

# BiT E-BUS

EIB, KNX cable



internal application



EN 60332-1-2



data transmission

## Technical data:

### Thermal parameters:

Operating temperature: -40 °C to 80 °C

Min. installation temp: -5 °C

### Electrical parameters:

Wave impedance:  $85\Omega \pm 15\%$ Conductor loop resistance (max.):  $73,2 \Omega/\text{km}$ Insulation resistance:  $100\text{M}\Omega \times \text{km}$ Capacitance:  $100\text{nF}/\text{km}$ 

### Mechanical parameters:

Min. bending radius:  $8 \times \varnothing$ 

## Design:

### Conductors:

solid copper conductors, as per EN 60228

### Insulation:

special PVC

### Conductor marking:

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  $\varnothing 0,4\text{mm}$  placed longitudinally under the  
 screen

### Sheath:

special PVC, oil resistant (cf. chemical resistance table),  
 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 Information 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.	$n \times 2 \times \text{mm}^2$	Outer diameter* [mm]	Approximate cable weight [kg/km]	Sheath colour
EB0151	1x2x0,8	5,6	37	green
EB0005	2x2x0,8	6,0	54	green
EB0007	4x2x0,8	9,3	92	purple
EB0007.07	4x2x0,8	9,3	92	green

\*Outer diameter tolerance:  $\pm 0,5\%$

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