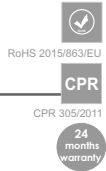


BiTmining® NTSCGEWOEU-W .../3E



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 type 3GI3 acc. to DIN VDE 0207-20

- outer semi-conductive insulation shield layer

Protective conductor:

tinned copper wire spinning, design acc. to DIN VDE 0250-1,

cross-section symmetrically split over the triple extruded core

three screened cores laid-up together

synthetic rubber compound based on type GM1b

acc. to DIN VDE 0207-21, filling the interstices, optimized

for water applications

heavy duty rubber compound, type 5GM3

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

Stranding:

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. for 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
Max. permissible operating voltage U _{0, max} in AC systems [kV]:	4.2/7.2	6.9/12	10.4/18	13.9/24	17.3/30	20.8/36
Max. permissible operating voltage U _{0, max} in DC systems [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 [A]:	acc. to DIN VDE 0298-4					

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BiTmining® NTSCGEWOEU-W .../3E 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]
BM0070	3x25+3x16/3E	47-50	0,795	0,36	0,34	131	3,0	3045	1125
BM0071	3x35+3x16/3E	49-52	0,565	0,34	0,38	162	4,3	3425	1575
BM0069	3x35+3x25/3E	50-53	0,565	0,34	0,38	162	4,3	3585	1575
BM0072	3x50+3x25/3E	55-58	0,393	0,32	0,44	202	6,1	4425	2250
BM0078	3x50+3x50/3E	55-58	0,393	0,32	0,44	202	6,1	4695	2250
BM0073	3x70+3x35/3E	59-62	0,277	0,31	0,48	250	8,5	5445	3150
BM0079	3x70+3x50/3E	59-62	0,277	0,31	0,48	250	8,5	5620	3150
BM0074	3x95+3x50/3E	63-66	0,210	0,29	0,54	301	11,6	6580	4275
BM0075	3x120+3x70/3E	67-70	0,164	0,28	0,59	352	14,6	8240	5400

BiTmining® NTSCGEWOEU-W .../3E 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]
BM0080	3x25+3x16/3E	49-52	0,795	0,37	0,31	131	3,0	3215	1125
BM1200	3x25+3x25/3E	49-52	0,795	0,37	0,31	131	3,0	3345	1125
BM0081	3x35+3x16/3E	51-54	0,565	0,35	0,34	162	4,3	3605	1575
BM0089	3x35+3x25/3E	51-54	0,565	0,35	0,34	162	4,3	3730	1575
BM0082	3x50+3x25/3E	57-60	0,393	0,33	0,38	202	6,1	4625	2250
BM1201	3x50+3x50/3E	57-60	0,393	0,33	0,38	202	6,1	4895	2250
BM0083	3x70+3x35/3E	60-63	0,277	0,31	0,43	250	8,5	5660	3150
BM1202	3x70+3x50/3E	60-63	0,277	0,31	0,43	250	8,5	5835	3150
BM0084	3x95+3x50/3E	66-69	0,210	0,30	0,48	301	11,6	7085	4275
BM0085	3x120+3x70/3E	69-72	0,164	0,29	0,54	352	14,6	8225	5400

BiTmining® NTSCGEWOEU-W .../3E 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]
BM0090	3x25+3x16/3E	55-58	0,795	0,39	0,25	139	3,0	3955	1125
BM0091	3x35+3x16/3E	57-60	0,565	0,37	0,28	172	4,3	4375	1575
BM0092	3x50+3x25/3E	62-65	0,393	0,35	0,31	215	6,1	5210	2250
BM0098	3x50+3x50/3E	62-65	0,393	0,35	0,31	215	6,1	5480	2250
BM0093	3x70+3x35/3E	67-70	0,277	0,33	0,34	265	8,5	6565	3150
BM0099	3x70+3x50/3E	67-70	0,277	0,33	0,34	265	8,5	6740	3150

BiTmining® NTSCGEWOEU-W .../3E

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BiTmining® NTSCGEWOEU-W .../3E 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]
BM0100	3x25+3x16/3E	60-63	0,795	0,41	0,22	139	3,0	4475	1125
BM1220	3x25+3x25/3E	60-63	0,795	0,41	0,22	139	3,0	4610	1125
BM0101	3x35+3x16/3E	62-65	0,565	0,39	0,24	172	4,3	4915	1575
BM1221	3x35+3x25/3E	62-65	0,565	0,39	0,24	172	4,3	5045	1575
BM1222	3x35+3x50/3E	62-65	0,565	0,39	0,24	172	4,3	5310	1575
BM0102	3x50+3x25/3E	68-71	0,393	0,37	0,27	215	6,1	6070	2250
BM1223	3x50+3x35/3E	68-71	0,393	0,37	0,27	215	6,1	6165	2250
BM1224	3x50+3x50/3E	68-71	0,393	0,37	0,27	215	6,1	6335	2250

BiTmining® NTSCGEWOEU-W .../3E 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]
BM0110	3x25+3x16/3E	67-70	0,795	0,43	0,19	139	3,0	5495	1125
BM0109	3x25+3x25/3E	68-71	0,795	0,43	0,19	139	3,0	5630	1125
BM0111	3x35+3x16/3E	69-72	0,565	0,41	0,21	172	4,3	5965	1575
BM0118	3x35+3x25/3E	70-73	0,565	0,41	0,21	172	4,3	6105	1575
BM0119	3x35+3x50/3E	70-73	0,565	0,41	0,21	172	4,3	6370	1575

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