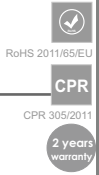
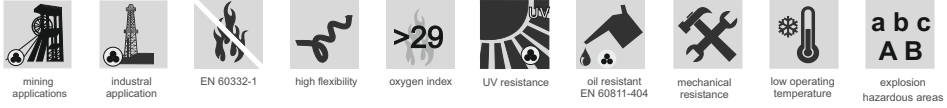


# BiTmining® NTSCGEWOU-W .../3



Mining cables

Medium voltage, flexible power supply cable for use in water



## Technical data:

**Operating temperature:**  
 Fixed systems: -40°C to 90°C  
 Flexible operation: -25°C to 80°C  
**Maximum permissible water temperature:**  
 40°C  
**Maximum permissible operating temperature of the conductor:** 90°C  
**Maximum conductors operating temperature in short-circuit:** 250°C  
**Tensile load:** 15N/mm<sup>2</sup>  
**Torsional stresses:** +/- 100%/m  
**Min. bending radius:** according to DIN VDE 0298, Part 3  
**Operating voltage:**  
 U<sub>n</sub>/U = 3,6/6kV to 18/30kV  
**Test voltage:** 11kV to 43kV  
**Standard:** according to DIN VDE 0250, p.813

## Construction:

**Conductor:** finely stranded class 5 (EN 60228, DIN VDE 0295) tinned, electrolytic copper  
**Insulation:** EPR compound with improved electrical and mechanical characteristics (DIN VDE 0207, Part 20)  
**Arrangement of protective-earth conductor:** protective-earth conductor split into 3 in the outer interstices  
**Electrical field control:** inner and outer layer of semiconductive rubber  
**Core colours:** natural colouring with black semiconductive rubber with printed white digits 1-3  
**Core arrangement:** three main conductors laid-up with protective-earth conductor split into 3 in the outer interstices  
**Wrapping:** semiconductive, reinforced, swellable, binding and separating tape waterproof  
**Inner sheath:** EPR compound type GM1b (acc. to DIN VDE 0201, Part 21)  
**Outer sheath:** 5GM3 compound with improved mechanical characteristics (acc. to DIN VDE 0207, Part 21), colour: red

## Application:

Power supply cable for use strip and 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. Cables classified according to **EN 50575 (CPR)**.

## Chemical parameters:

Resistance to oil: EN 60811-2-1, IEC 60811-2-1  
 Behaviour in case of fire: VDE 0482 Part 332-1-2, EN 60332-1-2, IEC 60332-1-2  
 Water compatibility: HD 22.16 (VDE 0282 Part 16)  
 Weather resistance: Unrestricted use outdoors and indoors, resistant to ozone, UV and moisture

Rated voltage U <sub>n</sub> /U [kV]	3,6/6	6/10	8,7/15	12/20	14/25	18/30
Maximum permissible operating voltage in AC systems U <sub>n</sub> /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 <sub>n</sub> /U [kV]	5,4/10,8	9/18	13,5/27	18/36	22,5/45	27/54
AC test voltage [kV]	11	17	24	29	36	43
Current-carrying capacity	According to DIN VDE 0298, Part 4					

# BiTmining® NTSCGEWOU-W .../3

Medium voltage, flexible power supply cable for use in water

## BiTmining® NTSCGEWOU-W .../3 3,6/6kV

Cat. no	Number of cores and nominal cross-section n x mm <sup>2</sup>	Overall cable diameter* [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]	Approx. net weight [kg/km]	Maximum permissible tensile force [N]
BM0001	3x25+3x25/3	45,8	0,795	0,36	0,34	131	3,0	3050	1125
BM0002	3x35+3x25/3	48,0	0,565	0,34	0,38	162	4,3	3400	1575
BM0003	3x50+3x25/3	52,4	0,393	0,32	0,44	202	6,1	4150	2250
BM0004	3x70+3x35/3	57,1	0,277	0,31	0,48	250	8,5	5300	3150
BM0005	3x95+3x50/3	61,8	0,210	0,29	0,54	301	11,6	6550	4275
BM0006	3x120+3x70/3	64,3	0,164	0,28	0,59	352	14,6	7450	5400
BM0007	3x150+3x70/3	70,1	0,132	0,28	0,64	404	18,3	8750	6750
BM0008	3x185+3x95/3	75,8	0,108	0,27	0,69	461	22,6	10450	8325

## BiTmining® NTSCGEWOU-W .../3 6/10kV

Cat. no	Number of cores and nominal cross-section n x mm <sup>2</sup>	Overall cable diameter* [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]	Approx. net weight [kg/km]	Maximum permissible tensile force [N]
BM0015	3x25+3x25/3	48,2	0,795	0,37	0,31	131	3,0	3250	1125
BM0016	3x35+3x25/3	50,3	0,565	0,35	0,35	162	4,3	3650	1575
BM0017	3x50+3x25/3	54,5	0,393	0,33	0,39	202	6,1	4400	2250
BM0018	3x70+3x35/3	59,4	0,277	0,31	0,43	250	8,5	5570	3150
BM0019	3x95+3x50/3	63,1	0,210	0,30	0,49	301	11,6	6720	4275
BM0020	3x120+3x70/3	66,5	0,164	0,29	0,53	352	14,6	7750	5400
BM0021	3x150+3x50/3	72,4	0,132	0,28	0,58	404	18,3	9100	6750
BM0022	3x150+3x70/3	72,4	0,132	0,28	0,58	404	18,3	9100	6750
BM0023	3x185+3x50/3	77,9	0,108	0,28	0,62	461	22,6	10700	8325
BM0024	3x185+3x95/3	77,9	0,108	0,28	0,62	461	22,6	10800	8325

