



PORSCHE



## **Porsche Kompakte Ladesäule**

Installationsanleitung  
Installation instructions

971044033

|                                     |    |
|-------------------------------------|----|
| Installationsanleitung .....        | DE |
| Installation instructions.....      | EN |
| Manual de instalación.....          | ES |
| Instructions d'installation .....   | FR |
| Istruzioni per l'installazione..... | IT |
| Installatiehandleiding .....        | NL |
| Manual de instalação.....           | PT |
| Инструкция по монтажу.....          | RU |
| 設置説明書.....                          | JA |
| 安装说明.....                           | ZH |
| 설치 매뉴얼.....                         | KO |

## Allgemein

Die Kompakte Ladesäule besteht aus zwei Teilen. Zum einen aus der Ladesäule und zum anderen aus dem Porsche UniversalLadegerät (AC), das separat bestellt werden kann oder bereits vorhanden ist. Beide Teile zusammen ermöglichen ein komfortables Laden der Porsche Fahrzeuge.

Nachdruck, auch auszugsweise, sowie Vervielfältigungen jeder Art nur mit schriftlicher Genehmigung.

Bewahren Sie diese Anleitung immer griffbereit auf und übergeben Sie diese bitte beim Verkauf Ihrer Ladesäule an den neuen Besitzer.

In dieser Installationsanleitung werden verschiedene Arten von Hinweisen verwendet.

### **GEFAHR**

Schwere Verletzungen oder Tod

Werden Sicherheitshinweise der Kategorie „Gefahr“ nicht befolgt, treten schwere Verletzungen oder der Tod ein.

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### **WARNUNG**

Schwere Verletzungen oder Tod möglich

Werden Sicherheitshinweise der Kategorie „Warnung“ nicht befolgt, können schwere Verletzungen oder der Tod eintreten.

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### **VORSICHT**

Mittlere oder leichte Verletzungen möglich

Werden Sicherheitshinweise der Kategorie „Vorsicht“ nicht befolgt, können mittlere oder leichte Verletzungen eintreten.

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### **HINWEIS**

Sachschäden möglich

Werden Sicherheitshinweise der Kategorie „Hinweis“ nicht befolgt, können Sachschäden auftreten.

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## Info



### **Information**

Zusatzinformationen, Tipps und Hinweise sind mit dem Wort „Information“ gekennzeichnet. Diese bitte sorgfältig lesen und beachten.

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# Contents

|                                                  |    |
|--------------------------------------------------|----|
| Contents .....                                   | 19 |
| Scope of delivery .....                          | 21 |
| Accessories .....                                | 22 |
| Tools .....                                      | 22 |
| Selecting a suitable installation location ..... | 23 |
| Installation Compact charging pole .....         | 24 |
| Electrical connection .....                      | 27 |
| Spare parts .....                                | 30 |
| Cleaning .....                                   | 30 |
| Technical specifications .....                   | 31 |
| Appendix: Foundation fastening kit Hilti .....   | 32 |



## **i** Information

Limited use of the charging equipment:

- ▶ If possible, the socket should be installed in a protected outdoor area (e. g. within the rain-protected area of a carport). Should a protected installation not be possible, we recommend installing the operating device outside of direct sunlight. However, please take into account that use of the charging cable is permitted only in dry environments.
- ▶ For use of the 2.5 m long vehicle cable, the socket should be installed as close to the vehicle as possible. In doing so, make sure to take the preferred park position and vehicle orientation into account.

The installation location of the compact charging pole should be selected in consideration of national standards and regulations in such a way as to ensure comfortable use.

## Scope of delivery

- ▶ Compact charging pole including a foundation fastening kit
- ▶ 2 keys for the front faceplate
- ▶ Country-specific plug adapter
- ▶ Holding plate for NEMA
- ▶ Installation instructions

## Compact charging pole - parts overview:

1. Front faceplate latch
2. Operating unit (Porsche universal charger)
3. Industrial socket (country-specific accessory)
4. Foundation fastening
5. Front faceplate
6. Lock
7. Charging plug holder
8. Charging cable (Porsche universal charger)
9. Power connection cable (country-specific accessory)

## **i** Information

In most countries, the country-specific power connection cable must be purchased additionally. Your Porsche dealer will be happy to provide the necessary advice.

