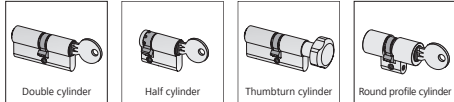


Installation and operating manual

For double cylinders, half cylinders and thumbturn cylinders with a Euro profile or round profile



1. General instructions

- According to manufacturer product liability as defined in the Product Liability Act, the following information on locking cylinders must be taken into account and passed on to users. Non-compliance releases us from any such liability.
- Locking cylinders are subject to dimension standard DIN 18252 / Austrian standard ÖNORM B5356. Technical terms referring to lock cylinders and locking systems are described or illustrated in EN 1303, DIN 18252 and ÖNORM B5356 if they are not explained in the EVVA Product catalogue.
- Lock cylinders can only be installed in locks, fittings and similar devices without any reservation if they comply with these dimensional standards and if such locks, fittings and similar devices are explicitly designed to accommodate the lock cylinders which comply with these standards. In all other cases, manufacturers, retailers and users of such locks, fittings and similar device must be certain that the lock cylinder that they select is suitable for installation and its intended use. Applicable statutory regulations must be observed.
- Making any alterations to a lock cylinder may cause it to malfunction, so any changes should be avoided. Guarantees and warranties become void if the cylinder is modified in any way.
- A lock cylinder with two locking sides (double cylinder) cannot be opened if a key is already inserted in the opposite side. If requirements stipulate that it must be possible to open a lock cylinder even if there is a key on the opposite side for safety reasons, lock cylinders with a so-called external key override function may be fitted.
- We recommend that you have locking cylinders installed by trained staff only. Lock cylinders and keys form a functional unit. We only accept liability for our own original products.
- Architects, planners and advisory institutions are obliged to request all necessary product information from us and take all such information into account in order to comply with obligations regarding information and instructions under the Product Liability Act. Specialist retailers/installers are obliged to abide by product information and instructions in price lists and, in particular, to request from us all necessary instructions and to pass them on to installers and users.
- If panic locks are fitted, the installer must verify what type of lock cylinder is suitable.
- The instructions in the installation and operating manual must be observed.

2. Description

For the purposes of this manual, a lock cylinder is a generally replaceable component found in locks, fittings, devices, doors and similar products designed to hold it. Other types of lock cylinders are to be dealt with in a corresponding way. A lock cylinder is assigned at least one key. Lock cylinder and key form a single functional unit. We only accept liability for our own original products.

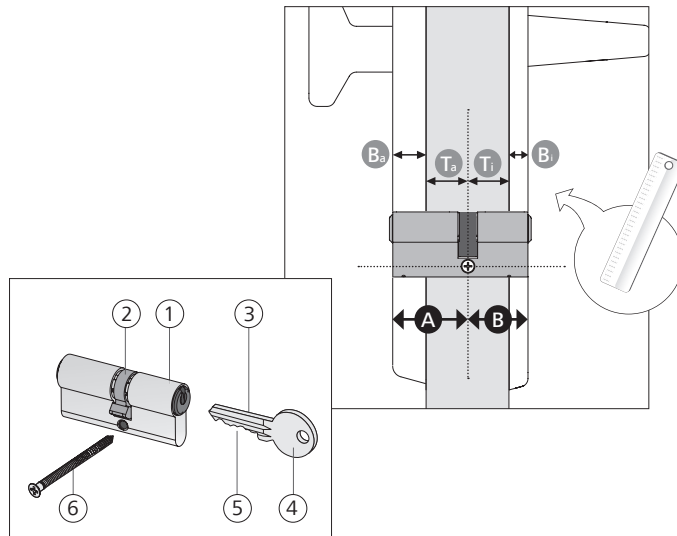
Determining the correct cylinder length:

The right-hand diagram shows the correct way to measure a lock cylinder.

- Ta** Distance to door exterior
- Ti** Distance to door interior
- Ba** Fitting height on outside
- Bi** Fitting height on inside
- A** Cylinder length outside ($A = Ba + Ta$)*
- B** Cylinder length inside ($B = Bi + Ti$)

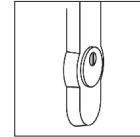
* Lock cylinder lengths are available in 5 mm increments.
If necessary, the outside cylinder length can be extended 3 mm or reduced 2 mm.

