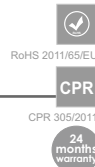
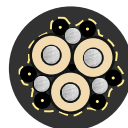


BiTmining[®](N)TSCGEWOEU-TR



Medium voltage, flexible power supply trailing cable



mining applications



industrial application



EN 60332-1



high flexibility



oxygen index



UV resistance



oil resistant
EN 60811-404



mechanical resistance



low operating temperature



explosion hazardous areas

Technical data:

Operating temperature:

Fixed systems: -50°C to 90°C

Flexible operation: -35°C to 80°C

Maximum permissible operating temperature of the conductor: 90°C

Maximum conductors operating temperature in short-circuiting: 250°C

Tensile load: 15N/mm²

Torsional stresses: +/-100°/m

Min. bending radius: acc. to DIN VDE

0298, Part 3

Operating voltage:

U₀/U= 3,6/6kV to 18/30kV

Test voltage: 11kV to 43kV

Standard: based on DIN VDE 0250 p.813

Construction:

Conductor: finely stranded class 5 (EN 60228, DIN VDE 0295) tinned, electrolytic copper

Protective-earth conductor: very 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)

Electrical field control: inner and outer layers of semiconductive rubber

Core identification: natural colouring with black semiconductive rubber and printed white digits 1 to 3

Core arrangement: three main conductors laid-up with protective-earth conductor split into 3 in the outer interstices

Reinforcement: extremely tear-resistant reinforcing tape preventing sheath movements and protecting from transverse and longitudinal stress

Inner and outer sheath: special 5GM5 compound (acc. to DIN VDE 0207, Part 21) with improved tear- and abrasion resistance characteristics, inner and outer sheath are inseparably bonded. Sheath colour black.

Application:

Flexible cable for power supply or connections for large material handling or mining machines in open-pit mines where exposed to extremely high mechanical stresses, abrasion and tear usually during trailing operation. 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

Weather resistance: Unrestricted use indoors, outdoors, resistance to ozone, UV and moisture

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 [kV]		11	17	24	29	36	43
Current-carrying capacity	According to DIN VDE 0298, Part 4						

BiTmining®(N)TSCGEWOEU-TR

Medium voltage, flexible power supply trailing cable

BiTmining®(N)TSCGEWOEU-TR 3,6/6kV

Cat. no	Number of cores and nominal cross-section n x mm ²	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]
BM0440	3x25+3x25/3	45,8	0,795	0,36	0,34	131	3,05	3120	1125
BM0441	3x35+3x25/3	48,0	0,565	0,34	0,39	162	4,27	3500	1575
BM0442	3x50+3x25/3	52,4	0,393	0,32	0,43	202	6,10	4289	2250
BM0443	3x70+3x35/3	57,1	0,277	0,30	0,49	250	8,54	5450	3150
BM0444	3x95+3x50/3	61,7	0,210	0,29	0,54	301	11,59	6750	4275
BM0445	3x120+3x70/3	64,3	0,164	0,28	0,60	352	14,64	7650	5400
BM0446	3x150+3x50/3	70,1	0,132	0,27	0,65	404	18,30	9015	6750
BM0448	3x150+3x70/3	70,1	0,132	0,27	0,65	404	18,30	9075	6750
BM0447	3x185+3x95/3	75,8	0,108	0,27	0,70	461	22,57	10755	8325

BiTmining®(N)TSCGEWOEU-TR 6/10kV

Cat. no	Number of cores and nominal cross-section n x mm ²	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]
BM0450	3x25+3x25/3	48,1	0,795	0,37	0,31	131	3,05	3365	1125
BM0451	3x35+3x25/3	50,3	0,565	0,34	0,35	162	4,27	3750	1575
BM0452	3x50+3x25/3	54,5	0,393	0,33	0,39	202	6,10	4540	2250
BM0453	3x70+3x35/3	59,4	0,277	0,31	0,44	250	8,54	5745	3150
BM0454	3x95+3x50/3	63,0	0,210	0,30	0,49	301	11,59	6925	4275
BM0455	3x120+3x70/3	66,4	0,164	0,29	0,54	352	14,64	7960	5400
BM0456	3x150+3x50/3	72,4	0,132	0,28	0,58	404	18,30	9370	6750
BM0457	3x150+3x70/3	72,4	0,132	0,28	0,58	404	18,30	9380	6750
BM0458	3x185+3x50/3	77,9	0,108	0,28	0,63	461	22,57	10970	8325
BM0459	3x185+3x95/3	77,9	0,108	0,27	0,63	461	22,57	11120	8325
BM0460	3x35+2x25/2+1x10	53,1	0,565	0,34	0,35	162	5,01	4375	1575

