







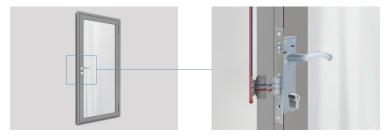
## **Application**

LBP-series locks are electromechanical mortise locks designed for operation as operating devices in access control systems to lock light and medium-thick doors made of extruded aluminium.

### Main features

Main features of the LBP-series locks:

• the lock has a unique design that allows connecting lock control cable through the strike plate in the door frame, not through the door leaf, which makes installation easier



- when the locks are connected to the PERCo ACS controllers (CT/LO4.1, CLO5.1, CL201.1), the lock operation can be maintained without using a door sensor (reed switch), the lock contact group registers the fact of opening / closure of the door
- mechanical release with a key
- ACS-focused design
- low power consumption
- universal lock design enables its installation on both right-handed and left-handed doors
- 85 mm center-to-center spacing
- the lock design allows using almost all types of lever handles, plates, and lock cylinders available in the market;
- the lock is resistant to self-opening (for instance, as a result of a hard kick on the door)
- details and lock body are corrosion-resistant coated
- the lock does not require preventive maintenance and lubrication from the customer for the entire period of operation



Locking and unlocking are performed upon signals from the ACS controller. Control signals are sent to the deadlock contacts through the contact group on the strike plate. After unlocking, the door can be opened by turning the handle (approximately by 20°), the bolt goes into the door frame and the door can be opened.

When the door is opened, the locking roller moves out automatically. When the door closes, the locking roller slides into the door frame and the locking bolt moves out automatically and locks the door.





Locking roller

Locking bolt moved out

# **Operating** conditions

The lock with regard to resistance to environmental exposure complies with GOST 15150-69, category NF4 (operation in premises with climate control). Operation of the lock is allowed at ambient air temperature from  $\pm 1^{\circ}$ C to  $\pm 40^{\circ}$ C and at relative air humidity of 80% at  $\pm 25^{\circ}$ C.

It is a serially produced product certified for compliance with applicable Russian and European CE standards.

### **Delivery set**

Electromechanical mortise lock	1
Mounting kit	1 set
Certificate, Assembly and Operation Manual	1
Marking template	1 set

Strike plate is chosen by the customer when ordering

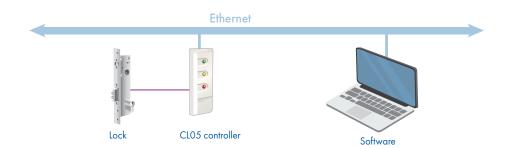
Optional equipment (upon reques	t)
Lock cylinder with a set of keys	1 set
Handles with decorative plates	1 set

# Technical specifications

Operating voltage		12±1 V DC
Current consumption		max. 120 mA
Power consumption		max. 2 W
Cylinder type		pin-typee
Locking bolt slide out distance		min. 14 mm
Operating mode	LBP85.1	normally closed
	LBP85.2	normally open
Overall dimensions (LxWxH)		46x25x210 mm
Center-to-center spacing		85 mm
Lock weight		max. 0.5 kg
Mean time to failure		Min. 200,000
Mean lifetime		8 years



#### Connection

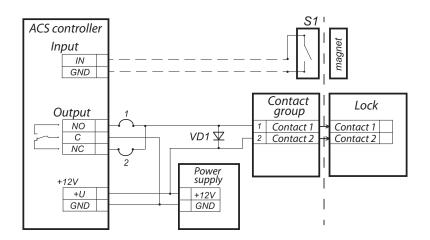


The lock is operated in potential mode. For normally closed locks unlocking is performed by sending control voltage, for normally open - removing control voltage.

To unlock the door, the ACS controller sends a control signal to the lock and holds it till the moment the door is opened (ACS controller potential operating mode).

The door opening / closure fact can be registered by the door sensor (reed switch) or by using the contact group (CT/LO4.1, CLO5.1, CL201.1 lock controller).

When the lock is connected to the ACS controller, it is recommended to install BZW06-15B or P6KE16CA or a similar suppressor on the contact group terminal block. The suppressor is designed to protect the ACS controller.



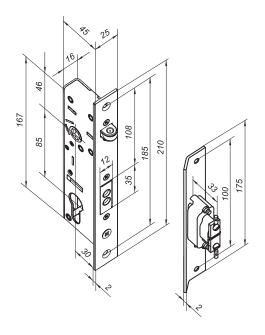
Variants of lock connections:

- 1 lock opens automatically when powered (LB85.1)
- 2- lock opens automatically when de-energized (LB85.2) VD1 15-18 V suppressor (BZW06-15B, P6KE16CA)
- S1 door opening detector (reed switch) can be not installed when using CT/L04.1, CL201.1 controllers

LBP-series lock connection to the controller



#### Overall dimensions

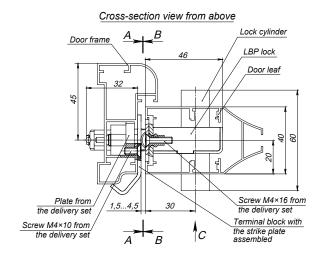


#### Overall dimensions

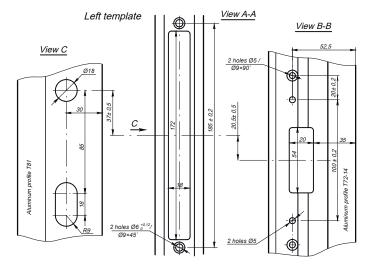
### Mounting

The lock operates normally with a gap between the door frame and the door (between lock and strike plate) of  $2-4\,\mathrm{mm}$ . The channel of the strike plate can be located symmetrically relative to the cross-section of the locking bolt.

The lock and strike plate are fixed to the profile with screws in the stack bolts made by riveters in the prepared holes. All aluminium profiles require a corresponding strike plate and mounting kit from the delivery set. Use the marking template from the delivery set for the installation of the lock and strike plate.

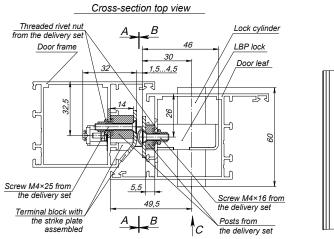


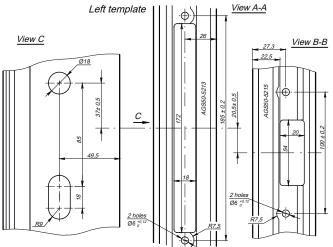
LBP85 lock with BP1 contact group assembled



Marking template for LBP85 locks with BP1 for left door







LBP85 lock with BP2 contact group assembled

Marking template for LBP85 locks with BP2 for right door

The length of the cylinder mechanism bolt must not exceed 50 mm.

The lock design allows using cylinder mechanisms of European standards such as EuroDIN (V DIN 18254), or 8809, 8209, 8259 produced by ISEO (Italy), D-series mechanisms produced by Wilco Supply (254 – 274 – 294, 453, 454, 554).

## Warranty

The warranty period is 5 (five) years commencing from the date of sale, unless otherwise determined in the delivery contract of the Product. In case of sale and installation of the equipment by authorized PERCo dealers and service centers, the warranty starts from the date of commissioning.

Should there be no date of sale on the warranty card, the warranty period shall commence from the date of manufacture specified in the Certificate and on the Product label.