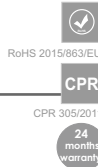


# BiTmining<sup>®</sup> NTMCGCWOEU



Medium voltage, screened single core cable according to DIN VDE 0250-813



mining applications



industrial application



EN 60332-1-2



high flexibility



oxygen index >29



UV resistance



oil resistant  
EN 60811-404

## 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:** 200 °C

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

### Mechanical parameters:

**Max. tensile load per conductor:** 15 N/mm<sup>2</sup>

#### Bending radius:

- fixed installation: ≥ 6 x outer-Ø  
- free moving: ≥ 10 x outer-Ø

## Design:

### Main core

**Conductor:** tinned copper wires, finely stranded, class 5 acc. to DIN EN/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

### Protective conductor:

spirally applied tinned copper wires, design acc. to DIN VDE 0250-1

### Outer sheath:

heavy duty rubber compound, type 5GM5 acc. to DIN VDE 0207-21, unrestricted use indoors, outdoors, resistance to ozone, UV and moisture, colour: red, inkjet marking

## Application:

Flexible high voltage cable used in short lengths, e.g. as a connection in switch-gear or transformer houses where small bending radius is requested.

## 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 <sub>0</sub> /U [kV]	3.6/6	6/10	8.7/15	12/20	14/25	18/30
Maximum permissible operating voltage U <sub>0,max</sub> in AC systems [kV]:	4.2/7.2	6.9/12	10.4/18	13.9/24	17.3/30	20.8/36
Maximum permissible operating voltage U <sub>0,max</sub> 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

# BiTmining<sup>®</sup> NTMCGCWOEU

Medium voltage, screened single core cable according to DIN VDE 0250-813

## BiTmining<sup>®</sup> NTMCGCWOEU 3.6/6 kV

Cat. no	n x mm <sup>2</sup>	Maximum conductor resistance [Ω/km]	Nominal diameter over insulation [mm]	Outer diameter min.-max. [mm]	Approximate cable weight [kg/km]	Current carrying capacity <sup>1)</sup> [A]
BM0789	1x16/16	1.24	12.5	20 - 23	680	116
BM0790	1x25/16	0.795	14	22 - 25	810	135
BM0791	1x35/16	0.565	15	23 - 26	950	169
BM0792	1x50/16	0.393	17	25 - 28	1140	207
BM0793	1x70/16	0.277	18	27 - 30	1380	268
BM0794	1x95/16	0.210	20	28 - 31	1630	328
BM0795	1x120/16	0.164	21	30 - 33	1890	383
BM0796	1x150/25	0.132	23	33 - 36	2310	444
BM0797	1x185/25	0.108	26	35 - 38	2680	510
BM0798	1x240/25	0.0817	27	38 - 41	3300	607
BM0788	1x300/25	0.0654	30	40 - 43	3930	703
BM0787	1x400/35	0.0495	34	44 - 47	5000	823
BM0786	1x500/35	0.0391	36	47 - 50	6000	946

## BiTmining<sup>®</sup> NTMCGCWOEU 6/10 kV

Cat. no	n x mm <sup>2</sup>	Maximum conductor resistance [Ω/km]	Nominal diameter over insulation [mm]	Outer diameter min.-max. [mm]	Approximate cable weight [kg/km]	Current carrying capacity <sup>1)</sup> [A]
BM0799	1x16/16	1.24	13	21 - 24	710	116
BM0800	1x25/16	0.795	15	23 - 26	880	135
BM0801	1x35/16	0.565	16	24 - 27	980	169
BM0802	1x50/16	0.393	17	26 - 29	1180	207
BM0803	1x70/16	0.277	19	27 - 30	1390	268
BM0804	1x95/16	0.210	21	29 - 32	1630	328
BM0805	1x120/16	0.164	22	31 - 34	1960	383
BM0806	1x150/25	0.132	24	33 - 36	2360	444
BM0807	1x185/25	0.108	26	36 - 39	2730	510
BM0808	1x240/25	0.0817	28	39 - 42	3350	607
BM0809	1x300/25	0.0654	31	41 - 44	3970	703
BM0810	1x400/35	0.0495	35	45 - 48	5070	823
BM0811	1x500/35	0.0391	37	48 - 51	6180	946

