



Installation and setting instructions

Gatelock Type VL60

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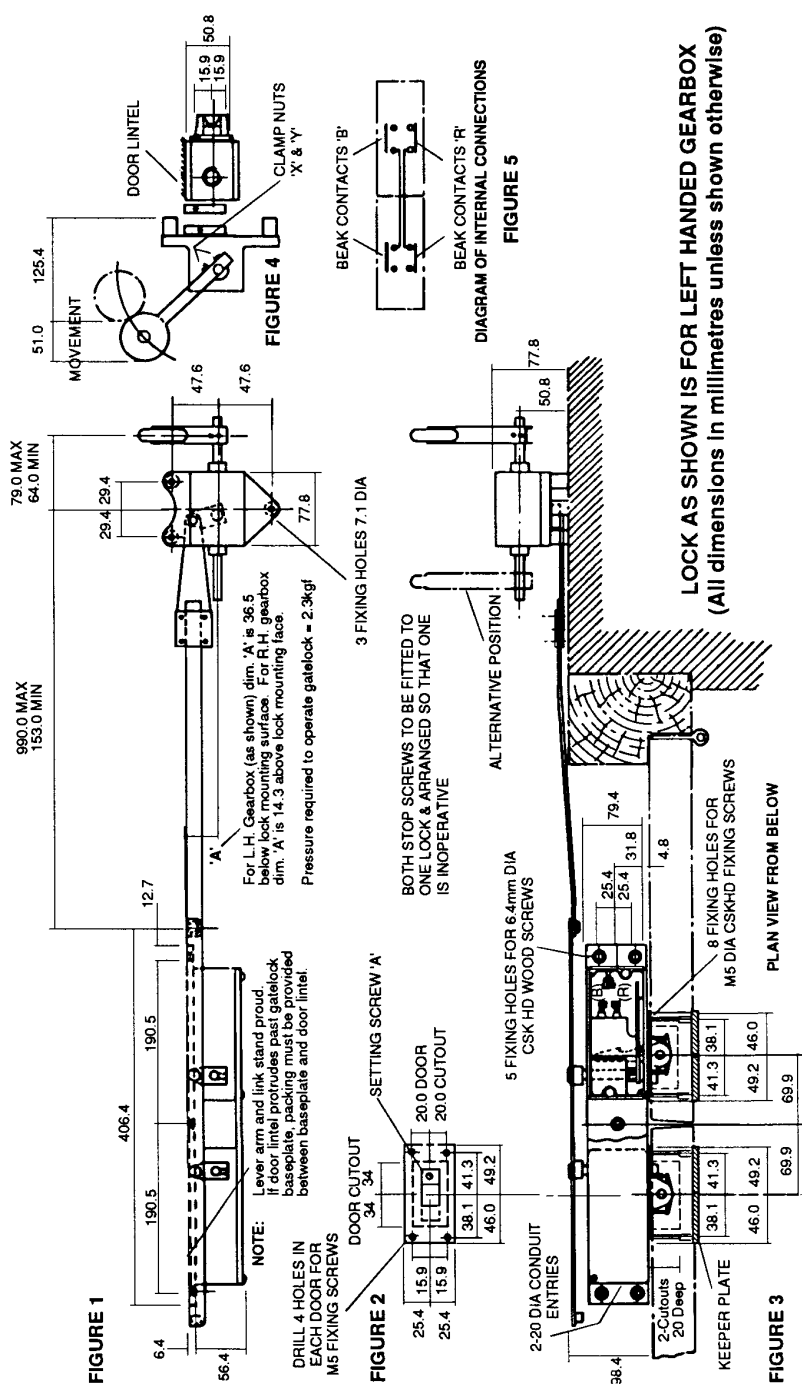
Important

These instructions must remain with the product to ensure correct installation. If extra copies are required please contact Dewhurst plc and quote publication number and issue

If you have any problems or questions, please contact our technical support desk direct on **+44 (0)20 8607 7322/7383** during office hours.

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APPLICATION

The VL60 gatelock is robustly constructed for installation on lift landings with double swing doors.

ENVIRONMENT

VL60 is suitable for application in all normal indoor locations. Abnormal locations involving water spraying or splashing, chemical fumes and ignitable or explosive gases or dusts, require more detailed consideration. If in doubt concerning location or installation, consult the manufacturers.

OPERATION

The gatelock should be used in conjunction with a suitable retiring ramp. (Dewhurst type FR21 is suitable for this application).

