

Item No.:

Dialock Door Terminal DTSH ANSI





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Safety notes



CAUTION

Read these instructions carefully, ensure that you have understood them and comply with them at all times.

Do not tamper with or make alterations on the Dialock Door Terminal DTSH ANSI.

Before starting up (assignment of keys) read the section "Start up" in these instructions (pp. 27)!

If the Dialock Door Terminal DTSH ANSI is installed in fire or smoke-control doors, they will no longer be approved for use!

Do not install on fire or smoke-control doors! Please consult the Häfele Sales Dept.

The holes A (see Fig. 5 page 14) for the fastening screws are outside the mortise lock (see fig. 3 and drilling scheme page 10). Larger types of mortise lock must have corresponding through holes in the mortise lock or installation will not be possible.

Condensation forming on cold components may damage the Dialock Door Terminal DTSH ANSI.

First drill the hole from one side of the door to the middle of the door leaf and then drill all the way through from the other side of the door.

Avoid damaging the door surface. Use suitable protection for drilling template and clamp.

The stop on the drilling template must lie square against the edge of the door as shown below.

Avoid damaging the mortise lock with the cutter. Push the spacer disk onto the cutter shank.



Remove shavings before next operation and clean lock recess thoroughly. Insert the connection cable carefully in the correct position to avoid crushing!

Non-compliance with these instructions will cause irreversible damage to the lock cylinder and the mortise lock. Do not use force. Use only a specified cylinder of the correct length! (See fig. 10)

Check the position of the ANSI lock cylinder carefully before tightening the screw (fig. 12).

The ANSI round cylinder is for emergency opening only – not for locking.

When inserting the plug, take care not to damage the pin strip.

Do not pinch the cable!

Avoid misuse of the user keys by unauthorized persons. Keep the programming ADD and DELETE keys in a safe place, since these are used for assigning or withdrawing locking rights to a user key.

This operation can only be carried out immediately after switching on for the first time. The first start-up must be carried out as quickly as possible and without interruption!

If the red DELETE key is not held in front of the operating panel within 5 sec. the operation is aborted automatically.

Correct functioning of the Dialock Door Terminal DTSH ANSI is only guaranteed if weak batteries are replaced immediately.

Do not dispose of old batteries with household waste!



Before starting up (assignment of keys) read the section "Start up" in these instructions (pp. 27)!

Items supplied

- 1 outer module
- 1 inner module
- 1 packet of small parts containing 2 set screws, locking ring, square pin



Fig. 1 Small parts




Fig. 2

Outer module

Inner module



Accessories (not included in supply)			Item No.
		Square-socket length	
Installation set for door thicknesses	37 - 47 mm	100 mm	917.90.410
 (Consisting of square pin and 3 countersunk-head screws)	47 - 57 mm	110 mm	917.90.411
	57 - 67 mm	120 mm	917.90.412
	67 - 77 mm	130 mm	917.90.413
	77 - 87 mm	140 mm	917.90.414
Spacer plate for mounting on thin doors; plastic ABS black			917.90.491
User key, various types			
4 x 1.5 V batteries, size AA Mignon type E91 Energizer® Ultra+			910.54.980
Perforated latch plate, various Typen			
Round cylinder, length dependent on door-leaf thickness			
Mortise lock			



Area of use

The Dialock door terminal DTSH ANSI is an electronic door lock for use in hotels. It is installed in interior doors with ANSI mortise locks and can be easily installed in existing doors. For opening in emergencies, the use of a mortise cylinder item no. 916.90.515 is recommended.

** Through holes must be drilled beforehand (see fig. 3, page 8).*



If the Dialock Door Terminal DTSH ANSI is installed in fire or smoke-control doors, they will no longer be approved for use!

For installation on fire or smoke-control doors, please consult the Häfele Sales Dept.

Characteristics

- Compatible with the Dialock locking system
- Easy and convenient operation
- Compact sturdy design
- Safety concept with electronic keys
- "Do not disturb" function with thumb turn
- USB interface for easy configuration
- Battery operation
- Easy installation



Technical Information

The Dialock Door Terminal DTSH ANSI is supplied in simple mode.

In this mode, it is possible to assign locking rights to a maximum of 228 user keys (in stand-alone mode) using a special programming ADD key (green) directly at the Dialock Door Terminal DTSH ANSI itself. Locking rights can also be withdrawn from a user key using a red DELETE key directly at the Dialock Door Terminal DTSH ANSI. If a different mode is required, please consult the Häfele Sales Dept. at 1-800-423-3531.

