

# BiTmining® (N)3GHSSHCH



CPR

CPR 305/2011

24 months warranty

Mining cables

Rubber insulated and halogen-free sheathed feeder cable



Internal application



Industrial application



EN 60332-1-2



high flexibility



halogen-free  
EN 60754



low smoke emission  
EN 61034

## Technical data:

### Thermal parameters:

#### Permissible temperature on cable surface:

fixed installation: -40 °C to 80 °C

flexible operation: -5 °C to 80 °C

**Max. conductor temperature:** 90 °C

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

### Mechanical parameters:

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

**Bending radius:** 6 x D for fixed installation  
10 x D for flexible operation

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

## Design:

### Main cores:

#### Conductors:

plain copper wires, finely stranded, class 5  
acc. to IEC 60228

#### Insulation:

- inner semi-conductive stress control layer  
- EPR compound, lead free with improved electrical and mechanical characteristics based on DIN VDE 0207-20  
- outer semi-conductive insulation shield layer  
cross-section symmetrically split and distributed over insulation of three power cores, plain copper wires  
acc. to DIN VDE 0250-1

#### Protective conductor:

### Pilot cores

#### Conductor:

plain copper wires, finely stranded, class 5  
acc. to IEC 60228

#### Insulation:

special EPR compound, lead free, with improved electrical and mechanical characteristics based on DIN VDE 0207-20  
three screened main cores laid-up with the control cores in the interstices

#### Stranding:

### Bedding:

#### Inner sheath 1:

filling the interstices  
special halogen-free compound HM4  
acc. to DIN VDE 0207-24

#### ÜL:

concentric monitoring conductor: plain copper wires,  
DC resistance ≤ 3.30 Ω/km at 20 °C  
special halogen-free compound HM4  
acc. to DIN VDE 0207-24

#### Inner sheath 2:

### Armour:

#### Outer sheath:

galvanized steel wire braid, covering min. 75%  
special halogen-free compound HM4  
acc. to DIN VDE 0207-24, colour: red

## Application:

In all mining workings e.g. tunneling, stationary and non-stationary, on gratings, planks and trays but not in mining operations and local operations.

## Chemical parameters:

Behaviour in case of fire:

DIN EN / IEC 60332-1-2

Weather resistance:

unrestricted use indoors and mines

## Electrical parameters:

Rated voltage $U_0/U$ [kV]	6/10	8.7/15	12/20
Max. permissible operating voltage $U_{b,max}$ in AC systems [kV]:	6.9/12	10.4/18	13.9/24
Max. permissible operating voltage $U_{b,max}$ in DC systems [kV]:	9/18	13.5/27	18/36
Tests: - General requirements:	DIN VDE 0250-1 / DIN VDE 0250-813 / DIN VDE 0250-605		
Tests: - Electrical tests:	DIN VDE 0250-605 / DIN VDE 0250-813		
Current-carrying capacities [A] and De-rating factors:	DIN VDE 0298-4		

# BiTmining® (N)3GHSSHCH

Rubber insulated and halogen-free sheathed feeder cable

## BiTmining® (N)3GHSSHCH 6/10 kV

Cat. no.	n x mm <sup>2</sup>	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]
BM1300	3x25 + 3x16/3E + 3x2.5ST + ÜL	51-55	4070
BM1301	3x35 + 3x16/3E + 3x2.5ST + ÜL	53-57	4520
BM1302	3x50 + 3x25/3E + 3x2.5ST + ÜL	57-61	5480
BM1303	3x70 + 3x35/3E + 3x2.5ST + ÜL	61-65	6600
BM1304	3x95 + 3x50/3E + 3x2.5ST + ÜL	66-70	7980
BM1307	3x120 + 3x70/3E + 3x2.5ST + ÜL	69-73	9270
BM1305	3x150 + 3x70/3E + 3x2.5ST + ÜL	75-79	10810

## BiTmining® (N)3GHSSHCH 8.7/15 kV

Cat. no.	n x mm <sup>2</sup>	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]
BM1364	3x25 + 3x16/3E + 3x2.5ST + ÜL	51-55	4070
BM1365	3x35 + 3x16/3E + 3x2.5ST + ÜL	53-57	4520
BM1366	3x50 + 3x25/3E + 3x2.5ST + ÜL	57-61	5480
BM1370	3x70 + 3x35/3E + 3x2.5ST + ÜL	61-65	6600
BM1367	3x95 + 3x50/3E + 3x2.5ST + ÜL	66-70	7980
BM1371	3x120 + 3x70/3E + 3x2.5ST + ÜL	69-73	9270
BM1368	3x150 + 3x70/3E + 3x2.5ST + ÜL	75-79	10810

## BiTmining® (N)3GHSSHCH 12/20 kV

Cat. no.	n x mm <sup>2</sup>	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]
BM1308	3x35 + 3x16/3E + 3x2.5ST + ÜL	59-63	5280
BM1309	3x50 + 3x25/3E + 3x2.5ST + ÜL	62-66	6090
BM1312	3x70 + 3x35/3E + 3x2.5ST + ÜL	66-70	7310
BM1310	3x95 + 3x50/3E + 3x2.5ST + ÜL	71-75	8740
BM1313	3x120 + 3x70/3E + 3x2.5ST + ÜL	75-79	10260

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