## BiTmining<sup>®</sup> NTMCGCWOEU 8.7/15 kV

Cat. no	n x mm <sup>2</sup>	Maximum conductor resistance [Ω/km]	Nominal diameter over insulation [mm]	Outer diameter min.-max. [mm]	Approximate cable weight [kg/km]	Current carrying capacity <sup>1)</sup> [A]
BM0820	1x16/16	1.24	15.5	23 - 26	840	116
BM0821	1x25/16	0.795	17	25 - 28	980	135
BM0822	1x35/16	0.565	18	27 - 30	1120	169
BM0823	1x50/16	0.393	20	28 - 31	1300	207
BM0824	1x70/16	0.277	21	30 - 33	1550	268
BM0825	1x95/16	0.210	23	32 - 35	1830	328
BM0826	1x120/16	0.164	24	33 - 36	2100	383
BM0827	1x150/25	0.132	26	36 - 39	2500	444
BM0828	1x185/25	0.108	29	39 - 42	2980	510
BM0829	1x240/25	0.0817	30	41 - 44	3540	607
BM0830	1x300/25	0.0654	33	43 - 46	4150	703
BM0831	1x400/35	0.0495	37	48 - 51	5350	823
BM0832	1x500/35	0.0391	39	51 - 54	6390	946

# BiTmining® NTMCGCWOEU

Medium voltage, screened single core cable according to DIN VDE 0250-813

## BiTmining® NTMCGCWOEU 12/20 kV

Cat. no	n x mm <sup>2</sup>	Maximum conductor resistance [Ω/km]	Nominal diameter over insulation [mm]	Outer diameter min.-max. [mm]	Approximate cable weight [kg/km]	Current carrying capacity <sup>1)</sup> [A]
BM0849	1x16/16	1.24	17.5	26 - 29	960	116
BM0850	1x25/16	0.795	19	27 - 30	1080	135
BM0851	1x35/16	0.565	20	28 - 31	1170	169
BM0852	1x50/16	0.393	22	30 - 33	1360	207
BM0853	1x70/16	0.277	23	32 - 35	1690	268
BM0854	1x95/16	0.210	25	34 - 37	1970	328
BM0855	1x120/16	0.164	26	35 - 38	2250	383
BM0856	1x150/25	0.132	28	39 - 42	2730	444
BM0857	1x185/25	0.108	31	41 - 44	3120	510
BM0858	1x240/25	0.0817	32	43 - 46	3680	607
BM0859	1x300/25	0.0654	35	45 - 48	4330	703
BM0862	1x400/35	0.0495	39	50 - 53	5540	823
BM0863	1x500/35	0.0391	41	53 - 56	6600	946

## BiTmining® NTMCGCWOEU 14/25 kV

Cat. no	n x mm <sup>2</sup>	Maximum conductor resistance [Ω/km]	Nominal diameter over insulation [mm]	Outer diameter min.-max. [mm]	Approximate cable weight [kg/km]	Current carrying capacity <sup>1)</sup> [A]
BM0883	1x25/16	0.795	22	30 - 33	1220	135
BM0884	1x35/16	0.565	23	32 - 35	1400	169
BM0885	1x50/16	0.393	24	33 - 36	1590	207
BM0886	1x70/16	0.277	26	35 - 38	1880	268
BM0887	1x95/16	0.210	28	38 - 41	2250	328
BM0888	1x120/16	0.164	29	39 - 42	2540	383
BM0889	1x150/25	0.132	31	41 - 44	2920	444
BM0890	1x185/25	0.108	33	43 - 46	3330	510
BM0891	1x240/25	0.0817	35	45 - 48	3900	607
BM0892	1x300/25	0.0654	37	49 - 52	4680	703
BM0893	1x400/35	0.0495	41	53 - 56	5810	823
BM0894	1x500/35	0.0391	43	55 - 58	6890	946

## BiTmining® NTMCGCWOEU 18/30 kV

Cat. no	n x mm <sup>2</sup>	Maximum conductor resistance [Ω/km]	Nominal diameter over insulation [mm]	Outer diameter min.-max. [mm]	Approximate cable weight [kg/km]	Current carrying capacity <sup>1)</sup> [A]
BM0865	1x25/16	0.795	24	33 - 36	1430	135
BM0866	1x35/16	0.565	25	34 - 37	1560	169
BM0867	1x50/16	0.393	27	36 - 39	1740	207
BM0868	1x70/16	0.277	28	38 - 41	2140	268
BM0869	1x95/16	0.210	30	40 - 43	2440	328
BM0870	1x120/16	0.164	31	41 - 44	2740	383
BM0871	1x150/25	0.132	33	43 - 46	3110	444
BM0872	1x185/25	0.108	36	46 - 49	3540	510
BM0873	1x240/25	0.0817	37	49 - 52	4230	607
BM0874	1x300/25	0.0654	40	51 - 54	4920	703
BM0875	1x400/35	0.0495	44	55 - 58	6080	823
BM0876	1x500/35	0.0391	46	58 - 61	7160	946

<sup>1)</sup> acc. to IEC 60364-5-52, conductor temperature: 90 °C/Reference ambient temperature: 30 °C, free in air, based on installation method F, three loaded conductors trefoil, values for further installation methods on request

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