The Dialock Door Terminal DTSH ANSI consists of an outer module which is mounted on the outside of the door and an inner module mounted on the inside of the door.



Installation Instructions



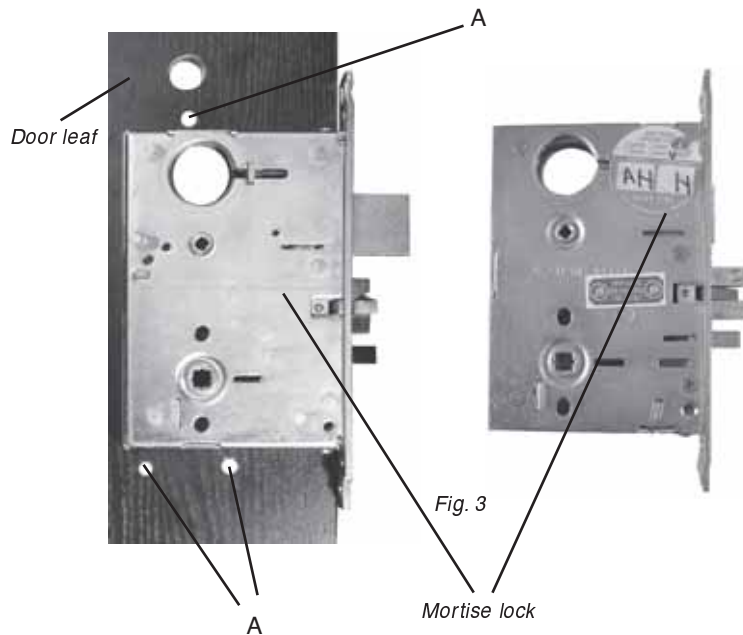
Do not install on fire or smoke-control doors!
Please consult the Häfele Sales Dept.

Preparation of door

The doors must be prepared for the use of locks according to ANSI standard.



The holes A for the fastening screws are outside the mortise lock (see fig. 3 and drilling scheme page 10). Larger types of mortise locks must have corresponding through holes in the mortise lock or installation will not be possible.





The length of the following parts of the Dialock Door Terminal DTSH ANSI depends on the thickness of the door and must be selected accordingly.

- Installation kit consisting of: attachment screws and square spindle (see list of accessories, page 5)
- ANSI mortise cylinder (not included in standard supply).

Tool		Item No.
Pliers for retaining ring (for mounting retaining ring on square spindle)		917.90.900
Aluminum mounting knob (for opening / locking battery compartment and cylinder cover)		917.90.031
Hex key for set screws of perforated handle plate	3 mm	008.28.035
Drilling template DTSH ANSI V2	version 2	917.90.004
Cutter for through hole for lock nut	Ø 25 mm	910.54.995
Electric drill		
Drill bit (attachment points)	8 mm	001.41.248
Drill bit (cable hole)	16 mm	910.54.994
Philips Head screwdriver	size 2	





Installation



Condensation forming on cold components may damage the Dialock Door Terminal DTSH ANSI.

⇒ Ensure that all components are installed at room temperature.

The following description applies to wooden doors. To install the Dialock Door Terminal DTSH ANSI follow the sequence of steps given below:

- | | |
|---|---------|
| A. Insert mortise lock | page 11 |
| B. Drill holes for fastening screws and cable | page 12 |
| C. Remove mortise lock, clean it and re-insert it | page 18 |
| D. Insert mortise cylinder | page 19 |
| E. Adjust outer module for perforated handle plate facing right or left (Pre-aligned by manufacturer) | page 21 |
| F. Install square spindle | page 23 |
| G. Mount outer module of Dialock Door Terminal DTSH ANSI | page 24 |
| H. Mount inner module | page 25 |



A. Insert mortise lock

1. Insert mortise lock
2. Screw mortise lock into position
3. Check the position of the mortise lock with a locking cylinder. The locking cylinder must fit in easily. If necessary enlarge the lock recess or free access for the locking cylinder.



Fig. 4



B. Drill holes for fastening screws and for connecting cable



First drill the hole from one side of the door to the middle of the door leaf and then drill all the way through from the other side of the door.