When each landing door is closed, each beak enters its lock and engages with an insulated cam which carries contacts in the primary circuit (B). Both doors must be fully closed in order to complete the primary circuit. When the ramp clears the lock roller the operating arm of the gatelock falls forward allowing the locking plate to move downwards, trapping each beak in position. The beak locking action is accompanied by the completion of a secondary circuit (R), but only if the primary circuit has been made.

MECHANICAL INSTALLATION

The gatelock is mounted centrally on the underside of the lintel, with the beak entries facing the landing. It must be mounted with the beak entry face 5mm back from the inside face of the doors. Use the template supplied to mark the five fixing positions of the gatelock. Drill fixing holes to accommodate M6, countersunk-head screws. Secure lock with M6 rustproof, countersunk-head screws together with spring-washers and nuts.

For a right-hand lock the gearbox is mounted on the right-hand side of the doorway, as viewed from the landing. Similarly for a left-hand lock the gearbox is mounted on the left-hand side of the doorway as viewed from the landing. Mark three fixing positions using dimensional data supplied. Drill fixing holes to accommodate M6 screws. Secure the gearbox with M6 rustproof screws together with spring-washers and nuts.

The gearbox is connected to the gatelock via a metal link rod. The link rod must be cut to the appropriate size, from a maximum of 990mm to a minimum of 153mm. Ensure that the end cut-off is not the end that has been pre-drilled. The link rod is connected to the driving rod of the gatelock by threading the stud on the driving rod through the hole in the link rod and securing with a circlip. The other end of the link rod is connected to the gearbox by inserting the cut end underneath the clamp plate and tightening the four screws. (See Figures 1 & 3).

Using dimensional data supplied mark the fixing positions for the beak carriers on the swing doors. Cut out door as required (see Figures 2 & 3) to allow free movement of the beak on its pivot. Secure the beak carriers to the doors using M5, rustproof, countersunk-head screws of the correct length (according to door thickness) to attach to the keeper plates as shown in Figure 3.

Check that each beak enters its lock smoothly. If not, adjust setting screw A to ensure that it does. Tighten all fixing screws and nuts, except for clamp nuts X and Y on the lock actuating arm (see Figures 2 & 4).

The lock actuating arm and roller **must** be mounted above the gearbox shaft as shown in Figure 4.

Move the operating arm along the shaft until the centre-line of the roller coincides with the centre-line of the retiring ramp. If necessary, move the operating arm to the shaft on the other side of the gearbox. Set the retiring ramp to move the roller a minimum of 43mm and a maximum of 51mm towards the landing. When the retiring ramp is retracted it must be completely clear of the lock roller (in the fully locked position). Similarly when the retiring ramp is fully actuating the lock roller, it should be possible to move the lock roller clear of the ramp by about 3mm. Loosen clamp nuts X and Y and make minor adjustments to achieve these settings on each lock. Tighten clamp nuts X and Y, to compress fully spring-washers. Do not over-tighten, (see Figures 1 & 4).

If, when the operating arm is positioned on the shaft, an excessive length remains beyond the arm, cut off surplus leaving between 6mm and 20mm of length.

ELECTRICAL CONNECTIONS

Ensure main and control supplies are isolated.

Remove common cover by undoing the three retaining screws. Utilise one of the 20mm tapped conduit entries to bring wires into the gatelock. Ensure conduit termination is tight and secure. If a flexible conduit is utilised a separate earth wire must be installed in the conduit and must be securely connected to a suitable earth terminal in the electrical installation. Plug unused conduit entries.

Connect primary circuit using beak contact terminals 'B' (one located in each lock) and the secondary circuit using ramp contact terminals 'R' (one located in each lock). Connect earth wire to terminal E. (See Figure 5).

Replace common cover and tighten retaining screws.

CONTACTS

Each set of contacts is self-aligning, having self-cleaning action with positive knock-off feature.

RECOMMENDED MAINTENANCE

The periodic maintenance required to ensure safe smooth trouble free operation of the latching and locking mechanism fitted to VL series locks.

1. Check lock beak and lock box enclosure are positioned to ensure a free and full engagement in the closed door position.
2. Check lock beak for signs of wear due to misalignment. If excessive wear is present the beak should be replaced and the lock retested.
3. Check that the operating arm is set to approximately 45°. This should give an operating movement of between 50.8 to 61.9mm maximum. Check clamping nuts for correct torque.
4. Check electrical integrity and resistance of the main and prelock contacts, typical resistance 0.2 ohm.
5. Grease operating cam located within lock box enclosure, operating lock box shutter mechanism. Recommend Shell Albida RL2 or equivalent.