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G E B A R

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Tachometer for locomotives GEBAR type GTL 16/01

Usage:

Tachometer for locomotives GEBAR type GTL 16/01 is a flameproof device, which is used to measure the velocity of a moving locomotive and also to register, measure, reading and visualization of functions in working locomotive. The main components of the tachometer are: The base, the encoder and the display screen (for two-cabin locomotives – 2 units). There is also a possibility of equipping the tachometer with the tachometer programmer. The components of the tachometer are connected with each other with three, four or five-cored wires that are designed to work in mining in flameproof circuits and are able to work in the conditions of any hazard.

Characteristics of the base GBTL:

The base GBTL is made of stainless steel. The stainless cover is classified with IP 66 protection level. It contains the holes for wires and the plate with electronics, which is covered with hermetic isolating mass. The cover is painted grey. In case of the tachometer with two display screens, the base is equipped with additional cable entries. With the usage of programmer there is a possibility of wireless reading from memory of the device, which allows moving the data and saving it PC computer memory.

Characteristics of the encoder GETL:

The encoder GETL contains the explosion-proof corpse and the roller, on which there is build a wheel with tread. On the roller, inside the corpse there is an detector and a plate, which calculates and passes the impulses to the charger. The I impulses are generated every 3cm of passed path, which allows to determine precisely both the distance travelled and the velocity during the way.

Construction of the display screen GWTL:

The display screen GWTL has a stainless housing classified as IP 65 protection level. It contains the connecting socket of outside wires. It's destination is to ease the reading of displayed data, which are processed in the base.

Construction of the programmer GPTL:

The housing of the programmer GPTL is made of ABS. Thanks to wireless connection the programmer can read the data, save them and pass them to the computer, in order to graphically represent all the parameters of the locomotive.

Technical specification

Base	Encoder	Screen	Programmer
The resolution of velocity: 0,01 m/s	Power supply voltage: 6 - 12 V	Power supply voltage: 6 - 12 V	Power supply voltage: 3 V
Memory capacity: 2 years of travel	Electric current: 20 mA	Electric current: 80 mA	Electric current: 80 mA
Power supply voltage: 15 - 30 V	Surrounding temperature: 0 - 40°C	Surrounding temperature: 0 - 40°C	Surrounding temperature: 0 - 40°C
Surrounding temperature: 0 - 40°C	Relative humidity: to 95%	Relative humidity: to 95%	Relative humidity: to 95%
Relative humidity: to 95%	Construction protection level: IP 65	Construction protection level: IP 65	Construction protection level: IP 65
Construction protection level: IP 66	feature: I M2 Ex ia I Mb	feature: I M2 Ex ia I Mb	feature: I M2 Ex ia I Mb
feature: I M2 Ex ia I Mb			



The display screen



The programmer