Preparation for drilling

Cable hole 16 mm through for
connecting cable, outer and inner
modules

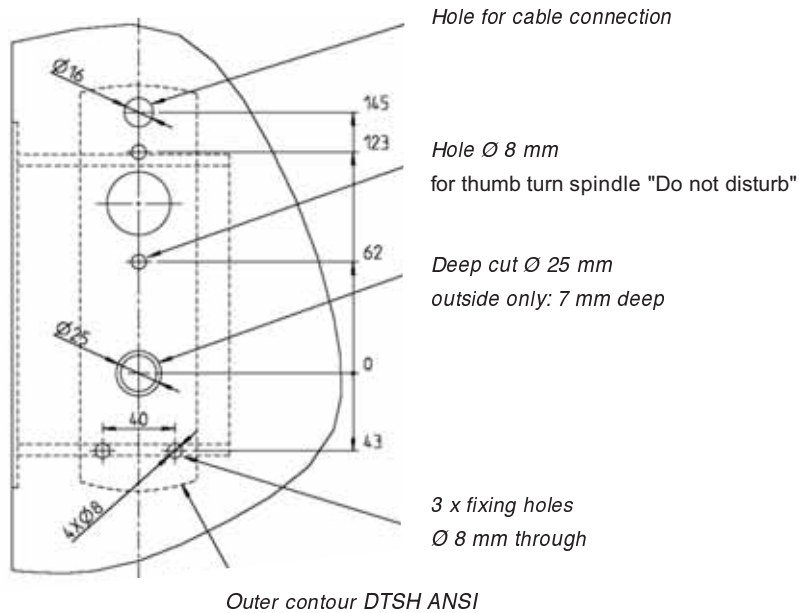


Fig. 5 Hole pattern



Using drilling template

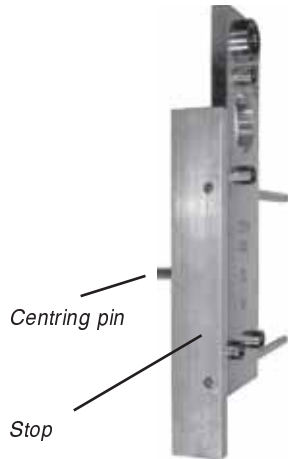


Fig. 8

1. Prepare drilling template: depending on door side, push right-hand (or left-hand) stop through the template.
2. Push the centering pin of the drilling template through the square hole for the mortise lock.
3. Lay the stop of the drilling template flat on the edge of the door and fix the template in position with a clamp.



Avoid damaging the door surface. Use suitable protection for drilling template and clamp.



The stop on the drilling template must lie square against the edge of the door as shown below.

If the dead bolt of the mortise lock projects:

⇒ Insert locking cylinder and retract the dead bolt with the key.

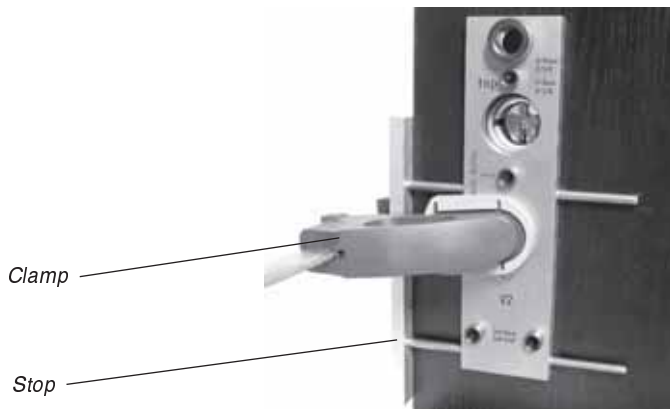
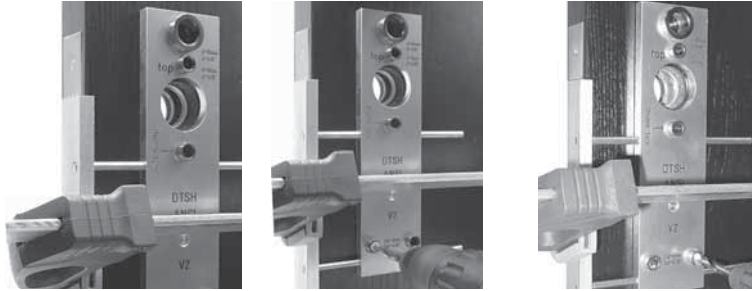


Fig. 9



Drilling holes on the inside of the door



Using the 8 mm bit, drill the fixing holes to the middle of the door leaf.



Only start the hole for the locking knob. When all the holes have been drilled, remove the mortise lock and then finish drilling this hole.

16 mm hole for cable between outside and inside module.



Drilling holes on the outside of the door



Using the 8 mm bit, drill the three fixing holes through to the other side.