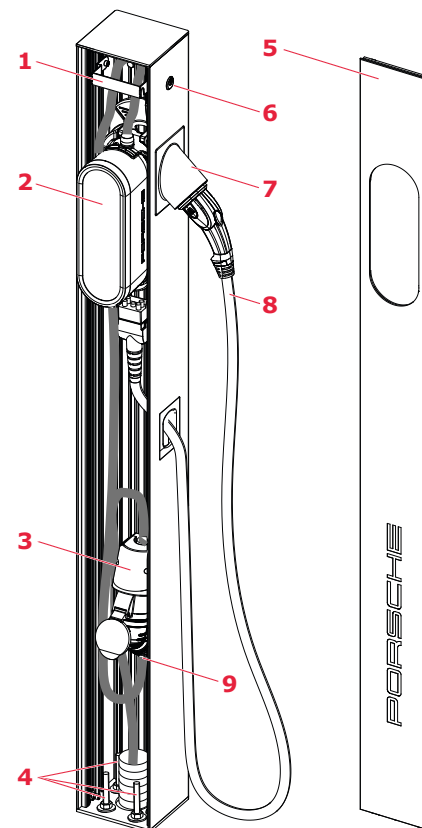


Fig. 1: Parts overview

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## Accessories

(not included in scope of delivery)

The operating unit, industrial socket, charging cable, power connection cable and mains cable are not included in the scope of delivery and must be purchased locally in accordance with the country-specific specifications, see the infrastructure connection of Porsche universal charger (AC).

- ▶ Operating unit
- ▶ The mains cable must be planned by a qualified electrician taking line length and country-specific specifications into consideration.
- ▶ Industrial socket for wall installation in outdoor areas (matching the operating device):  
PCE socket (EU) according to IEC 60309 or NEMA socket (US),  
Rated current minimum 40 A,  
Protection class min. IP54
- ▶ Empty conduit  $\varnothing$  63 mm (corrugated plastic pipe DIN EN 61386-22, minimum compressive strength 750 N)
- ▶ Foundation (provided on site or according to the following description)
- ▶ Foundation fastening kit or alternative fastening method: Hilti HITHY 200-A + HIT-V-R M12 or similar (see static calculation)

## Tools

- ▶ Allen wrench SW 4
- ▶ Allen wrench SW 5
- ▶ Torx wrench TX20
- ▶ Combination wrench SW 19 or torque wrench
- ▶ Slot screwdriver/Phillips screwdriver

## Selecting a suitable installation location

The compact charging pole is designed for installation in indoor and outdoor areas.

When selecting a suitable location, the following criteria should be taken into consideration:

- ▶ Install the operating unit where it is protected from direct sunlight.
- ▶ Do not expose the charging pole to direct hose water (e. g. from high-pressure cleaners or garden irrigation).
- ▶ Do not install the charging pole underneath suspended objects.
- ▶ Do not install the compact charging pole in stables, barns and locations where ammonia gas occurs.
- ▶ Install the compact charging pole on a firm base.

### DANGER

Electric shock, short circuit, fire, explosion, flames

- ▶ Do not install the compact charging pole in explosion-prone areas.
- ▶ Comply with the local applicable electrical installation regulations, fire precautions and accident prevention regulations and make sure not to block any emergency escape routes.
- ▶ Take note of the operating unit safety instructions and implement them for use in the compact charging pole.
- ▶ Protect sockets and connectors from humidity, water and other liquids.
- ▶ Damaged components must not be used and must be switched off via the preliminary fuse and locked out against inadvertent restart.

### Information

- Install the compact charging pole such that it is not located in the area of emergency escape routes or walkways and that the charging cable does not cross any emergency escape routes or walkways.
- Install the compact charging pole such that the distance between the charging plug and the vehicle does not exceed the available cable length.
- Check the condition of the foundation prior to installation to ensure secure fastening.

## Recommended installation sequence

1. Prepare the foundation (with empty conduit and anchor rods).
2. Lay the cable for the circuit breaker to the foundation.
3. Install the compact charging pole.
4. Have the power supply installed by a qualified electrician.

