

**EN 50575:2016**

**CPR Class B2ca**

outer diameter: 7,0mm +/-0,5mm

Min. bending radius: 70mm

(=10 x cable diameter)



Article nr:

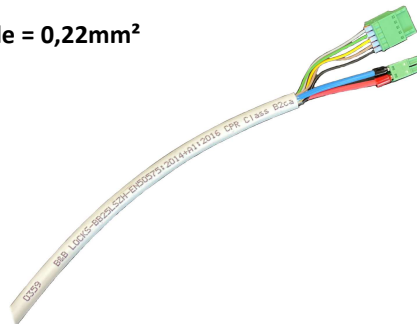
**BB25LSZH**

**2 x power supply cable = 1,50mm<sup>2</sup>**

- red = +24V
- blue = GND

**5 x signalization cable = 0,22mm<sup>2</sup>**

- black
- brown
- yellow
- green
- grey



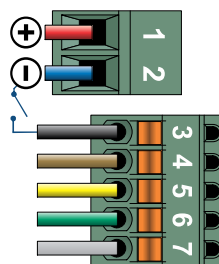
Description and connection diagram:

**BB25LSZH cable (for connecting both A1 and G1 locks)**

Cable consists of 2 x 1,5mm<sup>2</sup> and 5 x 0,22mm<sup>2</sup> wires + shielding

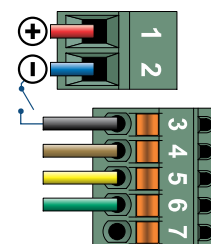
**A1 connection:**

RED	: power supply +24V
BLUE	: GND (0V)
BLACK	: opening impulse (to GND)
BROWN	: bolt signal
YELLOW	: door signal
GREEN :	: key signal
GREY:	: handle signal



**G1 connection:**

RED	: power supply +24V
BLUE	: GND (0V)
BLACK	: opening impulse (to GND)
BROWN:	bolt signal (out and locked)
YELLOW	: door signal
GREEN :	: key signal



It is extremely important that the correct current reaches the lock. In order to warrant this in each situation (during holding current, but especially at the moment the activation current is demanded) we impose the use of 1,5mm<sup>2</sup> wiring for the power cables and 0,22mm<sup>2</sup> wiring for the signalisation cables. To facilitate this using 1 cable during the installation, we had this cable custom made.

The installation also requires the use of a good power supply and distances between power supply and lock need to be respected in order to be sure the correct voltage and current arrives at the lock. When 1,5mm<sup>2</sup> power supply cables are used we experience a 5% voltage drop over a distance of 25m.

## Technical Data

### VDE 0812 EN 50575:2016 CPR Class B2ca

Multi-Core, LSZH-Insulation, Collective Screen, LSZH-Soft Shore Sheath

#### BB25LSZH

#### Application

These cables are used for power supply and control signal transmission in mechanical engineering for tooling machinery, for production lines and transport equipment, as well as in industrial installations. They meet the requirements of the EEC directive concerning electromagnetic compatibility (EMC), and ensure interference-free transmission providing protection against external pulses.

#### Construction (2x1,5mm<sup>2</sup> + 5x0,22mm<sup>2</sup>)

		Unit	Nominal Value
Formation	2 Cores		
Section	1,50mm <sup>2</sup>		
Conductor	Plain annealed copper wire, multistrand	mm	1,6
Insulation	Thermoplastic Low Smoke, Halogen Free, Soft Shore - LSZH	mm	2,4
Colour Code	Red, Blue		
Formation	5 Cores		
Section	0,22mm <sup>2</sup>		
Conductor	Plain annealed copper wire, 7 strand	mm	0,6
Insulation	Thermoplastic Low Smoke, Halogen Free, Soft Shore - LSZH	mm	1,0
Colour Code	Black, Brown, Yellow, Green, Grey		
Wrapping	at least 1 layer of plastic tape 0,023mm		
Collective Screen	0,026mm Aluminium / PETP tape over tinned copper drain wire		
Outer Sheath	Thermoplastic Low Smoke, Halogen Free, Soft Shore - LSZH - White	mm	7,0 +/- 0,5
Cable Printing	B&B LOCKS - BB25LSZH - EN 50575:2014+A1:2016 CPR Class B2ca Batch + Meter marking		

#### Technical Data & Standard References

Fire Propagation:		CPR Class <b>B2ca</b>	EN 50575:2016
- Test on single cable	IEC 60332-1	Construction Reference Standard:	VDE 0812
- Test on bunched cables	IEC 60332-3	Type of Cable:	Control Cable
		Low Voltage Directive:	2014/35/UE
		Other References:	
		- IEC 60228	
Limiting Oxygen Index (LOI)	(min 37%)	- IEC 60332-1	
Smoke Density	IEC 61034	- IEC 60332-3-24	
Amount of halogen acid gas	IEC 60754-1 (max 0,5%)	- NF C 32-020	
Acidity (ph value) and conductivity	IEC 60754-2		
Sunlight resistance	UL 1581 section 1200		
Notes			

#### Electrical & Mechanical Data

Conductor Cross-section	Nom.	1,5mm <sup>2</sup>	Temperature Range:		
DC Resistance per core at 20°	max Ω/km	13,6	During Operation	°C	-30°C up to +75°C
Insulation Resistance at 20°C	min MΩ*km	25	During Installation	°C	-5°C up to +50°C
Mutual Capacitance	max nF/km	250			
Inductance	max mH/km	1	Min. Bending Radius	mm	10 x cable diameter
Test Voltage - Core/Core	V	2000	Max Pulling Tension	N/mm <sup>2</sup>	160
Test Voltage - Core/Screen	V	2000	Weight Approx	kg/km	90
L/R Ratio	max μH/Ω	40			
Operating Voltage	V	300/500			