

Note:

The cover sheet provides warning information, and an explanation of the symbols and terms used, together with our disclaimer.

Mount the keypad before installing the electronic lock. For information on how to install the keypads, please refer to “APxxxx Part 2a- Keypad Installation Manual”.

Contents

- General 2
- Preparation for installation 3
 - Installation dimensions of lock A7000 3
 - Preparation of the boltwork / door 4
- Installation 4
- Cabling / installation 4
 - Cabling 4
 - Connection of an analogue keypad 6
 - UART connection 6
 - Connection of alarm contacts 7
 - Connecting an alarm system outside the scope of the VdS 7
 - Connecting an alarm system within the scope of the VdS 9
- Functional test 10
 - Input of the opening code 10
 - Keypad test 10

- Figure 1 - Dimensional drawing 3
- Figure 2 - Drilling positions for the Primor FS 5
- Figure 3 - Cable connection 6
- Figure 4 - Assignment of the alarm interface 8
- Figure 5 - Connection of the Gator Signal plus 9

General

A7000 series locks have standard installation dimensions and can be installed in all 4 installation positions (right, left, top, bottom). They are designed for “scissor-bolt” movements, i.e. for force absorption by the bolt flanks.

They are intended to be installed in metal safes.

Depending on the version, additional locking elements (e.g. angle rail with bolts) can optionally be attached to the bolt using the existing holes. Ensure the proper operation of the lock and its connection.

The electronic lock is maintenance-free in a normal residential or office environment.

After approximately 10,000 closures, it is recommended to have a security and functional check of the electronic lock conducted by a safe technician.

No not allow the opening for the keyhole to exceed a rectangle measuring 27 x 9 mm.

It is essential that the lock is protected against external attacks. We recommend protecting the security-relevant components of the high-security lock from being accessed even when the safe door is open.

Do not apply any lubricants or other substances to the lock.

Multiple locks where the closure needs to be checked by a bolt movement, as is the case with the A-7000, may not be installed on the boltwork of a safe. If the lock on a boltwork is combined with locks featuring a closing status indicator, then the A-7000 must first be closed and the closure status checked.

Always adhere to the following sequence for installation:

- Check the preconditions for installation
- Wiring / installation of the cables
- Disconnection of the power supply
- Functional test of the locking mechanism
- Perform all settings (user installation, time delay)