## Preparing the foundation

### Information

If a firm ground is available that complies with the static calculation and is provided with a suitable possibility for cable feed, no separate foundation is required. In such a case, the compact charging pole can be installed directly on the existing ground.

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## Installation Compact charging pole

### Installation on existing ground

1. Mark the drill holes on the ground through the cable gland.
2. Drill the fastening holes  $\varnothing 14$  mm and use the foundation fastening kit in accordance with the product instructions.

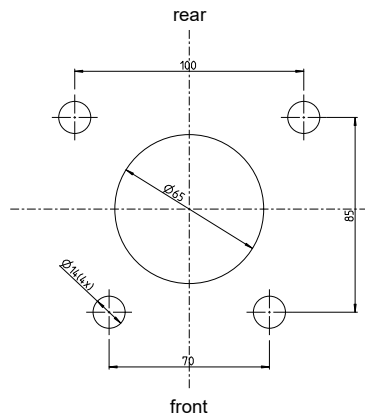


Fig. 2: Drilling dimensions

### Installing the compact charging pole

The foundation must be provided on site.

Alternative fastening method:

HILTI HVA (HVU M12x110 + HAS-R M12x110/168) (see chapter „Appendix: Foundation fastening kit Hilti“ on page 32) or similar (see static calculation).



### Information

The compact charging pole is usually installed directly (without any spacing) on the prepared reinforced concrete ground with flooring (e. g. paving, tarmacadam etc.) (see Fig. 7).  
If the flooring is to be finished later, it is possible to use distance mounting in order to install the charging pole in advance above the planned floor covering (see Fig. 3).

### Preparing for distance mounting

1. Brace the anchor rods with the foundation using four washers A13 and four hexagonal nuts M12.  
The maximum tightening torque is 40 Nm.
2. Set the desired height between 30 mm and 150 mm using four hexagonal nuts M12 and washers A13.
3. Empty conduit: Protrusion minimum 250 mm above the foundation.

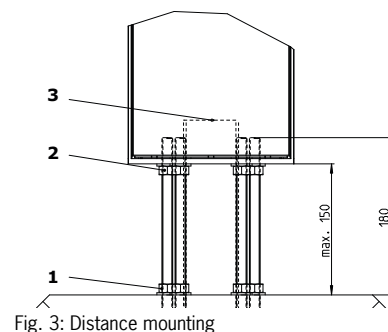


Fig. 3: Distance mounting

## Installation on ground/foundation to be provided on site

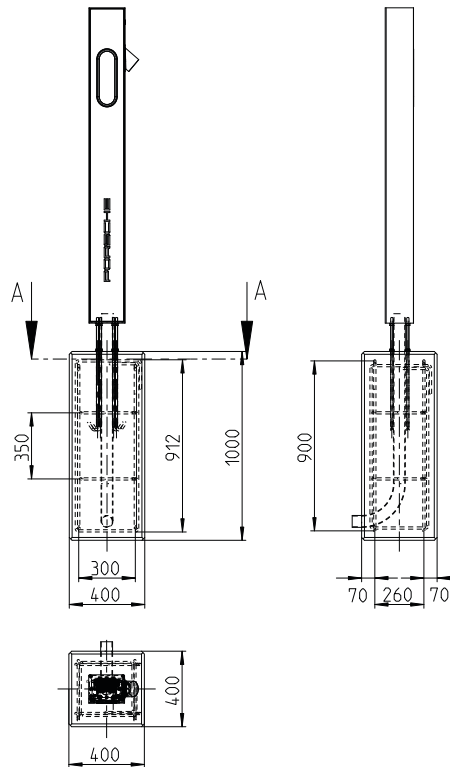


Fig. 4: Foundation dimensions



### Information

For anchor rod dimensions see chapter „Drilling dimensions“ on page 24.

