# Instructions for use





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Quick couplings RQ-03, RQ-04, RQ-14, RQ-24, RQ-34

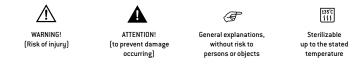


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# W&H Symbols



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Data Matrix Code for product identification, e.g. in hygienic maintenance process Customer satisfaction is the main priority under the W&H quality policy. This W&H product has been developed, manufactured and subjected to final inspection according to legal regulations, quality norms and industry standards.

For your safety and for the safety of your patients

Prior to initial use please read the Instructions for use.

These explain how to use your W&H product and guarantee a smooth and efficient operation.

#### Intended use

Connection piece for the transmission of media (air, water, electricity and light) between the supply hose of the dental unit and the air drives.

Misuse can damage the Roto Quick coupling and involves risk and danger to user and third parties.

# **( F** Production according to EU directive

0297 The Roto Quick coupling is a medical product according to the EU directive 93/42/EEC.

#### Skilled application

The Roto Quick coupling is intended only for skilled application in dentistry according to its purpose of use in compliance with the valid health and safety at work regulations and the valid accident prevention regulations as well as in compliance with these instructions for use. The Roto Quick coupling should be prepared for use and maintained by staff who have been trained in procedures for infection control, personal safety and patient safety. Improper use, (e.g. through poor hygienic maintenance), noncompliance with our instructions or the use of accessories and spare parts which are not approved by WBH, invalidates all claims under warranty and any other claims.

#### Service

In case of service or repair contact an authorized W&H service partner (see Page 33). Service and maintenance work must only be carried out by an authorized W&H service partner.

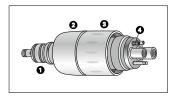
- > The operation of the Roto Quick coupling with light is permitted only on dental units which correspond to the standards IEC 60601-1 (EN 60601-1) and IEC 60601-1-2 (EN 60601-1-2) and satisfy the following requirements to be guaranteed by the system assembler:
  - > Double insulation for the highest expected supply voltage must be provided between the primary and secondary power circuits.
  - > Double insulation for the highest expected secondary voltage must be provided between the secondary voltage and earth (PE).
  - > The secondary voltage must be limited to a maximum of 3.3 V AC/DC.
  - > The leakage currents of the applied part must be kept.
  - > The secondary circuits must be protected against short circuits and overloads.

- $\,\,$  >  $\,$  The user is not allowed to touch the ring contacts and the patient at the same time.
- > Only use supply hoses which comply with EN ISO 9168.
- > Always ensure that the correct operating conditions exist and that the coolant is working properly.
- > As cooling air, only use air which has been processed by dental compressors and which is filtered, free of oil and cooled.
- > Before using the coupling, always check it for damage and loose parts.

## Hygienic maintenance prior to initial use

The Roto Quick coupling is in a clean condition and sealed in PE-film when delivered. Sterilize the Roto Quick coupling, > Sterilization Page 26

# 3. Product description



- 0-rings
- Retention sleeve
- Spray regulation ring (for RQ-14, RQ-34)
- Water filter with resuction stop



#### **Cooling water lines**

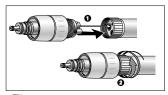
All Roto Quick couplings are equipped with a non-retraction valve which prevents contaminated cooling water from being sucked back into the turbine and the turbine hose.

The non-retraction valve— is integrated in the cooling water supply system.

In the event of blocked or incorrectly routed cooling water lines, please contact an authorized W&H service partner (see page 33).

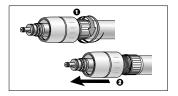


The cooling water lines must not be cleaned with sharp objects! (This could damage the sealing element and prevent the non-retraction valve from working.)



 Connect the Roto Quick coupling to the turbine hose.
Firmly tighten the union nut of the turbine hose by hand in a clockwise direction to ensure there are no leaks.

<sup>2</sup> This method of assembly provides a connection for drive air, chip air, water and return air (only for RM).



- Unscrew the union nut of the turbine hose by hand in an anticlockwise direction.
- Carefully remove the Roto Quick coupling from the turbine hose.