Finish drilling the 16 mm hole. Drilling of the door is now complete.



Spacer disk

25 mm cutter

Cutting out coupling area on the outside of the door.



Avoid damaging the mortise lock with the cutter. Push the spacer disk onto the cutter shank.

C. Remove, clean and re-insert mortise lock

Remove mortise lock.



**Remove wood shavings before next operation and clean lock recess thoroughly.
Insert the connection cable carefully in the correct position to avoid crushing!**

Insert mortise lock as described in "A. Inserting mortise lock" on page 11.



D. Inserting the ANSI round cylinder



Non-compliance with these instructions will cause irreversible damage to the lock cylinder and the mortise lock.

Do not use force.

Use only a specified cylinder of the correct length! (See fig. 10)

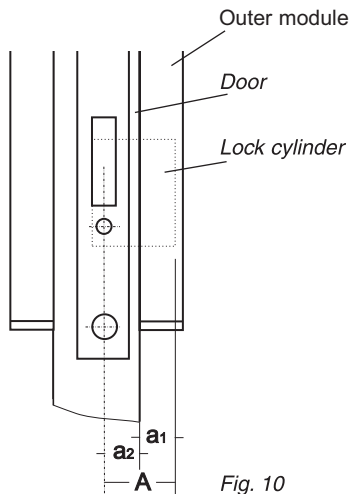


Fig. 10

Important when ordering:

$$A = a1 + a2$$

a1 = module height (inside):

Recess in module for lock cylinder: 20 mm (min.) – 25 mm (max.)

a2 = distance between center of door and surface of the door.



Check the position of the ANSI lock cylinder carefully before tightening the screw (fig. 12).

1. Push the ANSI lock cylinder into the mortise lock until the screw can be screwed in from the edge of the door. Check that the cam turns smoothly when the key is turned. If necessary, adjust the position of the lock cylinder.
2. Tighten the ANSI mortise cylinder with the screw (fig. 12). Check again that the cam turns smoothly when the key is turned. If necessary, adjust the position of the lock cylinder.



The ANSI mortise cylinder is for emergency opening only – not for locking.

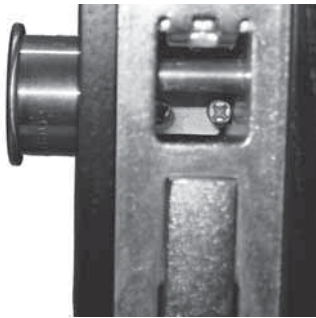
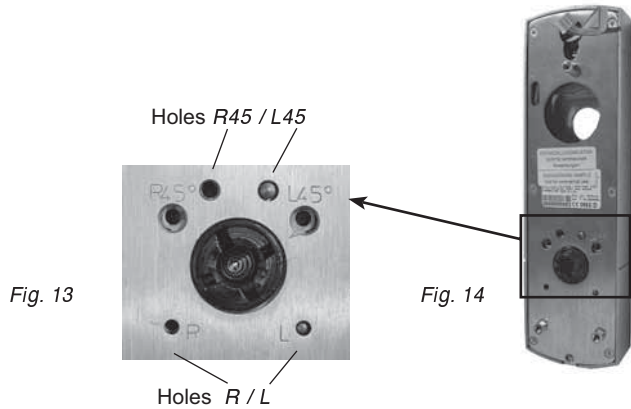


Fig. 12



E. Adapting the outer module for door handle to point right or left (pre-aligned by manufacturer)



Adjusting the outer module for door handle to point right

1. To adjust the Dialock Door Terminal DTSH ANSI for a door handle pointing right, insert the pin (3 x 24 mm) on the rear of the outer module into the hole "R".
2. To limit the movement of the door handle to 45 or 80°, insert the second pin (4 x 24 mm) into holes R45 or R80.

Adjusting the outer module for door handle to point left

1. To adjust the Dialock Door Terminal DTSH ANSI for a door handle pointing left, insert the pin (3 x 24 mm) on the rear of the outer module into the hole "L".
2. To limit the movement of the door handle to 45 or 80°, insert the second pin (4 x 24 mm) into holes L45 or L80.



To adjust the door handle, proceed as follows.



When inserting the plug, take care not to damage the pin strip.