## Foundation reinforcement plan

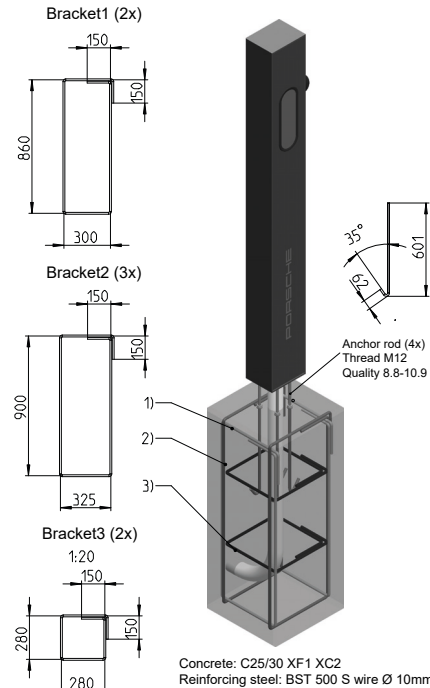


Fig. 5: Foundation reinforcement plan



### Information

- This is an illustration of distance mounting. The mounting can be performed flush to the floor as well.
- Providing the foundation according to the foundation reinforcement plan requires structural engineering expertise.

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## Unlocking the charging pole

1. Unlock the front faceplate using the key.
2. Carefully tilt the front faceplate forward and lift it upward out of the base frame.

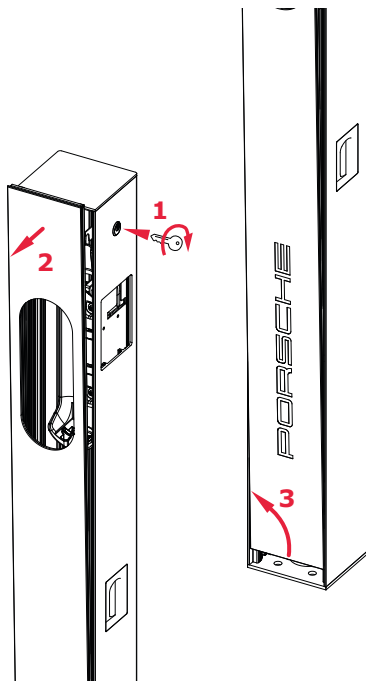


Fig. 6: Opening the charging pole

## Floor mounting - fastening the charging pole

1. Fasten the charging pole on the threaded rods using the nuts provided. Tightening torque 40 Nm.
2. Empty conduit: Protrusion minimum 250 mm above the foundation.

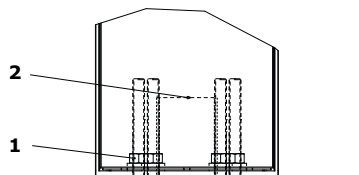


Fig. 7: Floor mounting

## Electrical connection


**DANGER**

Incorrectly installed sockets

During charging of the high-voltage battery via the vehicle charging connector, incorrectly installed sockets can cause electric shock or fire.

- ▶ Installation and initial start-up of the socket for the Porsche universal charger (AC) must only be performed by a **qualified electrician**. In doing so, the qualified electrician is entirely responsible for complying with the existing standards and regulations.
- ▶ The Porsche universal charger (AC) may be used only in appropriately earthed power grids. Operation in not earthed grids (e. g. IT grids) is not possible.
- ▶ The line cross-section of the supply line to the socket should be established in consideration of the line length and the locally applicable regulations and standards.
- ▶ The socket used for charging should be connected via a separately fused circuit that complies with the local laws and standards.
- ▶ Make sure to adhere to the safety instructions in the installation instructions as well as in the operating instructions of the vehicle and the Porsche charging equipment.


**WARNING**

Flammable or explosive fumes

Components of the Porsche charging equipment can cause sparks and thus ignite flammable or explosive fumes.

- ▶ In order to reduce the risk of explosions, particularly in garages, make sure to install the charging pole socket at least 50 cm above the floor.
- ▶ The Porsche charging equipment is exclusively suitable for use with vehicles of Dr. Ing. h.c. F. Porsche AG or brands of Volkswagen AG. Use of the equipment with vehicles of other manufacturers is not released.



