

# BiT E-BUS H

EIB, KNX halogen-free cable



internal application



EN 60332-1-2



halogen-free  
EN 60754



low smoke emission  
EN 61034



data transmission

## Technical data:

### Thermal parameters:

#### Temperature range:

operating temperature: -40 °C to 80 °C  
min. installation temp.: -5 °C

### Electrical parameters:

**Wave impedance:** 85 Ω ±15 %

**Conductor loop resistance (max.):** 73,2 Ω/km

**Insulation resistance:** 100 MΩ x km

**Capacitance:** 100 nF/km

### Mechanical parameters:

**Min. bending radius:** 8 x Ø

## Design:

### Conductors:

solid copper conductors, as per EN 60228

### Insulation:

special halogen-free compound

### Core identification:

for a one-pair arrangement: red, black  
for a two-pair arrangement: 1p-white/yellow, 2p-red/black  
for a four-pair arrangement: 1p-white/blue, 2p-yellow/red,  
3p-white/green, 4p-white/brown

### Core arrangement:

### Screen:

cores twisted in pairs, pairs twisted together  
aluminium backed polyester tape with tinned copper  
drain wire Ø 0,4 mm placed longitudinally underneath  
the screen

### Outer sheath:

special halogen-free, self-extinguishing and flame  
retardant (as per EN 60332-1-2); colour: green (one-pair  
cable), green (two-pair cable) or purple (four-pair cable)

## Application:

Cable for transmission of BUS signals in intelligent building management systems based on standards of the European Installation Bus EIB. Signals received from system sensors (lighting, temperature, air conditioning, access control and others) are gathered in the EIB bus, and subsequently processed and used to control a device's operation. Cables can be installed in dry and damp rooms, both within and on walls, as well as in pipes, trays and cable ducts. They may also be used for external applications but suitably protected against direct exposure to sunlight. Cables classified according to **EN 50575 (CPR)**.

Cat. no.	n x 2 x mm <sup>2</sup>	Outer diameter* [mm]	Approximate cable weight [kg/km]	Sheath colour
EB0082	1x2x0,8	5,6	37	green
EB0080	2x2x0,8	6,0	54	green
EB0081	4x2x0,8	9,3	92	purple

\*Outer diameter tolerance: +/-5%

Cable Factory BITNER reserves the right to modify the specifications without prior notice