer diameter min. – max. [mm]	Conductor resistance at 20°C [Ω/km]	Inductance [mH/km]	Operating capacitance [μF/km]	Current carrying capacity at 30°C [A]	Permissible short-circuit current (1s) [kA]	Approximate cable weight [kg/km]	Maximum permissible tensile force [N]
BM0050	3x25+3x25/3	65-68	0,795	0,43	0,19	139	3,0	5329	1125
BM0051	3x35+3x25/3	67-70	0,565	0,41	0,21	172	4,3	5794	1575

BiTmining® NTSCGEWOU-W .../3 18/30 kV

Cat. no	n x mm ²	Outer diameter min. – max. [mm]	Conductor resistance at 20°C [Ω/km]	Inductance [mH/km]	Operating capacitance [μF/km]	Current carrying capacity at 30°C [A]	Permissible short-circuit current (1s) [kA]	Approximate cable weight [kg/km]	Maximum permissible tensile force [N]
BM0060	3x25+3x25/3	70-73	0,795	0,45	0,17	139	3,0	6075	1125

Cable Factory BITNER reserves the right to modify specifications without prior notification.
Note: On customer's request other cross sections or number of cores can be produced