Preparation for installation

Installation dimensions of lock A7000

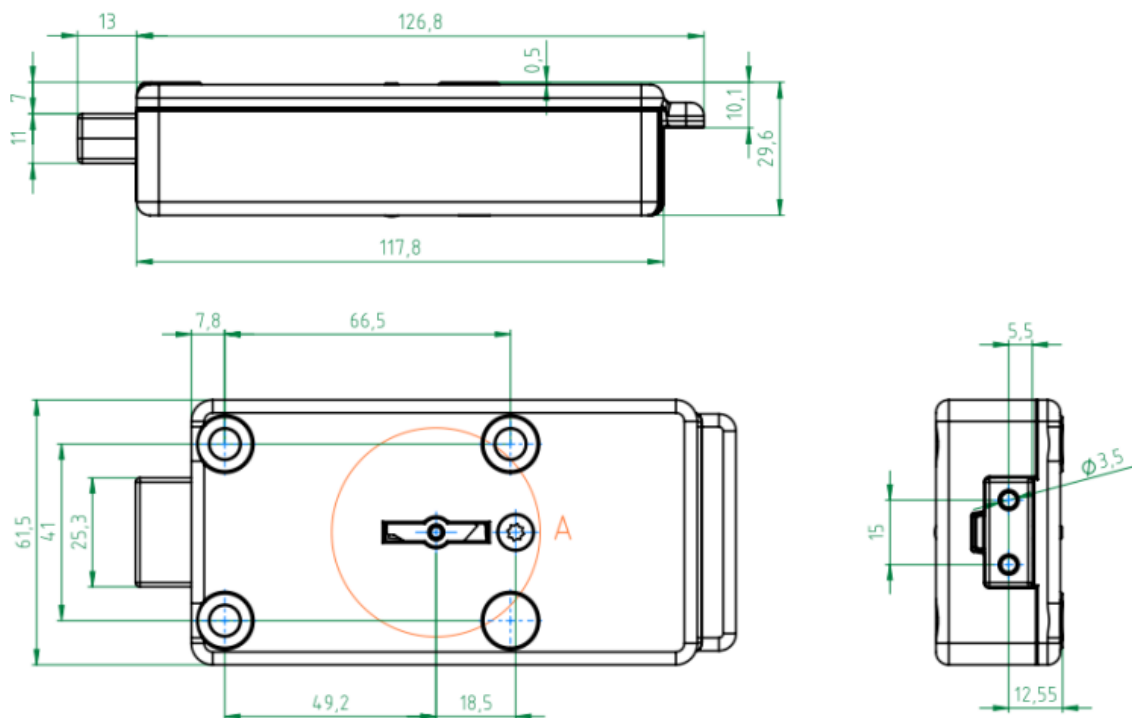


Figure 1 - Dimensional drawing

Preparation of the boltwork / door

To install the lock, there needs to be three threaded fixing holes on the boltwork or inside the safe door. Use the screws supplied or M6 of 1/4" cylinder screws (min.

strength class 8.8) to fix the electronic lock. Measure the length of the screws to ensure a minimum screw penetration depth of 5 mm.

Installation

Tighten the retaining screws to ensure a permanent and firm hold.

Tighten the fastening screws with a maximum torque of 3.5 - 5 Nm.

We recommend using a bolt locking agent (adhesive) to prevent the screws from coming undone by themselves.

Ensure that the bolt of the lock is not under tension or pressure once installed.

Make sure there is sufficient clearance to the locking point.

Cabling / installation

Cabling

Fundamentally, the installation positions of the input unit and lock can be sited independently of each other. Make openings with a diameter of 9 mm through which to pass the cables into the safe.

Particularly when using series FS keypads, it is possible to install them centred to the keyhole. The keypad flap thus also acts as a cover for the keyhole.

Possible drilling positions for this case are shown in Figure 2.

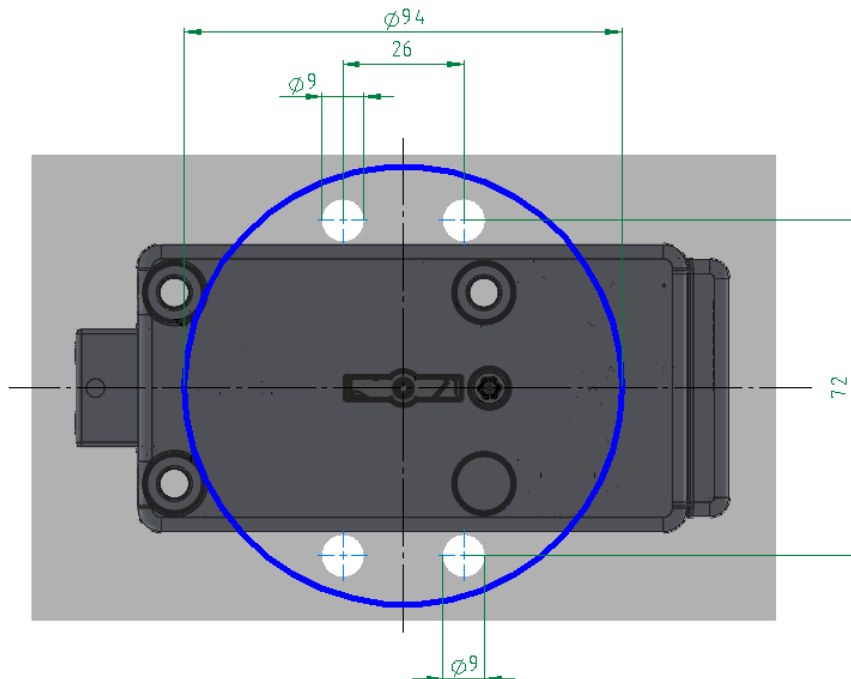


Figure 2 - Drilling positions for the Primor FS

Always route the cables in such a way that they do not come into contact with moving parts, e.g. of the boltwork. Ensure that there

is no continuous movement of the cables during operation.

Disconnect the power supply, including the power supply from the battery, before starting work or making any changes to the wiring between the lock, keypad or signal boxes.

