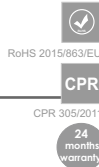
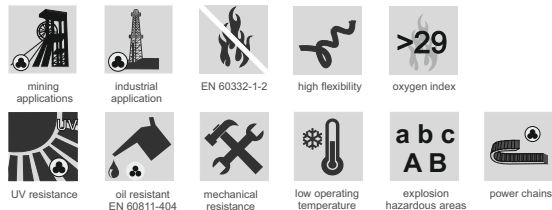


BiTmining®(N)TSKCGECW0EU-CH



Medium voltage, flexible power supply cable for trailing applications based on DIN VDE 0250-813

Mining cables



Technical data:

Thermal parameters:

Ambient temperature:

fixed installation: -40 °C to 90 °C

flexible operation: -25 °C to 80 °C

Max. permissible conductor temp.: 90 °C

Max. short-circuit temp. at conductor: 250 °C

Mechanical parameters:

Tensile load: 15 N/mm²

Min. bending radius: acc. to DIN VDE 0298, Part 3, or 2.3 x D with tensile load limited to 5 N/mm²

Minimum distance with S-type directional changes: 20 x D

Design:

Conductors:

finely stranded class 6 (EN 60228, DIN VDE 0295) tinned, electrolytic copper

Control/

protective conductor:

spirally applied concentric tinned copper wires forming control conductors around support element, EPR insulation and spirally applied concentric CuSn wires to form protective conductor

Insulation:

EPR compound with improved electrical and mechanical characteristics (DIN VDE 0207, Part 20)

Electrical field control:

Core identification:

inner and outer layers of semiconductive rubber natural colouring with black semiconductive rubber with printed white digits 1-3

Core arrangement:

three power conductors laid-up with double concentric control/protective conductor elements in the outer interstices, with optimised lay length GM1b (acc. to DIN VDE 0207, Part 21)

Inner sheath:

Signal/monitoring conductor:

spirally applied galvanized steel and tinned copper wires in a vulcanized bond between inner and outer sheath.

Outer sheath:

5GM5 compound with improved mechanical characteristics (acc. to DIN VDE 0207, Part 21), colour: red

Application:

Flexible power supply cable for use in underground mining facilities for mobile machines like coal cutters etc. Designed for use in cable chains trailed behind the machines. Chains have protective function.

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_0/U [kV]	3.6/6
Max. permissible operating voltage $U_{0,max}$ in AC systems [kV]:	4.2/7.2
Max. permissible operating voltage $U_{0,max}$ in DC systems [kV]:	5.4/10.8
AC test voltage acc. to DIN VDE 0250-813 [kV]	11
Current-carrying capacities	acc. to DIN VDE 0298-4

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n x mm ²	Outer 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. cable weight [kg/km]	Maximum permissible tensile force [N]
Cat. no								
BM0940 3x25+3x(1,5ST KON+16/3KON) + ÜL KON)	48	0,795	0,35	0,34	131	3,2	3900	1125
BM0941 3x35+3x(1,5ST KON+25/3KON) + ÜL KON)	51	0,565	0,33	0,38	162	4,5	4405	1575
BM0942 3x50+3x(1,5ST KON+25/3KON) + ÜL KON)	54	0,393	0,32	0,43	202	6,4	5510	2250
BM0943 3x70+3x(1,5ST KON+35/3KON) + ÜL KON)	58	0,277	0,29	0,49	250	8,9	6350	3150
BM0944 3x95+3x(1,5ST KON+50/3KON) + ÜL KON)	61	0,210	0,28	0,55	301	12,1	7420	4275
BM0945 3x120+3x(1,5ST KON+70/3KON) + ÜL KON)	69	0,164	0,27	0,60	352	15,4	9750	5400
BM0946 3x150+3x(1,5ST KON+70/3KON) + ÜL KON)	71	0,132	0,27	0,64	404	19,2	10470	6750
BM0947 3x50+3x(2x1,5ST KON+25/3KON) + ÜL KON)	58	0,393	0,30	0,43	202	6,4	6250	2250
BM0136 3x70+3x(2x1,5ST KON+35/3KON) + ÜL KON)	61	0,277	0,31	0,49	250	8,9	7005	3150
BM0948 3x95+3x(2x1,5ST KON+50/3KON) + ÜL KON)	66	0,210	0,28	0,55	301	12,1	8460	4275

*Outer diameter tolerance: +/-5%
 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