

Product Description:

Head lamp MTL12 is designed for exterior lighting of railway vehicles. The lamp consists of a modular optical system that allows using the same fixed number of optical elements to create various custom light shapes on customer request. The lamp uses SMD LEDs with high luminosity as the light source, incorporated in a modular optical system. The optical system is designed to meet the requirements of standards ČSN EN 15153-1, TSI 1302/2014 LOC&PAS and UIC 534 for conventional and high-speed vehicles when using 3 glass customised optical elements. The lamp is fitted with 3 white diodes controlled by an LED driver. The LED driver also performs diagnostics of the LEDs and indicates any fault states on the diagnostic relay output. MTL12 operates in dimmed and undimmed mode in a way that meets all requirements of ČSN EN 15153-1.



An advantage of MTL12 lies in significantly improved utility properties thanks to the customer-designed optical system and the use of LEDs instead of classic light bulb- or halogen lamp-based lighting, which brings high reliability, longer service life and lower operating and maintenance costs and thus also higher safety in the use of the railway vehicle. MTL12 can be used on new railway vehicles or as a full-fledged replacement for existing light bulb lights.

Technical Parameters:

Type designation	MTL12/BA00
Number of optical elements	3
Supply voltage U_n	16.8 – 60 V DC
Recommended input protection	6 A circuit breaker
Diagnostic relay output	0.00001 A / 24 V minimum
	1 A / 24 V maximum
Maximum input consumption	4 to 8 mA at 16.8 to 60 V DC, resistance load
Design in line with	ČSN EN 50155, ČSN EN 15153-1, TSI 1302/2014 LOC&PAS, UIC 534
Ambient temperature	OT2
Ambient storage temperature	-40 °C to +70 °C
Humidity	In line with ČSN EN 50155
Impacts and vibrations	Category 1, class B, in line with ČSN EN 50155
Supply voltage tolerance	0.7 U_n to 1.25 U_n , supply voltage interruption S1
Insulation resistance	In line with ČSN EN 50155
Electric strength	Between live sections and frame 500 V
Enclosure in line with ČSN EN 61373	IP65
Mounting position	Vertical, in accordance with print on the rear of the lamp
Termination	SUPERSEAL connector, 11 conductors

Manufacturing quality is guaranteed by the observance of procedures for quality management in accordance with ČSN EN ISO 9001:2010.