## BiTmining® NTSCGEWOU-W .../3 8,7/15kV

Cat. no	Number of cores and nominal cross-section n x mm <sup>2</sup>	Overall cable diameter* [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]	Approx. net weight [kg/km]	Maximum permissible tensile force [N]
BM0030	3x25+3x25/3	53,6	0,795	0,39	0,25	139	3,0	3860	1125
BM0031	3x35+3x25/3	55,8	0,565	0,37	0,28	172	4,3	4260	1575
BM0032	3x50+3x25/3	60,3	0,393	0,35	0,31	215	6,1	5100	2250
BM0033	3x70+3x35/3	64,9	0,277	0,33	0,34	265	8,5	6300	3150
BM0034	3x95+3x50/3	69,6	0,210	0,32	0,39	319	11,6	7650	4275
BM0035	3x120+3x70/3	72,3	0,164	0,31	0,42	371	14,6	8600	5400
BM0036	3x150+3x70/3	77,8	0,132	0,30	0,46	428	18,3	10100	6750
BM0037	3x185+3x95/3	83,6	0,108	0,29	0,48	488	22,6	11800	8325

# BiTmining® NTSCGEWOU-W .../3

Medium voltage, flexible power supply cable for use in water

## BiTmining® NTSCGEWOU-W .../3 12/20kV

Cat. no	Number of cores and nominal cross-section n x mm <sup>2</sup>	Overall cable diameter* [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]	Approx. net weight [kg/km]	Maximum permissible tensile force [N]
BM0040	3x25+3x25/3	58,0	0,795	0,41	0,22	139	3,0	4360	1125
BM0041	3x35+3x25/3	61,1	0,565	0,39	0,24	172	4,3	4900	1575
BM0042	3x50+3x25/3	65,4	0,393	0,37	0,27	215	6,1	5770	2250
BM0043	3x70+3x35/3	70,2	0,277	0,35	0,30	265	8,5	7050	3150
BM0044	3x95+3x50/3	73,9	0,210	0,33	0,33	319	11,6	8300	4275
BM0045	3x120+3x70/3	77,3	0,164	0,32	0,36	371	14,6	9370	5400
BM0046	3x150+3x70/3	83,2	0,132	0,31	0,39	428	18,3	10900	6750
BM0047	3x185+3x95/3	88,6	0,108	0,30	0,41	488	22,6	12650	8325

## BiTmining® NTSCGEWOU-W .../3 14/25kV

Cat. no	Number of cores and nominal cross-section n x mm <sup>2</sup>	Overall cable diameter* [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]	Approx. net weight [kg/km]	Maximum permissible tensile force [N]
BM0050	3x25+3x25/3	65,4	0,795	0,43	0,19	139	3,0	5350	1125
BM0051	3x35+3x25/3	67,5	0,565	0,41	0,21	172	4,3	5780	1575
BM0052	3x50+3x25/3	72,0	0,393	0,39	0,23	215	6,1	6750	2250
BM0053	3x70+3x35/3	76,6	0,277	0,37	0,25	265	8,5	8050	3150
BM0054	3x95+3x50/3	81,3	0,210	0,35	0,28	319	11,6	9500	4275
BM0055	3x120+3x70/3	83,9	0,164	0,34	0,30	371	14,6	10500	5400
BM0056	3x150+3x70/3	89,6	0,132	0,33	0,33	428	18,3	12050	6750
BM0057	3x185+3x95/3	95,4	0,108	0,32	0,35	488	22,6	14000	8325

## BiTmining® NTSCGEWOU-W .../3 18/30kV

Cat. no	Number of cores and nominal cross-section n x mm <sup>2</sup>	Overall cable diameter* [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]	Approx. net weight [kg/km]	Maximum permissible tensile force [N]
BM0060	3x25+3x25/3	71,5	0,795	0,45	0,17	139	3,0	6220	1125
BM0061	3x35+3x25/3	73,6	0,565	0,43	0,19	172	4,3	6690	1575
BM0062	3x50+3x25/3	77,9	0,393	0,41	0,21	215	6,1	7660	2250
BM0063	3x70+3x35/3	82,8	0,277	0,39	0,23	265	8,5	9100	3150
BM0064	3x95+3x50/3	86,5	0,210	0,37	0,25	319	11,6	10400	4275
BM0065	3x120+3x70/3	89,8	0,164	0,35	0,27	371	14,6	11600	5400
BM0066	3x150+3x70/3	95,8	0,132	0,34	0,30	428	18,3	13250	6750
BM0067	3x185+3x95/3	101,3	0,108	0,33	0,31	488	22,6	15200	8325

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

\*Cable outer diameter may differ from the one shown in table

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