# Door lock LO-92 / LO-922

Reference: Installation instruction LO-92 / LO-922

LO-92 and LO-922 are maintenance-free door locks for swing doors.

The LO-922 comes with a built-in microswitch that is affected by a magnet (hidden contact).

#### **Contents of packaging**

- 1. Door lock
- 2. Door leaf magnet (LO-922)
- 3. Locking roller with shaft

#### **Recommended tools**

Screwdriver - Torx 20 and Allen key 6mm

#### **Required material**

4 screws M6x12mm with suitable washers and Epoxy glue or Popnit for the door leaf magnet. Shims are ordered separately. Article no. 2109021/2109022. Thickness 1/1,5mm.

#### 1. Mounting of locks in door frame

The lock is mounted in the frame in the mounting holes 1. The holes are drilled and threaded as shown below. We recommend you to use one of our adapter plates when replacing a lock with different hole pattern.

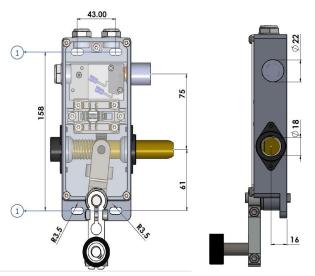


Figure 1 Distance between mounting holes

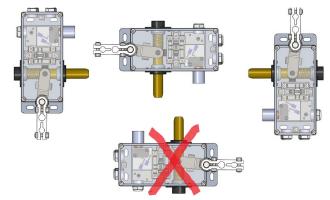
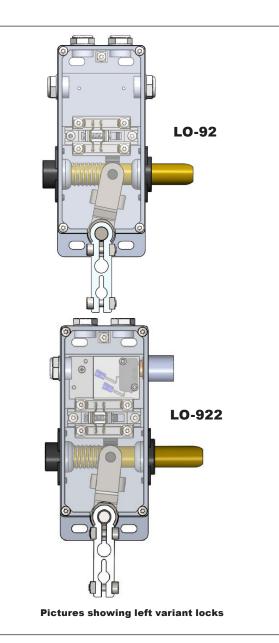


Figure 2 Approved positions



#### 2. Adjustment of lock engagement and clearance

The door lock should be adjusted so that the latching bolt engagement is 15 mm. According to standard EN81-20, the minimum permissible locking action is 7 mm + movement with closed contact (approx. 2 mm). The front surface of the locking magnet must be aligned with the outside of the frame (LO-922). The locking action is adjusted by moving the lock in the oblong holes 1 (see Figure 1).

The lock is adjusted so that there is clearance at the latching bolt and the door leaf in locked position. We recommend a clearance of 1-2 mm. If necessary, shims can be placed between the lock and the frame if the clearance is too large.

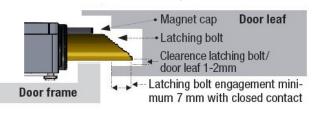


Figure 3 Locking engagement and clearance viewed from the bottom of the lock



# 3. Emergency opening function (Valid only to locks with triangle opening)

Holes are drilled in the door frame for the emergency opening function as shown in the figure below. The hole should be at least 14mm in diameter and the triangle should be recessed at least 3mm from the front to meet the EN81-20 standard.

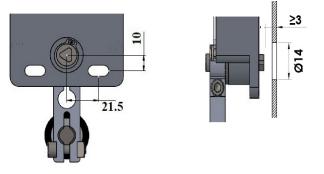


Figure 4 Emergency unlocking

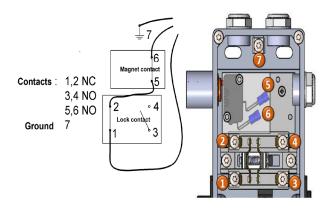
## 4. Connections of the contacts

LO-922 has magnetic contact and lock contact as either connected in series or separately. Below are wiring diagrams for both options.

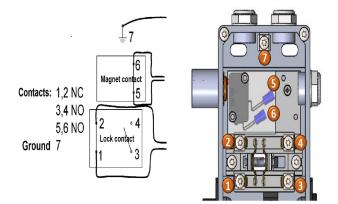
LO-92 has only 1,2,3,4 & 7.

Cables are attached with cable lugs to the magnetic connector and between contact blades on locking contact and at ground 7. Rear contact 3,4 is switched on if necessary.

Alternative 1: connections for complete lock



Alternative 2: Connections with seperate hidden contact



#### 5. Mounting of door magnet

The door magnet is mounted in Ø 22 mm holes in the door leaf. The door magnet must be centered in front of the magnetic contact and adjusted so that the distance between the door magnet and the lock's magnet cap is a maximum of 5 mm (maximum distance depends on the thickness of the frame). The door magnet is attached with epoxy glue or pop rivets. If the door frame is of thick material, problems can arise with the locking magnet being disturbed by the magnetic field of the door frame.

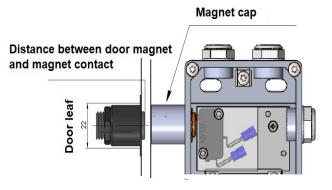
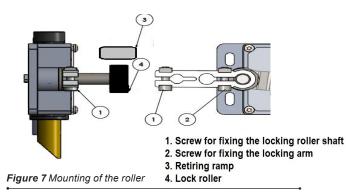


Figure 6 Mounting of the door magnet

## 6. Mounting and adjustment of the roller

The locking roller shaft is mounted in bracket 5 and tightened with screw 1. The roller should be centered over the retiring ramp 3. The locking arm is finally adjusted with screw 2 so that the roller is about 2 mm from the retiring ramp when the ramp is retracted.



# **TECHNICAL SPECIFICATIONS**

Lock/Auxilary contact: Voltage: 230VAC / 200VDC Current: 2A AC/DC

# REQUIREMENTS

The lock should not be lubricated. The European Standard EN 81-20 requires a minimum lactching bolt engagement of 7mm before the lock contact closes.

#### RECOMMENDATIONS

we recommend to adjust the lactching bolt engagement to 15mm.

#### REGULATIONS

LO-922 meets the requirements of EN81-20 with hidden contact. LO-92 requires additional components to meet EN81-20.

#### CERTIFICATE

EU certified, 19-GOT-LD-004, Kiwa Inspecta AB. Notified body No: 0409