Connection of an analogue keypad

As supplied, only the interface for an analogue keypad of the AnchorPrimor series is enabled. The serial interface to the PC-based configuration of the lock and/or

to read audit information needs to be enabled via the menu function [6]. (See the Operation Manual)

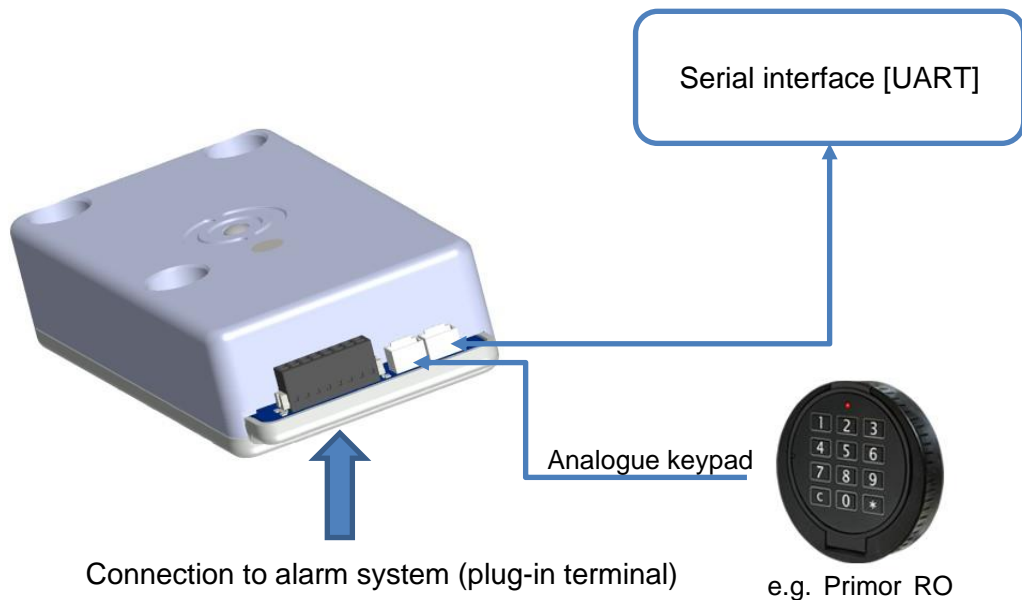


Figure 3 - Cable connection

Note:

Unlike with Anchor series locks, the serial interface is not configured for a Primor Signal Box. The serial interface function is permanently set.

As the function of the signal box is fully mapped via the plug-in terminal, there is no need for a dual function.

UART connection

The connection via the serial interface [UART] (see above) always takes place when the system is configured or an audit is read using the AnchorSELECT PC software. The connection to the PC is made using the system cable DataCONNECT.

Outside the intended use of the serial interface (UART), i.e., reading the audit or configuring in the setup mode, the VdS approval is no longer valid.

Connection of alarm contacts

Connection via the plug-in terminal (see above) is always used if

- The lock system has an external power supply,
- A “silent alarm” contact is used to evaluate a hazard alarm system or
- A system lock is to be provided by an external signal (potential-free contact).

The connection terminal has spring-loaded terminals. Locking is automatic when the individual cables are inserted.

Cable cross-sections of between 0.2 mm² and 0.5 mm² are used for flexible single wires, and cross-sections of 0.14 mm² to 0.5 mm² for rigid cables.

According to AWG specifications, this corresponds to cross-sections 26 to 20.

Strip 6 mm off the lines, 7.5 mm with flexible cables.

(refer to the Phoenix Contact Combicon data sheet)

Connecting an alarm system outside the scope of the VdS

Figure 3 shows the assignment of the alarm interface. The signal lines can be connected directly outside the scope of the VdS. The signalling contacts for the silent alarm (labelled “Duress Alarm”) and the bolt position switch (labelled “Secure Off”) are potential-free contacts.

(Switching capacity max. 24 V, 1 A resistive load). We recommend considering flyback diodes when switching high inductive loads.

When using the alarm connection, a regulated 12 V direct current power supply is needed via terminals 7 (12 V DC) and 8 (GND).

Terminals 5 (“Block Sig”) and 6 (GND) need to be bridged by a potential-free contact to signal a signal lock. Depending on the switching logic set (see also Operation Manual), a connection of the contacts leads to the system being locked or released when the function is enabled.