### Checking the Roto Quick coupling for leaks

- > Check for leaks between the Roto Quick coupling and turbine hose.
- > Block the water outlet on the tip of the Roto Quick coupling using a piece of rubber or leather.
- > Turn on the spray water. After being blocked for 10 seconds, no water must escape between the coupling and turbine hose or at the spray regulator.
- > If you observe problems (e.g. vibrations, unusual noise and/or leaks), stop the Roto Quick coupling immediately and contact an authorized W&H service partner (see Page 33).

- > Observe the instructions in the relevant instructions for use.
- Only connect air driven instruments with Roto Quick connections to the Roto Quick coupling. The user accepts sole responsibility if other air driven instruments are used. We accept no liability in such cases.

Never connect or disconnect the air driven instrument while the system is running!

- > Attach the air driven instrument onto the Roto Quick coupling until it audibly engages.
- > Pull axially along the Roto Quick coupling to check that the air driven instrument is securely attached.
- > Pull the retention sleeve of the Roto Quick coupling back.
- > To disconnect the air driven instrument, pull it off in axial direction.

#### Regulating the spray water

For Roto Quick couplings RQ-14 and RQ-34: Adjustment directly at the spray adjuster ring or at the adjustable valves of the unit. Roto Quick couplings RQ-03, RQ-04 and RQ-24 can only be adjusted at the unit.

Minimum spray flow: Line marking on the spray adjuster ring and point on the retention sleeve correspond with each other. Maximum spray flow: Turn the spray adjuster ring to the right or left.



The water flow can only be varied using this spray adjuster ring. It cannot be stopped completely.

## Test run

- > Connect the Roto Quick coupling to the turbine hose.
- > Attach the air driven instrument onto the Roto Quick coupling until it audibly engages.
- > Start the air driven instrument.
- > If you observe problems (e. g. vibrations, unusual noise and/or leaks), stop the Roto Quick coupling immediately and contact an authorized W&H service partner (see Page 33).

# Operation - Changing O-rings



### Immediately replace any damaged or leaking 0-rings. Never use sharp tools!

- Press the 0-ring firmly together with your thumb and index finger until it forms a loop.
- Pull off the 0-ring.
- Slide the new O-ring back on.

# 5. Hygienic maintenance

Follow your country-specific directives, standards and guidelines for cleaning, disinfection and sterilization.



- Wear protective clothing.
- > Remove the Roto Quick coupling from the turbine hose.
- > Clean and disinfect the Roto Quick coupling immediately after every treatment.
- > The Roto Quick coupling is sterilizable
- > Manual internal and external cleaning is to be carried out before each sterilization.



## Pre-disinfection

> If heavily soiled: Clean first with disinfectant cloths.

Only use disinfectants that have no protein-fixing effects.

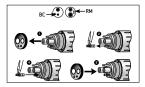


# Manual cleaning internal and external

- Rinse under demineralized water (< 38 °C / < 100 °F) with the aid of a brush.
- Remove any liquid residues

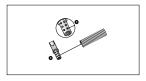
(absorbent cloth, blow dry with compressed air).

Do not place the Roto Quick coupling in liquid disinfectant or in an ultrasonic bath!



# Changing the water filter (BC/RM)

- Remove the seal.
- Pull out the water filter with tweezers.
- Clean the water filter (see page 24).
- Carefully insert the water filter.
- Slide on the seal.



# Clean the water filter (BC/RM)

• Use the nozzle cleaner carefully to remove dirt and deposits from the water filter outlets.

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The water filter can be cleaned in an ultrasonic bath.

- 7 >
- Repeat the entire hygiene and maintenance process.



# Manual disinfection

W&H recommends wiping down with disinfection.

- > Use only disinfectants which do not contain chlorine and which are certified by officially recognized institutes.
- > Note the manufacturer's specifications for the use of the disinfectants.

# Storage in the surgery

For storage, the Roto Quick coupling is normally firmly screwed between the air driven instrument (turbine, air motor, air scaler) and the turbine hose and stored on the turbine hose.

### Sterilization and storage



W&H recommends sterilization according to EN 13060, class B

- > Note the instructions of the unit manufacturer.
- > Clean and disinfect before sterilizing.
- > Wrap the Roto Quick coupling in sterile goods packing according to EN 868-5.
- > Make sure, that you only remove dry sterile goods.
- > Store sterile goods dust-free and dry.