- 1 Lock cylinder
- 2 Lock cam
- 3 Key
- 4 Key bow
- 5 Key bit
- 6 Cylinder Fixing Screw ZS (M5 thread)



⚠ Cylinder projection

Lock cylinders that may be vulnerable to acts of wilful damage may only project a maximum of 3 mm from the protective fitting which is tightly enclosed around them. The extent of burglary resistance measures is determined by the specified security objectives/requirements for the installation concerned (see EN 1627 and Austrian standards ÖNORM B5351 and ÖNORM 5338).



NOTE

Attack resistance requirements in classes 1 and 2 according to EN 1303 or ÖNORM B5351 are only met if a suitable protective fitting is installed featuring a cylinder cover or a security rose with a cylinder cover.

⚠ VdS-approved lock cylinders

The following information should be taken into account when installing VdS-approved lock cylinders.

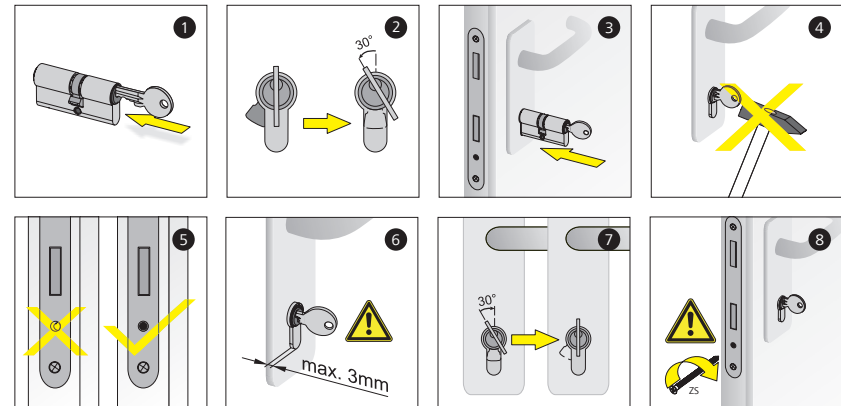
NOTE

- Lock cylinders without pulling protection – Class A
Lock cylinders in doors which are vulnerable to break-ins must be fitted with a VdS-approved, burglary-resistant door plate with Class-A pulling protection. Such door plates must comply with requirements under DIN 18257 Class ES 1 ZA.
- Lock cylinders with pulling protection – Class AZ
Lock cylinders in doors which are vulnerable to break-ins must be fitted with a VdS-approved, burglary-resistant door plate with Class-A pulling protection. Such door plates must comply with requirements under DIN 18257 Class ES 1.
- Lock cylinders without pulling protection – Class B (+)
Lock cylinders in doors which are vulnerable to break-ins must be fitted with a VdS-approved, burglary-resistant door plate with Class-B(+) or Class-C pulling protection. Such door plates must comply with requirements under DIN 18257 Class ES 2 ZA or ES 3 ZA.
- Lock cylinders with pulling protection – Class BZ (+)
Lock cylinders in doors which are vulnerable to break-ins must be fitted with a VdS-approved, burglary-resistant door plate with Class-B(+) or Class-C pulling protection. Such door plates must comply with requirements under DIN 18257 Class ES 2 or ES 3.

3. Installation

- Insert the key in the lock cylinder as far as it will go.
- Turn the inserted key until the lock cam is aligned with the cylinder body. The 30° turn in the diagram is shown as an example only. A different key position may be required for different applications.
- Insert the lock cylinder into the cylinder opening in the lock case.
- Do not use any force when installing the lock cylinder.
- The lock cylinder is in the correct position in the lock case when the drill holes in the lock and lock cylinder are superimposed and the latch and/or bolt can be drawn back using the key.
- Lock cylinders that may be vulnerable to acts of wilful damage may only project a maximum of 3 mm from the protective fitting which is tightly enclosed around them. The extent of burglary resistance measures is determined by the specified security objectives/requirements for the installation concerned (see EN 1627 and Austrian standards ÖNORM B5351 and ÖNORM 18252).
- Straighten the key as soon as the lock cylinder is in the right position (Step 3) in the lock case.
- Secure the lock cylinder in the lock case with the cylinder screw. Fasten the screw by hand using a Phillips screwdriver (maximum tightening torque of 2.5 Nm). Also see section on Frequent Installation Errors

The locking function must be checked while holding the door open. To do so, the lock bolt should be moved to and fro between the open and locked position.