Fig. 15
Door handle pointing right
Zero position



Fig. 16
Door handle pointing left
Zero position

1. Push the handle onto the square spindle of the outer module with the direction of movement as intended.
2. With the perforated plate of the handle, turn the square bolt to the upper stop position (zero position) and hold it there.
3. Using a hammer, tap the pin (3 x 24 mm) lightly into the hole marked "R" or "L". Set the stop limit by inserting the pin into the hole "R45" or "L45". Use only "R" for "R45" or "L" for "L45" (see fig. 18, page 23).
4. Secure the pins with the green adhesive stickers to prevent them from falling out.

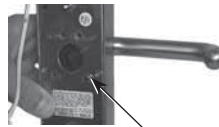


Fig. 17

The spring in the outer module assembly / handle is now pre-tensioned.



F. Installing the square spindle

1. Turn the mark (1) (hub) of the coupling element (2) in direction V.

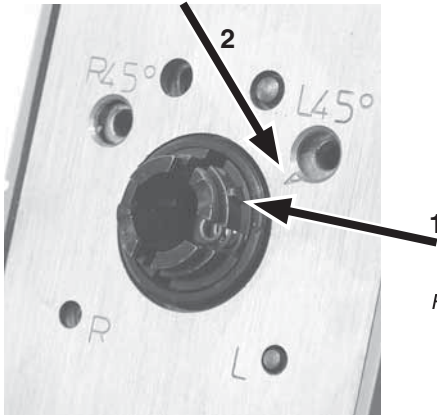


Fig. 19 Square spindle with groove

Fig. 18

2. Before inserting the square spindle into the coupling element, align it so that the groove of the square pin is pointing in the same direction as the set screw in the handle.
3. Push the square spindle into the inner coupling element so that the pins fit into recesses in the coupling element.
4. Using pliers, insert a retaining ring into the groove of the inner coupling element. Ensure that the opening of the retaining ring does not lie above any of the upper pins of the square spindle.



Fig. 20

The square spindle is now in position.



After installing the square spindle on the outer module, the mark (hub) of the coupling element must always point in direction V. When the door lock is inserted, the square spindle must not be twisted.



G. Installing the outer module of the Dialock Door Terminal DTSH ANSI

Connection cable



The following conditions must be fulfilled:

- The holes have been drilled according to the correct hole pattern.
- The door lock and locking cylinder are inserted.

If the distance between the surface of the door (outer) and the lock case is less than 6 mm, a spacer plate must be used; otherwise the outer module will rest on the top of the lock.



1. Before fitting the outer module, check that the hub of the coupling element is pointing in direction V (see fig. 18, page 23).
2. Insert the square spindle into the spindle hub (fig. left) and push the connecting cable through the top hole (16 mm). **Always note the location of the cable!**



Do not pinch the cable!

3. Adjust the outer module vertically to ensure that the hexagonal bosses of the outer module fit into the holes.
4. Push the outer module towards the door until it lies flat on the door (fig. on left.)

If the outer module does not lie flat:

- ⇒ Check holes and remove wood shavings if necessary.

The outer module is now installed in the correct position.



H. Installing the inner module



Caution: Do not pinch the cable!
Note location of cable!

1. Push the plug of the connection cable through the opening in the back plate of the inner module.
2. Push excess cable back into the hole.
3. Hold the back plate of the inner module against the inside of the door.
4. Insert the thumb turn spindle for the "Do not disturb" correctly (on diamond, green mark at 12 o'clock).
5. Screw the back plate lightly onto the outer module with the three screws. Allow each of the screws to engage the thread before tightening it fully.
6. Check the vertical alignment of the inner module.
7. Push the plug of the connection cable into the socket above the battery holder.
8. Insert batteries into the battery holder. Ensure correct position of battery terminals.



Fig. 23



9. Place the cover into the hook of the attachment plate.

10. Close the cover so that the pin at the bottom of the attachment plate fits into the cover.



11. Using the special tool, insert threaded ring into the outer module (do not cross thread the ring) and screw it tight.



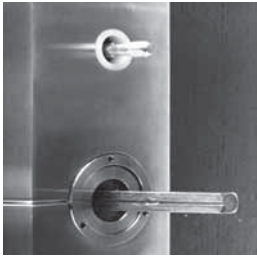


Use only the set screws supplied in the enclosed packet.

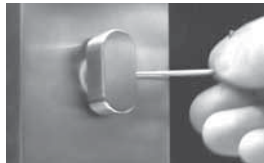
⇒ If necessary, remove any other set screws from the handle.



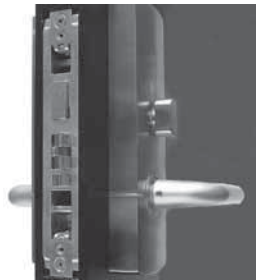
12. Push the inner and outer handles onto the square spindle and tighten the set screws with the hexagon-socket key (3 mm).



