

Product Description:

The front headlamp BKS11 is designed for rail vehicles lighting.

High-luminance SMD LEDs in combination with originally designed optics 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.

BKS11 can work in dimmed and full mode. It is equipped with system for easy directing the lamp into desired direction and also includes LED diagnostic functions, which diagnostic outputs can report the operational or fault conditions.

The variants BKS11/A and BKS11/B combine the functions of front headlamp and position signal lamp.

The luminance of signal lights (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 BKS11 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. BKS11 can be used both for new rolling stock, as well as a full replacement for existing halogen headlamps.



Technical parameters:

Type	BKS11	BKS11/A	BKS11/B
Lamp Type	Headlamp	Headlamp / Signal lamp	Headlamp / Signal lamp
Chromaticity	White	White / Red	White
Number of LEDs (Hi-Power White)	10	10	10
Number of LEDs (White)	---	22	22
Number of LEDs (Red)	---	22	---
Supply voltage U_n	16.8 V to 60 V DC		
Input power at U_n 24 V	Max. 30 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 max.	Ø250 × 106 mm (dia. × d)		
Weight	4,5 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.