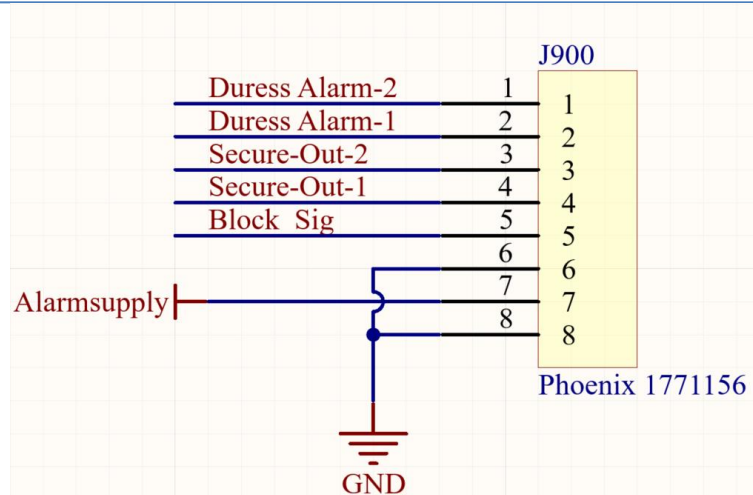


Figure 4 - Assignment of the alarm interface

If a signal lock with “release enabled” (switching logic) has been set up, this will ensure that the lock is not automatically switched off if the control cable is cut through. At the same, a cable breakage within the safe thus always entails the risk of a block.

You can find the configuration of the signal interfaces in the Operation Manual. (03 Axxx – Operation Manual V3.00 Chap. 6-2 and 6-2).

Connecting an alarm system within the scope of the VdS

In the event that an alarm connection is to be within the scope of the VdS, the “**Gator signal plus**” box known from the Gator

family must be connected between the two via a system cable.

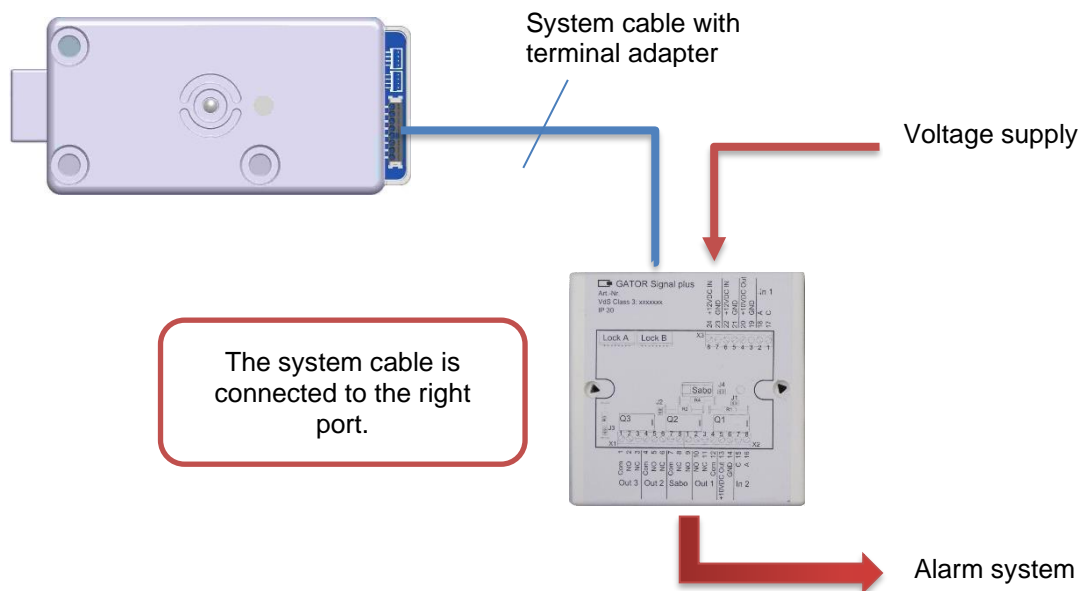


Figure 5 - Connection of the Gator Signal plus

The “Gator Signal plus” box is a combined solution with the functions of a certified

	Identification number
VdS locking device	G115016
VdS hold-up detector	G115032
VdS closure monitor	G115033

It is connected by a system cable (8-pin) and plug-in adapter for the plug-in terminal.

Please refer to Part c of the Installation Manual for wiring and installation of the “Gator Signal plus” box.

(02 P30xx-Part 2 - Signal Box Installation Manual)

Functional test

Carry out a functional test after completion of all assembly and installation work. With the door open, open and close the lock several times using the master code that has been factory set.

The safe should open smoothly and reliably reclose using the operating lever of the locking mechanism. The locking control is to be performed after each opening of the safe.

Input of the opening code

e.g. master factory code



The opening code can be entered directly without selection or similar. The bolt is released for approx. 3 seconds after a valid code has been entered. Open the safe within this period after the code has been entered.

Keypad test

To ensure that all numeric keys are working properly, we recommend performing a final keypad test using function menu 5.



Check system menu

Press the keys in the sequence



Press each numeric key once. A functional key is indicated by a double signal tone. A key that is not recognised is indicated by a long signal tone and the functional test is cancelled. The system must be checked.