13. Push the plastic ring (bushing) and thumb turn into position and tighten with the hexagon-socket key (2 mm).



14. Screw the cover onto the mortise lock.



The outer and inner modules are now fully installed.



Starting up

When supplied, the Dialock Door Terminal DTSH ANSI is set for the so-called "simple mode", i.e. for stand-alone (SA) operation. Only this mode is described in these instructions. Other modes may be set after consultation with the dealer or Häfele sales department.



Avoid misuse of the user keys by unauthorized persons .
Keep the programming ADD and DELETE keys in a safe place, since these are used for assigning or withdrawing locking rights to a user key.

At the first start-up, the ADD and DELETE keys are assigned as follows:



This operation can only be carried out immediately after switching on power for the first time.
The first start-up must be carried out as quickly as possible and without interruption!

1. Keep the green programming ADD key and the red DELETE key ready.
2. Hold the green ADD key in front of the operating panel until the green LED shows continuously.
3. Remove the programming ADD key. The red LED flashes.
4. When the red LED is flashing, hold the red DELETE key in front of the operating panel.



If the red DELETE key is not held in front of the operating panel within 5 sec. the operation is aborted automatically.

5. The LED shows green continuously, upon successful teaching. If any errors still occur, contact the Häfele Sales Department.



Brief instructions for use

Assigning locking rights for user key

1. Hold the green programming ADD key in front of the antenna.
⇒ The green LED flashes.
2. Hold the user key being taught in front of the antenna within 5 sec. If the green LED lights up briefly, the locking right for the user key has been successfully assigned.
3. Remove the taught user key.
4. Hold the next user key to be taught in front of the antenna within 5 sec.

Withdrawing locking rights from user key

1. Hold the red DELETE key in front of the antenna.
⇒ The red LED flashes.
2. Hold the user key to be cleared in front of the antenna. The red LED lights up briefly. The locking right for the user key has now been withdrawn.

Withdrawing locking rights from all user keys

If a user key has been lost and should no longer have locking rights, all the user keys for the Dialock Door Terminal DTSH ANSI must be cancelled. Following this, all authorized user keys must be re-assigned.

1. Hold the red cancelling key in front of the antenna.
⇒ The red LED flashes.
2. Hold the green programming key in front of the antenna.
⇒ The red LED lights up briefly.
3. Re-assign access rights to all user keys as required.



Operation

1. Hold the user key in front of the antenna. The red LED lights up briefly. A warning signal is heard. In the case of an unauthorized user key, the signal is heard twice.
2. The green LED lights up, the red LED goes off.
3. The Dialock Door Terminal DTSH ANSI can now be opened within 3 sec. To open the door, rotate the handle.

If the LEDs do not switch from red to green:

⇒ Hold the user key closer to the antenna.

If the LEDs still do not switch from red to green:

⇒ The user key is not authorized.

Battery replacement

If the batteries are weak, the red and green LEDs flash alternately three times when the electronics are switched on.

⇒ The batteries should now be replaced.

If the replacement of the batteries takes longer than 3 minutes, the time and date in the Dialock Door Terminal DTSH ANSI are lost. These can be reset using the Dialock MDU (only for operation with personnel and hotel software).

The authorization of the user keys remains in effect.



Correct functioning of the Dialock Door Terminal DTSH ANSI is only guaranteed if weak batteries are replaced immediately.



Do not dispose of spent batteries with household waste!

⇒ Observe environmental regulations, e.g. use special municipal collection points.



To replace the batteries, proceed as follows:

The batteries are located in the inner module of the Dialock Door Terminal DTSH ANSI.

1. Using the hex key, loosen the set screw of the handle and thumb turn on the inside of the door.
2. Pull the handle off the square spindle.
3. Using the special removal tool, unscrew the threaded ring.
4. Remove the cover from the inside module.
5. Remove the spent batteries.
6. Insert fresh batteries into the battery holder within 3 minutes.
Ensure that the battery terminals are oriented correctly (see fig. 23, page 25)!
7. Replace the cover of the inner module.
8. Place the threaded ring squarely and screw it tight with the special removal tool.
9. Push the handle and thumb turn onto the correct square spindles and tighten the set screws with the hexagon-socket keys.

Emergency opening

1. Remove the cover (fig. 24) from the outer module with the removal tool.
2. Open the Dialock Door Terminal DTSH ANSI with the emergency opening key.