NOTE:

Lock cylinders must be fitted in such a way that they are not subject to any external forces except when used correctly and at the designated mounting points. Similarly, when the key is removed, no external forces may be exerted on the cam or on the lever in the direction of turning.



WARNING

If the cylinder screw is fastened too tightly, the cylinder may function incorrectly, may be stiff or may cause other problems.

4. Disassembly

The cylinder can be disassembled using the same procedure, but in reverse.

NOTE:

Ensure the lock cam is in the right position. Turn the key in such a way that the lock cam is aligned with the lower, elongated section.

When replacing a cylinder, it is advisable to check the lock for any damage or dirt when you have disassembled the lock cylinder.

You should dispose of lock cylinders, keys and packaging material in compliance with local regulations. Lock cylinders and keys are classified as scrap metal for disposal purposes.

Required tools

We recommend using a PH2 Phillips screwdriver to fasten the lock cylinder into the lock case with cylinder screw.

Warning

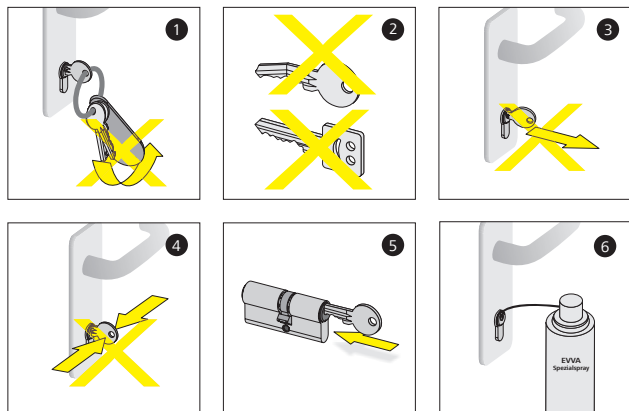
You must not use other tools such as a hammer or pliers when fitting a lock cylinder.

Ensure you apply the correct torque (2.5 Nm) if you use a battery-operated screwdriver.

5. Please note:

the product is incorrectly used, i.e. lock cylinders or keys are not used as intended, in the following cases:

- Do not use tools such as screwdrivers, pliers or bunches of keys to increase the torque. Other lock picking tools must not be used. The key way and hence also the key shaft feature a slim design to ensure that torque can only be applied to the key bow by hand, thus guaranteeing that the cylinder can be reliably unlocked without any difficulty.
- Lock cylinders may only be locked using original, authorised EVVA keys or keys manufactured by licensed EVVA partners. Do not lock or unlock lock cylinders using a tampered, bent or damaged key, or a copy supplied by an unauthorised manufacturer.
- The key should not be used as a handle to open or close doors.
- Do not apply force on the key bow from the side when the key is inserted in the cylinder (e.g. force applied using a key when it has not been completely withdrawn). Only turn the key once it is fully inserted in the lock cylinder, i.e. when it has been inserted as far as it will go.
- When inserting the key into the lock cylinder, ensure that you only exert pressure on the key from the front or the rear. If you apply pressure from the side, above or below, you are using the key incorrectly. If you are carrying the key on a lanyard, remove the key from the lanyard when locking or unlocking.
- If foreign bodies are in the key way or on the key itself or if the maintenance instructions have not been followed.



6. Correct usage

- Only turn the key once it is fully inserted in the lock cylinder as far as it will go in the key way.
- Lock cylinders for special applications, such as cold stores, must include special convenience, usage or security features.
- The lock cylinder will only provide optimal security if used together with a security fitting.
- You should check that keys work correctly in the corresponding lock cylinder while holding the door open.

