

### Product Description:

The signal lamp BKS04 (red, white, bicolour) is designed for exterior lighting of railway vehicles. High-luminance SMD LEDs in combination with metalized reflectors are used as light source that meets the requirements of EN 15153-1, TSI LOC & PAS 1302/2014 and UIC 534 for conventional and high-speed vehicles.

The lamp is fitted with white and/or red LEDs. The LEDs of each colour are controlled and diagnosed separately. In case of failure of certain number of LEDs, the fault condition is signalled by the diagnostic output that can be connected to the vehicle control system. The LEDs are located in sections. The failure of a single LED stops just one section, which slightly reduces the light intensity, while lamp function remains unchanged.

The luminance of signal light (red and white colour) is also selectable in several steps through inputs. Thanks to this, the white signal light meets the parameters for use as the lower and/or upper position lamp in the dimmed and full modes, and the red signal light complies with the parameters for use as a taillight.

The advantages of BKS04 are significantly better use properties compared to conventional bulb or halogen lamps - high reliability, longer life, lower operational and maintenance costs and thus higher safety of railway operation. BKS04 can be used both for new rolling stock, as well as a full replacement for existing bulb lamps.



### Technical parameters:

Type	BKS04/A	BKS04/B	BKS04/C
Chromaticity	Red	White	White / Red
Number of LEDs (White)	---	36	36
Number of LEDs (Red)	24	---	24
Supply voltage	16,8 V to 60 V DC		
Input power at $U_n$ 24 V	Max. 10 W		
Suggested fusing	Automatic fuse 6 A		
Control input parameters	16,8 V to 60 V DC, 4 mA, resistance load		
Diagnostic output parameters	16.8 V to 60 V DC, max. 40 mA, resistance load		
Diagnostic output OPERATION	Yes		
Diagnostic output FAILURE	Yes		
Design according to	EN 50155, EN 15153-1, TSI 1302/2014 LOC&PAS, UIC 534		
Ambient temperature	T1 a T2		
Ambient temperature, storage	-40 °C to +70 °C		
Humidity	According to EN 50155 requirements		
Shocks and vibrations	Category 1, class B, according to EN 61373		
Supply voltage tolerance	0,7 $U_n$ to 1,25 $U_n$ , supply voltage interruption S1		
Insulation resistance	According to EN 50155 requirements		
Electric strength	Between live parts and body: 500 V		
Climatic resistance	According to EN 50155 requirements		
Protection	IP65		
Mounting position	Vertical, cable inlet in down direction		
Dimensions (dia. × d)	Ø248 × 95 mm		
Weight	2,2 kg		

*The quality of the production is guaranteed by adherence to the procedures for quality management system according to DIN EN ISO 9001: 2010. The product has been designed in accordance with the principles of functional safety.*