

BiTmining[®] (N)TSKCGECW0EU-FN

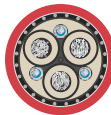
RoHS 2015/863/EU

CPR

CPR 305/2011

24 months warranty

Medium voltage, flexible power supply cable for underground festoon systems



mining applications



industrial application



EN 60332-1-2



high flexibility



oxygen index



UV resistance

oil resistant
EN 60811-404

mechanical resistance



low operating temperature



explosion hazardous areas

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:

Max. tensile load per conductor: 15 N/mm²

Bending radius: acc. to DIN VDE 0298-3

Design:

Main cores:

Conductor:

tinned copper wires, finely stranded, class 5
acc. to DIN VDE 0295

Insulation:

EPR compound with improved electrical and mechanical characteristics as per DIN VDE 0207-20

Control/protective conductor:

conductor:

spirally applied concentric tinned copper wires forming control conductors around supporting element, EPR insulation and spirally applied concentric tinned copper wires forming protective conductor

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 0207-21

Inner sheath:

Signal/monitoring conductor:

spirally applied galvanised steel and tinned copper wires in a vulcanized bond between inner and outer sheath
heavy duty rubber compound, type 5GM5 acc. to DIN VDE 0207-21, colour: red, inkjet marking

Outer sheath:

Application:

Flexible power supply cable for use in underground mining facilities especially for festoon systems.

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 [A]:

acc. to DIN VDE 0298-4

BiTmining[®](N)TSKCGECWOEU-FN

Medium voltage, flexible power supply cable for underground festoon systems

BiTmining[®](N)TSKCGECWOEU-FN 3.6/6 kV

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]	Approximate cable weight [kg/km]	Maximum permissible tensile force [N]
Cat. no								
BM0140 3x35+3x(1,5ST KON+25/3KON) + 6ÜL KON	47	0,554	0,30	0,28	162	4,3	3494	1575
BM0141 3x50+3x(1,5ST KON+25/3KON) + 6ÜL KON	52	0,386	0,29	0,33	202	6,1	4339	2250
BM0142 3x70+3x(1,5ST KON+35/3KON) + 6ÜL KON	56	0,272	0,28	0,37	250	8,5	5410	3150
BM0143 3x95+3x(1,5ST KON+50/3KON) + 6ÜL KON	59	0,206	0,27	0,42	301	11,6	6281	4275
BM0144 3x120+3x(1,5ST KON+70/3KON) + 6ÜL KON	68	0,164	0,26	0,46	352	14,6	8353	5400

*Outer diameter tolerance: +/- 2,5 mm

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