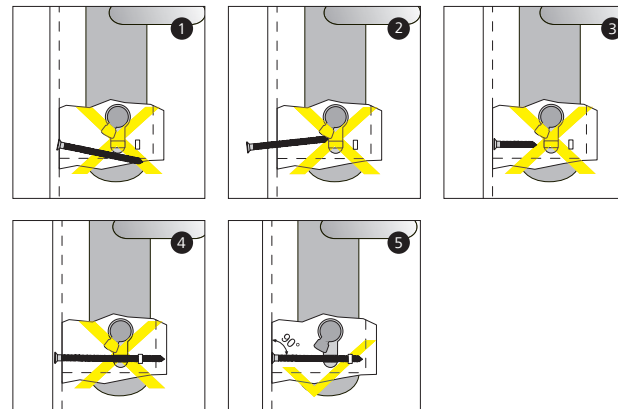
7. Product performance features

Requirements for individual lock cylinders must be agreed with us in writing if the required product performance features have not been explicitly specified in our catalogues, leaflets, technical specifications or similar. Refer to Standard EN 1303: „Cylinders for locks“ for guidance in this respect. This standard specifies basic and supplementary requirements for lock cylinders. The information in the standard should be applied to other lock cylinders as appropriate.

Lock cylinder serviceability depends on aspects such as frequency of use, the way it is used, environmental factors and maintenance. Lock cylinders and keys should be replaced as soon as any fault arises, even if they have been properly maintained. This particularly applies to problems when inserting and removing keys.

8. Frequent installation errors

- Lock cylinder not fastened correctly.** The cylinder screw misses the hole in the lock cylinder and is driven under the cylinder. This is not easy to see, so check the lock cylinder to ensure it is securely fastened in position once you have installed it.
- Lock cylinder not fastened correctly.** The cylinder screw misses the hole and strikes against the lock cylinder.
- Screw too short.** A cylinder screw which is too short will miss the hole and the lock cylinder will not be fixed in position in the lock.
- Screw too long.** A cylinder screw which is too long will protrude from the face plate and the door cannot be closed or the screw enters too far into the lock case and prevents the cylinder from locking.
- Lock cylinder fastened correctly in position.** Insert the lock cylinder into the lock and fasten using a cylinder screw of the correct length (supplied by the lock manufacturer) at an angle of 90° (depending on the specific backset of the lock).



9. Maintenance

Lock cylinders should be lubricated on both sides at least twice a year using the care product recommended by EVVA (EVVA special spray) (see Step 5/fig. 6).

Warning! DO NOT use resinifying oils, or cleaning agents which cause corrosion.

Lock cylinders with cogwheel cams

Always fit lock cylinders with cogwheel cams without the key.

NOTE: The locking function must be checked while holding the door in an open position. You must verify that the lock cylinder/multi-point lock unit functions correctly as a whole.

Lock cylinders with free-wheel function

Free-wheel cylinders with self-disengaging free-wheel cams and 360° free-wheeling cams are always fitted without a key

NOTE:

This type of cylinder may only be fitted into multi-point gear locks with a panic function if the manufacturer explicitly requires forced lock cam disengagement to guarantee the panic function works correctly. Read the lock manufacturer's instructions for use carefully before fitting the cylinder. The locking function must be checked while holding the door in an open position. The complete panic exit device including lock cylinder, panic lock, panic bar and/or handle set must be checked to ensure it works correctly.

In doing so, the following aspects must be taken into account:

- The key may only be inserted when locking or unlocking the cylinder.
- The key must not be inserted during normal, day-to-day operations.
- The lock or multi-point lock must always be fully locked or unlocked as far as it will go to ensure that the bolt is fully retracted or extended.
- As a basic rule, requirements under EN 179 and EN 1125 apply

Lock cylinder with external key override: Limited function

When using a cylinder with an external key override, you must ensure that nothing is blocking the opposite side of the cylinder (e.g. heavy bunch of keys).

NOTE: A lock cylinder with an external key override can be locked even if a valid key is inserted in the opposite side.