BiTmining®(N)TSCGEWOEU-TR 8,7/15kV

Cat. no	Number of cores and nominal cross-section n x mm ²	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]
BM0465	3x25+3x25/3	53,7	0,795	0,39	0,25	139	3,05	4000	1125
BM0466	3x35+3x25/3	55,8	0,565	0,37	0,28	172	4,27	4410	1575
BM0467	3x50+3x25/3	60,2	0,393	0,35	0,31	215	6,10	5270	2250
BM0468	3x70+3x35/3	64,9	0,277	0,33	0,35	265	8,54	6520	3150
BM0469	3x95+3x50/3	69,6	0,210	0,32	0,39	319	11,59	7900	4275
BM0470	3x120+3x70/3	72,1	0,164	0,31	0,42	371	14,64	8840	5400
BM0471	3x150+3x70/3	77,9	0,132	0,30	0,46	428	18,30	10300	6750
BM0472	3x185+3x95/3	83,6	0,108	0,29	0,50	488	22,57	12140	8325

BiTmining[®](N)TSCGEWOEU-TR

Medium voltage, flexible power supply trailing cable

BiTmining[®](N)TSCGEWOEU-TR 12/20kV

Cat. no	Number of cores and nominal cross-section n x mm ²	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]
BM0480	3x25+3x25/3	58,0	0,795	0,41	0,22	139	3,05	4530	1125
BM0481	3x35+3x25/3	61,1	0,565	0,39	0,25	172	4,27	5100	1575
BM0482	3x50+3x25/3	65,3	0,393	0,37	0,27	215	6,10	5985	2250
BM0483	3x70+3x35/3	70,2	0,277	0,35	0,30	265	8,54	7310	3150
BM0484	3x95+3x50/3	73,9	0,210	0,33	0,33	319	11,59	8580	4275
BM0485	3x120+3x70/3	77,2	0,164	0,32	0,36	371	14,64	9690	5400
BM0486	3x150+3x70/3	83,2	0,132	0,31	0,39	428	18,30	11250	6750
BM0487	3x185+3x95/3	88,5	0,108	0,30	0,42	488	22,57	13100	8325

BiTmining[®](N)TSCGEWOEU-TR 14/25kV

Cat. no	Number of cores and nominal cross-section n x mm ²	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]
BM0490	3x25+3x25/3	65,3	0,795	0,43	0,19	139	3,05	5550	1125
BM0491	3x35+3x25/3	67,5	0,565	0,41	0,21	172	4,27	6020	1575
BM0492	3x50+3x25/3	71,9	0,393	0,39	0,23	215	6,10	6990	2250
BM0493	3x70+3x35/3	76,6	0,277	0,37	0,25	265	8,54	8350	3150
BM0494	3x95+3x50/3	81,3	0,210	0,35	0,28	319	11,59	9850	4275
BM0495	3x120+3x70/3	83,8	0,164	0,34	0,30	371	14,64	10870	5400
BM0496	3x150+3x70/3	89,6	0,132	0,33	0,33	428	18,30	12480	6750
BM0497	3x185+3x95/3	95,3	0,108	0,32	0,35	488	22,57	14470	8325

BiTmining[®](N)TSCGEWOEU-TR 18/30kV

Cat. no	Number of cores and nominal cross-section n x mm ²	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]
BM0500	3x25+3x25/3	71,5	0,795	0,45	0,17	139	3,05	6480	1125
BM0501	3x35+3x25/3	73,7	0,565	0,43	0,19	172	4,27	6980	1575
BM0502	3x50+3x25/3	77,9	0,393	0,40	0,21	215	6,10	7990	2250
BM0503	3x70+3x35/3	82,8	0,277	0,38	0,23	265	8,54	9440	3150
BM0504	3x95+3x50/3	86,4	0,210	0,37	0,25	319	11,59	10810	4275
BM0505	3x120+3x70/3	89,8	0,164	0,35	0,27	371	14,64	12020	5400
BM0506	3x150+3x70/3	95,7	0,132	0,34	0,29	428	18,30	13740	6750
BM0507	3x185+3x95/3	101,3	0,108	0,33	0,31	488	22,57	15770	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