### Information

Consider the following recommendations in order to ensure an interruption-free charging operation:

- For charging the vehicle with the Porsche charging equipment, a new industrial socket should be installed that provides maximum possible power available through the electrical house installation.
- The electrical installation should be dimensioned such that the maximum rated power of the used socket is permanently available for charging the vehicle.
- Prior to installing the charging infrastructure, please check whether it is possible to permanently provide the additionally required power for charging the vehicle through the existing house installation.
- We recommend using either NEMA sockets with a rated current of at least 40 A or industrial sockets according to IEC 60309 for charging.
- During charging of the high-voltage battery via the industrial socket, the electrical installation can be strained to its maximum capacity.
- We recommend to have the electrical installations used for charging regularly checked by a qualified electrician.
- When charging the high-voltage battery via a domestic socket, the charging current is automatically set to 100 %. To prevent overheating of the electrical installation, the charging current can be limited to 50 %.

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## Connecting the industrial socket

1. Swivel the charging plug holder into the opening provided.

### Information

A charging plug holder matching charging plug type 2 is pre-installed. You can exchange the charging plug holder for one that is matching a country-specific charging plug by dismounting the two torx screws.

2. Fasten the charging plug holder using 2 PT screws WN1452 4 x 20.
3. Mount the country-specific high-voltage socket (minimum protection class IP54) – for a NEMA socket you additionally need to use the holding plate provided in the scope of delivery. Connect the socket.

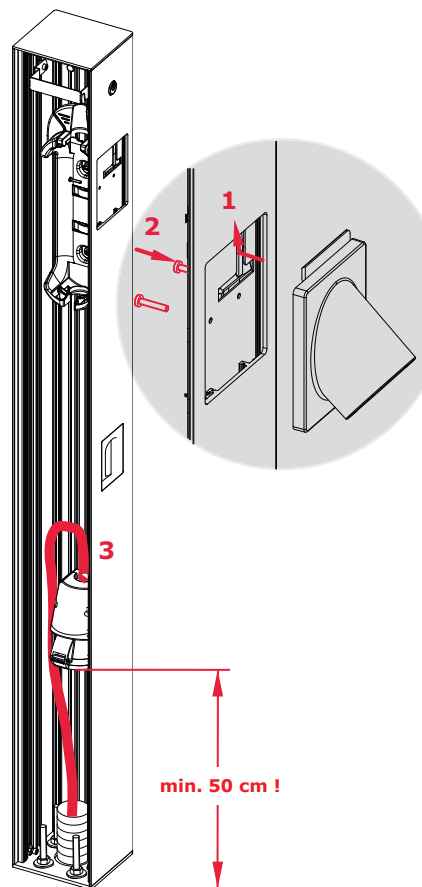


Fig. 8: Connecting the industrial socket

## Installing the operating device

1. Lay the optional power connection cable in the wide groove on the left-hand side and guide it via the cable duct upward.
2. Connect the power connection cable to the operating unit.
3. Guide the connector plug of the vehicle cable from outside through the brush seal.
4. Connect the charging cable from the vehicle side to the operating unit.
5. Now press the operating unit into the support provided.

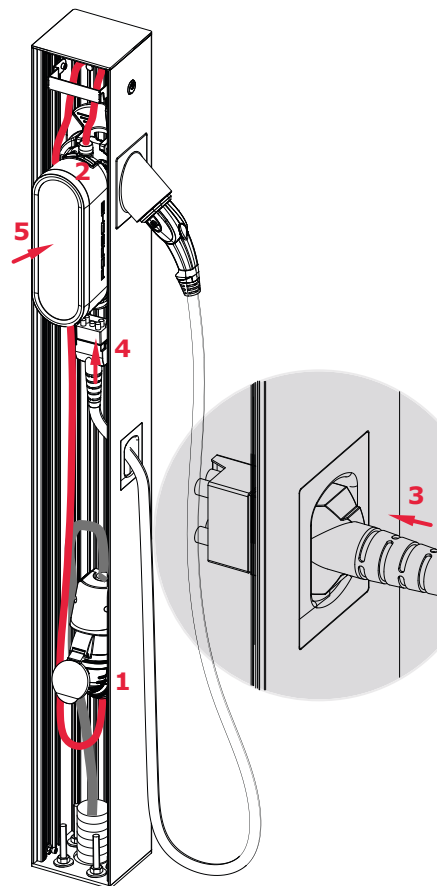


Fig. 9: Installing the operating device

## Locking the charging pole

1. Place the faceplate on the two mounting studs in the bottom area of the pole rack.
2. Swing the faceplate in.
3. Lock the front faceplate using the key.

