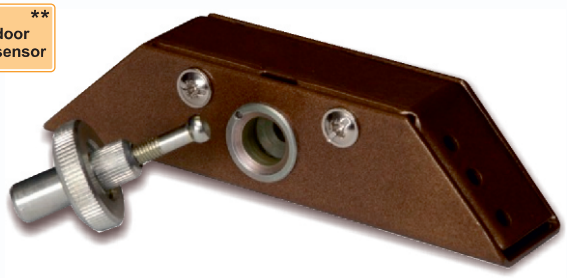
SHERIFF-1 light/SHERIFF-1 premium

SPACE-SAVING ELECTROMECHANICAL CORNER-HALVING

AN ALTERNATIVE FOR ELECTROMAGNETIC LOCK

12B 24B* | 400 kg | NO NC | ** lock sensor | ** door sensor

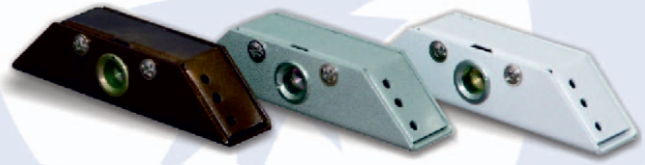
* - by order
** - for Sheriff 1 premium
INVENTION PATENT №238261



Purpose

It is designed for using as an actuation device as a part of access control system (ACS) to lock light and middle doors in offices and administration rooms. Locks can be mounted on metal, wooden and plastic doors with width of ledge more than 25 mm and thickness of the door from 25 mm to 70 mm. To mount on a door with ledge less than 25 mm an additional set of fixing system is used, what all "SHERIFF-1" locks are packaged.

Model	Design	Integrated door position sensor and lock status sensor	Color
Sheriff-1 light (NO-W)	Normally opened	-	White
Sheriff-1 light (NO-B)		-	Brown
Sheriff-1 light (NO-S)		-	Silver
Sheriff-1 light (NC-W)	Normally closed	-	White
Sheriff-1 light (NC-B)		-	Brown
Sheriff-1 light (NC-S)		-	Silver
Sheriff-1 premium (NO-W)	Normally opened	+	White
Sheriff-1 premium (NO-B)		+	Brown
Sheriff-1 premium (NO-S)		+	Silver



Mounting and operating principle

Lock is aimed to be installed in a upper corner of a door-case. Such a fixation fixes the lock reliable even on “light” doors. Counterpart (locking point) is installed on the door. It is necessary to fix up the lock with coincidence of axis for locking point

Locking point closing happens when the locking point has enteredto a lock hole. Normally closed lock has an emergency rod for an emergency exit.

“Sheriff-1 premium” has two additional sensors: door positioning sensor and lock status sensor. Integrated door positioning sensor consists of reed relay, which is located on a case of the lock, and magnet, which is on a movable hub inside the lock and is moved by locking point. Reed relays contacts are opening, when the door is opened (locking point is outside of the lock), and are closing, when the door is closed (locking point is inside the lock up to the stop)

Integrated locks status sensor consists of reed relay which is fixed to locks electromagnetic coil. Reed relays contacts open, when the lock is de-energized, and close when electric current flows through the coil.

Consequently, if both of two sensors are serially connected, circuit will be closed in case of locking point is installed inside the lock (the door is closed) and the lock draws current (it is in a closed position), what means the door is closed.

Features

- It doesn’t spoil doors design – there are no visible mounting and adjusting elements (with width of ledge more than 25 mm.);
- Provides greater retention force with small size;
- Low power consumption;
- It can be installed rapidly and accurately by a template;
- Design flexibility admits installing the lock on the right and left doors;
- There is self-adjustment of locking point position in case of improper assembling and door whipping in operation;
- Base members of the lock are painted with polyester powder varnish paint;
- Latch gear components and locking point have anti-corrosive coating (C6, C6Hr);
- It doesn’t need preventive maintenance and using grease during its lifecycle;
- Lock design is robust to spontaneous opening in case of knock on the door, deformation or pressing the door.

Usage environment

- resistance to climatic factors influence UHL2, according GOST 15150 (during use of lock under roof or indoors where variances in temperature and wetness incidentally differ from variances outdoor; absence of direct impact of sun radiation and atmospheric precipitation)
- free air temperature: -40…+50°C
- atmosphere relative humidity: less than 95% at a temperature of +35°C and less, without damp condensation and snow formation;

Contents of delivery

Electromechanical lock	1 piece	Cap screw 8x35 for locking point fixation	1 piece
Support arm	1 piece	Pattern of support arm fixation	1 piece
Lock fixation strainer	2 piece	Marking felt tip pen	1 piece
Tap screw M4	2 piece	Maintenance manual	1 piece
Screw 4x30 for support arm fixation	2 piece	Additional set of fixation	1 piece
Sunk wood screw 4x30 for support arm fixation	2 piece		
Locking point as a set	1 piece		

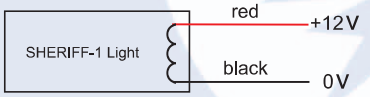
Specification

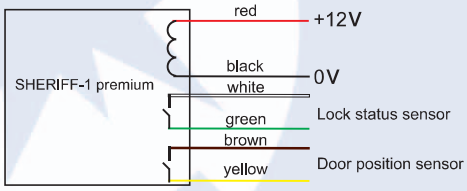
Force retention	more than 400 kg
Current consumption	105 mA
DC source voltage	10-15V
Peak switch current of reed relay (SHERIFF-1 premium)	0,5A
Peak switch voltage of reed relay (SHERIFF-1 premium)	36V
Wire length	0,3m
Reliability	more than 400000 cycles of operation
Weight	less than 0,3 kg

Locks “SHERIFF-1” are serialized and have code certificate GOST

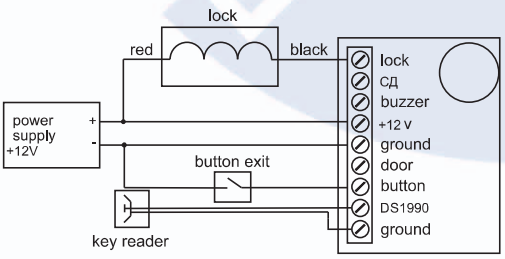
Wiring

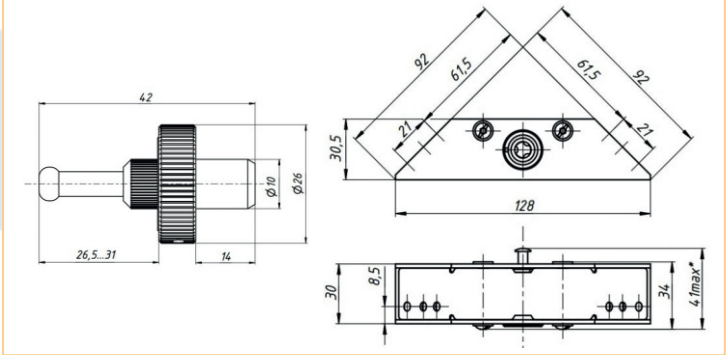
Unblocking of NC locks will take place when control voltage is supplied; vice versa for NO locks – after voltage removal.
It is necessary to have power supply and ACS controller for operating.
To open the lock ACS controller has to supply or remove voltage and keep these conditions until opening the door.





Connection diagram of “Sheriff-1 light” lock to controller(By the example of controller JSB-CL002)





An example of installing on a wooden door