The lock cylinder is for emergency opening only – not for locking. If force is used to attempt locking, the unit may be damaged!



FAQs

I have lost a user key and want to clear it.

How do I do it!

If a user key has been lost and should no longer have locking rights, all the user keys for the Dialock Door Terminal DTSH ANSI must be cleared.

Following this, all authorized user keys can then be re-assigned.

See: "Withdrawing locking rights from all user keys".

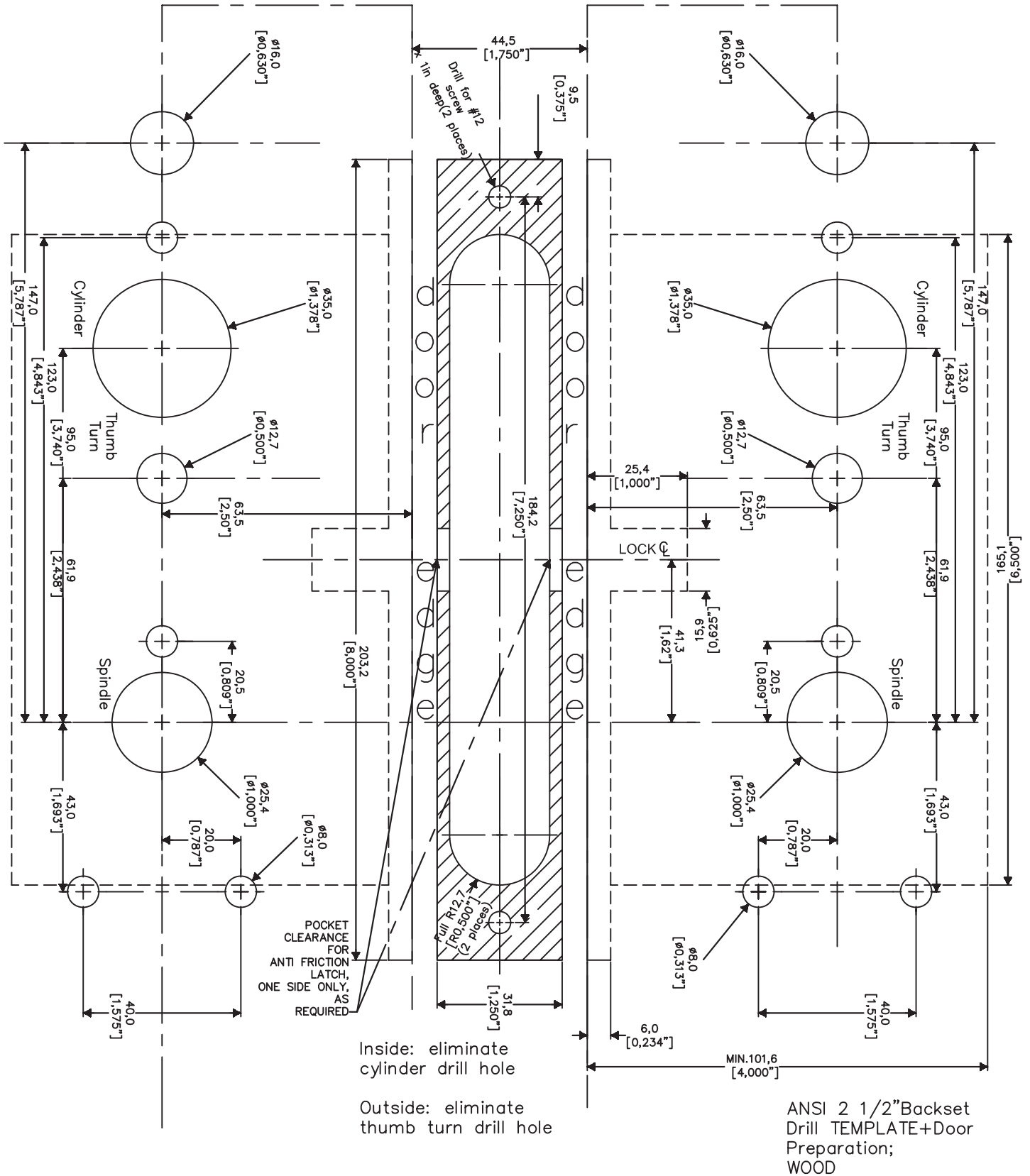
Technical data

Dimensions	(26 x 65 x 227) mm (l x w x h)
Power supply	4 x 1,5 V batteries, size AA Premium Alkaline (art. no. 910.54.980)
Temperature range	0 - 65°C (32°F -149°F)
Humidity	0 - 90 % (non-condensing)

Technical changes may be made without notification.