#### Approved sterilization procedures

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Follow your country-specific directives, standards and guidelines.

> Steam sterilization class B (pre and post vacuum) with sterilizers in accordance with EN 13060. Sterilization holding time a minimum of 3 minutes at 134 °C (273.2 °F).

or

Steam sterilization class S with sterilizers in accordance with EN 13060.
The sterilizer manufacturer must give their express approval for the sterilization Roto Quick couplings.
Sterilization holding time a minimum of 3 minutes at 134 °C [273.2 \*F].

# 6. W&H Accessories

### Use only original W&H accessories and spare parts! Suppliers: W&H partners

- 10400300 Roto Quick coupling RQ-03 with resuction stop, with Borden 2/3-hole connection
- 10400400 Roto Quick coupling RQ-04 with resuction stop, for Ritter-Midwest 4-hole connection
- 10401400 Roto Quick coupling RQ-14 with resuction stop, spray regulation, for Ritter-Midwest 4-hole connection
- 10402400 Roto Quick coupling RQ-24 with resuction stop, standard 4-hole connection and 2 electrical contacts
- 10403400 Roto Quick coupling RQ-34 with resuction stop, spray regulation, for standard 4-hole connection and 2 electrical contacts
- 02060100 0-ring, large
- 02060200 0-ring, small

# 7. Technical data

Hose type:

Recommended voltage range:

 $\begin{array}{l} \text{ISO 9168 type 1} \\ \text{ISO 9168 type 3} \\ \text{3.2 } \pm 0.1 \, \text{V} \, \text{AC/DC} \end{array}$ 

Physical characteristics Temperature for storage: Air humidity for storage: Ambient temperature during operation: Air humidity during operation:

-40 °C to +70 °C (-40 °F to +158 °F) 8 % to 80 % (relative), non-condensing +10 °C to +35 °C (+50 °F to +86 °F) 15 % to 80 % (relative), non-condensing

#### Recycling

W&H considers that it has a special duty towards the environment. The Roto Quick coupling equipment along with its packaging has been designed to be as environmentally friendly as possible.



#### Disposal of the Roto Quick coupling

Follow your country-specific laws, directives, standards and guidelines for the disposal of used electrical devices.

Ensure that the parts are not contaminated on disposal.

#### Disposal of the packaging material

All packaging materials have been selected according to environmentally compatible and disposal aspects and can be recycled. Please send old packaging materials to the relevant collection and reprocessing system. In this way, you will contribute to the recycling of raw materials and the avoidance of waste.

# Letter of indemnity

This W&H product has been manufactured with great care by highly qualified specialists. A wide variety of tests and controls guarantee faultless operation. Please note that claims under warranty can only be validated when all the directions in the instructions for use have been followed.

As manufacturer, W&H is liable for material or manufacturing defects within a warranty period of 24 months from the date of purchase.

We accept no responsibility for damage caused by incorrect handling or by repairs carried out by third parties not authorized to do so by W&H!

Claims under warranty – accompanied by proof of purchase – must be sent to the vendor or to an authorized W&H service partner. The provision of service under warranty extends neither the warranty period nor any other guarantee period.

# **24** months warranty

# Authorized W&H service partner

Find your nearest W&H service partner at http://wh.com Simply go to the menu option »Service« for full details. Alternatively please contact:

W&H (UK) Limited, Unit 6, Stroud Wood Business Centre, Park Street, St Albans, AL2 2NJ Hertfordshire t + 44 1727874990, f + 44 1727872254, E-Mail: technical.uk@wh.com

W&H IMPEX INC., 6490 Hawthorne Drive, Windsor, Ontario, N8T 1J9, Canada t + 1 519 9446739, f + 1 519 9746121, E-Mail: service.ca@wh.com

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W&H Austria GmbH, Ignaz-Glaser-Straße 53, 5111 Bürmoos, Austria t + 43 6274 6236-239, f + 43 6274 6236-890, E-Mail: office.at@wh.com

A-DEC Australia, Office and showroom, Unit 8, 5-9 Ricketty Street, 2020 Mascot NWS t + 61 283324000, f + 61 283324099, E-Mail: a-dec@a-dec.com.au

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