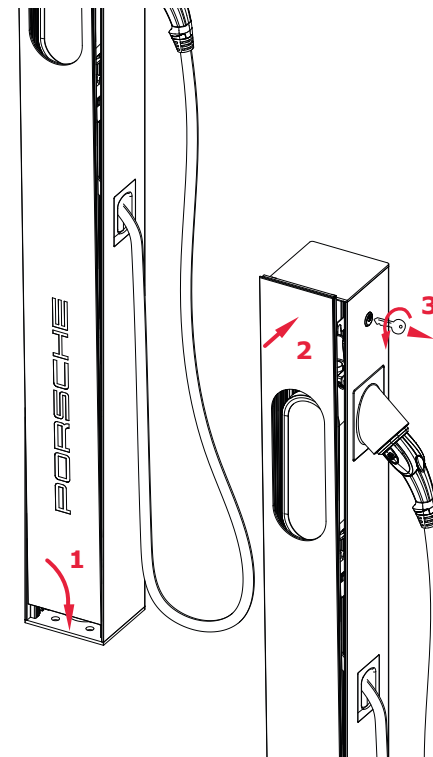


Fig. 10: Locking the charging pole

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### Spare parts

971.044.031 / Connector holder including adapter set

971.044.032 / Foundation fastening kit

971.044.033 / Installation instruction

971.044.034 / Spare key



#### Information

The lock cylinder number is required for reordering the key. It is stamped on the lock cylinder and/or on the key.

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### Cleaning

**Plexiglass:** Clean the plexiglass with a cloth using water and a liquid cleaning agent.

**Aluminium housing:** Clean the aluminium housing with warm water (~25 °C) and a soft cloth. For coarse dirt use only pH-neutral soap. In doing so, let the dirt soak for a short time and then remove it using the cloth.

#### NOTE

Never use highly abrasive or scratching cleaning materials, hard objects or steel wool.

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## Technical specifications

### Mechanical specifications

Charging pole dimensions (width x height x depth) 190 (263) x 1670 x 150 mm

Charging pole weight (without operating device/  
cables/accessories) approx. 20.1 kg

### Ambient conditions

Operating temperature -25 to +35 °C

Humidity 5 - 95 % not condensing

Altitude max. 4,000 m above sea level

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# Appendix: Foundation fastening kit Hilti

Page 9 of the European Technical Assessment  
ETA-05/0255 of 19 January 2016

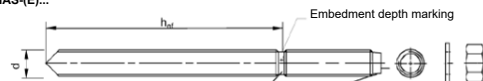


Table B1: Installation parameters HAS-(E)...

| HAS-(E)...                                                          |                        | M8   | M10   | M12    | M16    | M20    | M24    | M27    | M30    |
|---------------------------------------------------------------------|------------------------|------|-------|--------|--------|--------|--------|--------|--------|
| Foil capsule HVU M...                                               |                        | 8x80 | 10x90 | 12x110 | 16x125 | 20x170 | 24x210 | 27x240 | 30x270 |
| Diameter of element                                                 | d [mm]                 | 8    | 10    | 12     | 16     | 20     | 24     | 27     | 30     |
| Nominal diameter of drill bit                                       | d <sub>0</sub> [mm]    | 10   | 12    | 14     | 18     | 24     | 28     | 30     | 35     |
| Effective embedment depth and drill hole depth                      | $h_{ef}$<br>$h_0$ [mm] | 80   | 90    | 110    | 125    | 170    | 210    | 240    | 270    |
| Maximum diameter of the clearance hole in the fixture <sup>1)</sup> | d <sub>k</sub> [mm]    | 9    | 12    | 14     | 18     | 22     | 26     | 30     | 33     |
| Minimum thickness of concrete member                                | h <sub>min</sub> [mm]  | 110  | 120   | 140    | 170    | 220    | 270    | 300    | 340    |
| Maximum tightening torque                                           | T <sub>max</sub> [Nm]  | 10   | 20    | 40     | 80     | 150    | 200    | 270    | 300    |
| Minimum spacing                                                     | s <sub>min</sub> [mm]  | 40   | 45    | 55     | 65     | 90     | 120    | 130    | 135    |
| Minimum edge distance                                               | c <sub>min</sub> [mm]  | 40   | 45    | 55     | 65     | 90     | 120    | 130    | 135    |

<sup>1)</sup> For larger clearance holes see "TR 029 section 1.1".