Scale 1:1



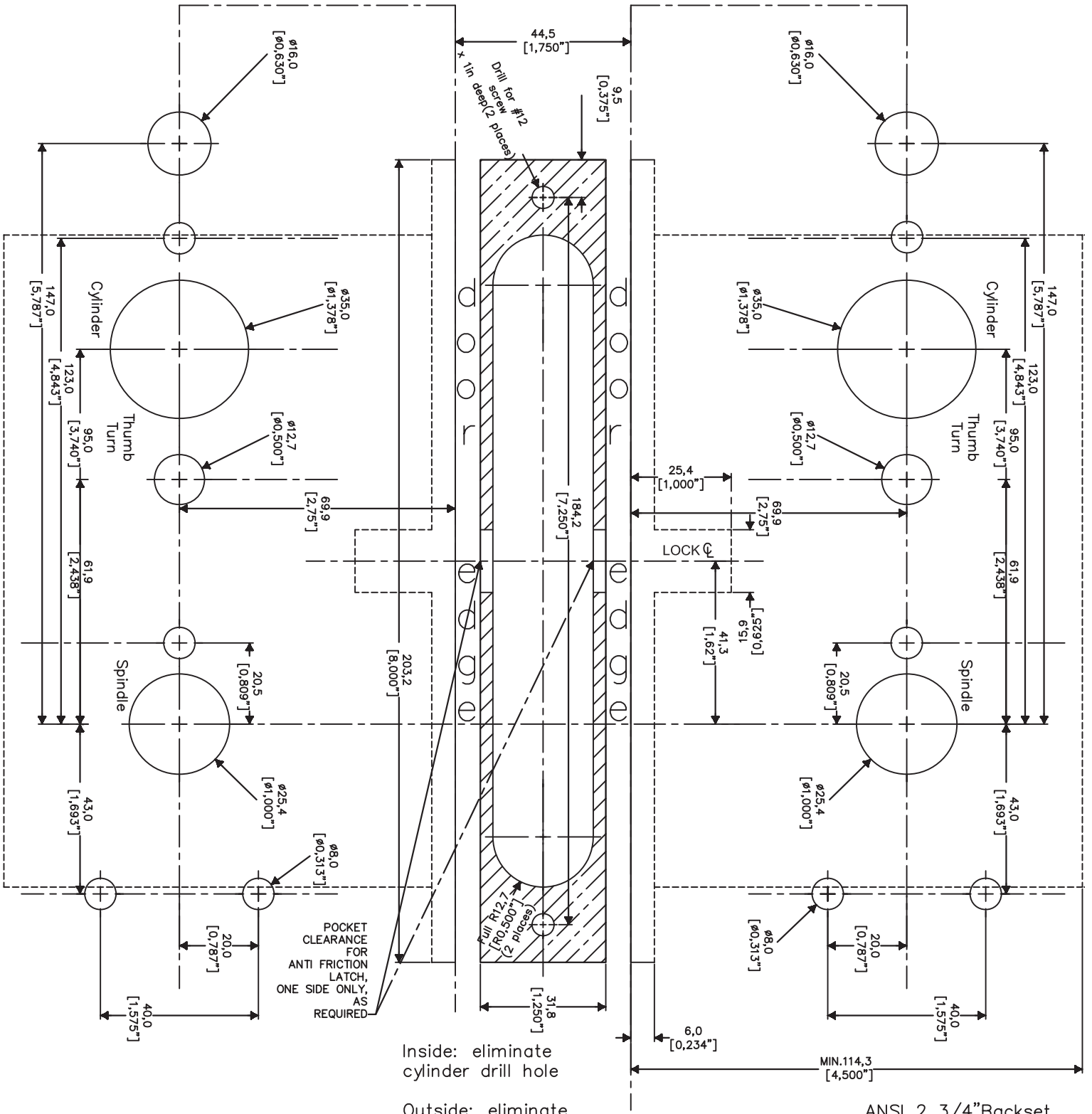
Inside: eliminate cylinder drill hole

Outside: eliminate thumb turn drill hole

ANSI 2 1/2" Backset Drill TEMPLATE+Door Preparation; WOOD



Scale 1:1



Inside: eliminate cylinder drill hole

Outside: eliminate thumb turn drill hole

ANSI 2 3/4" Backset Drill TEMPLATE+Door Preparation; WOOD



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