HAS-(E)...



**Marking:**

identifying mark - H, embossing "1" HAS-(E)(F) M8 to M24, class 5.8  
 identifying mark - H, embossing "8" HAS-(E)(F) M8 to M30, class 8.8  
 identifying mark - H, embossing "=" HAS-(E)R  
 identifying mark - H, embossing "CR" HAS-(E)HCR

Hilti bonded anchor HVA, HVA R and HVA HCR

Intended use  
Installation instructions

Appendix B2

Z7757.10

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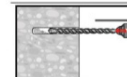
Page 13 of the European Technical Assessment  
ETA-05/0255 of 19 January 2016



## Installation instructions

### Hole drilling

#### Hammer drilling



Drill hole to the required embedment depth with a hammer drill set in rotation-hammer mode using an appropriately sized drill bit.

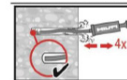


Drill hole to the required embedment depth using an appropriately sized Hilti hollow drill bit TE-CD or TE-YD with Hilti vacuum attachment. This drilling system removes the drill dust while drilling. After drilling is complete, proceed to checking the embedment depth in accordance with the installation instructions.

#### Drill hole cleaning

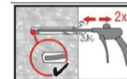
Just before setting the anchor, the drill hole must be free from dust and debris. Insufficient drill hole cleaning - low load capacity.

#### Manual cleaning (MC)



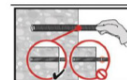
The Hilti manual blow-out pump can be used for blowing out the drill hole. Blow out the drill hole from the hole bottom at least 4 times using the Hilti blow-out pump until return air flow is dust-free.

#### Compressed air cleaning (CAC)



Blow out the drill hole 2 times starting from the drill hole bottom over the entire length with oil-free compressed air (min. 6 bar at 6 m³/h; using an extension if required) until the return air flow is dust-free.

#### Checking embedment depth



Check the embedment depth using a marked anchor rod. The drill hole depth must not exceed the embedment depth. If inserting the anchor rod into the drill hole up to the embedment mark is not possible, respectively deeper drilling is required.

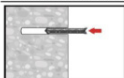
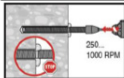
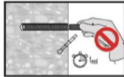
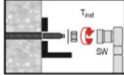
Hilti bonded anchor HVA, HVA R and HVA HCR

Intended use  
Installation instructions

Appendix B6

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| Setting the fastening element                                                     |                                                                                                                                                                                                                                                                                                                                |             |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
|  | Insert the mortar capsule with the tip first into the drill hole as far as possible.                                                                                                                                                                                                                                           |             |
|  | <p>Fasten the setting tool to the drill.</p> <p>Drive the anchor rod into the mortar capsule by means of the attached or bolted-on setting tool (see appendix B4/B5) using hammer-drill mode (250 - 1000 rpm) and applying medium pressure.</p> <p>Switch off the hammer drill when the marked embedment depth is reached.</p> |             |
|  | After the required cure time $t_{rel}$ (see table B3), the bolted-on setting tool can be removed.                                                                                                                                                                                                                              |             |
|  | <p>After the required cure time <math>t_{cure}</math> (see table B3) the torque <math>T_{max}</math> can be applied (see table B1 and B2).</p> <p>The anchor can be loaded.</p>                                                                                                                                                |             |
| Hilti bonded anchor HVA, HVA R and HVA HCR                                        |                                                                                                                                                                                                                                                                                                                                | Appendix B7 |
| Intended use<br>Installation instructions                                         |                                                                                                                                                                                                                                                                                                                                |             |