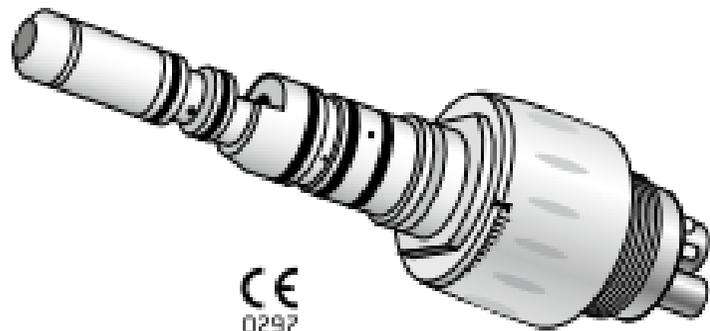


Instructions for use



PEOPLE HAVE PRIORITY



Coupling
RM-34 LED

Contents

W&H Symbols	4
1. Introduction	5 – 7
2. Before use – Safety notes	8 – 9
3. Product description	10 – 11
Coupling (10), Cooling water lines (11)	
4. Operation	12 – 19
Connecting the coupling (12), Disconnecting the coupling (13), Checking for leaks (14), Changing air-driven instruments (15 – 16), Regulating the spray water (17), Test run (18), Changing O-rings (19)	

5. Hygienic maintenance	20 – 25
Pre-disinfection (21), Manual cleaning internal and external (22), Changing the water filter (23), Clean the water filter (24), Manual disinfection (25)	
6. W&H Accessories	26
7. Technical data	27
8. Recycling and disposal	28 – 29
Letter of indemnity	30
Authorized W&H service partner	31

W&H Symbols



WARNING!
(Risk of injury)



ATTENTION!
(to prevent damage
occurring)



General explanations,
without risk to
persons or objects



Data Matrix Code
for product identification
e.g. in hygienic
maintenance process



UL Component Recognition Mark indicates
compliance with Canadian and U.S. requirements

1. Introduction

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 coupling and involves risk and danger to user and third parties.

CE Production according to EU directive

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

Skilled application

The 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 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), non-compliance with our instructions or the use of accessories and spare parts which are not approved by W&H, 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 31).

Service and maintenance work must only be carried out by an authorized W&H service partner.

2. Before use – Safety notes



- > The operation of the 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 5.5 V AC/DC.
 - > The leakage currents of the applied part must be kept.
 - > The secondary circuits must be protected against short circuits and overloads.

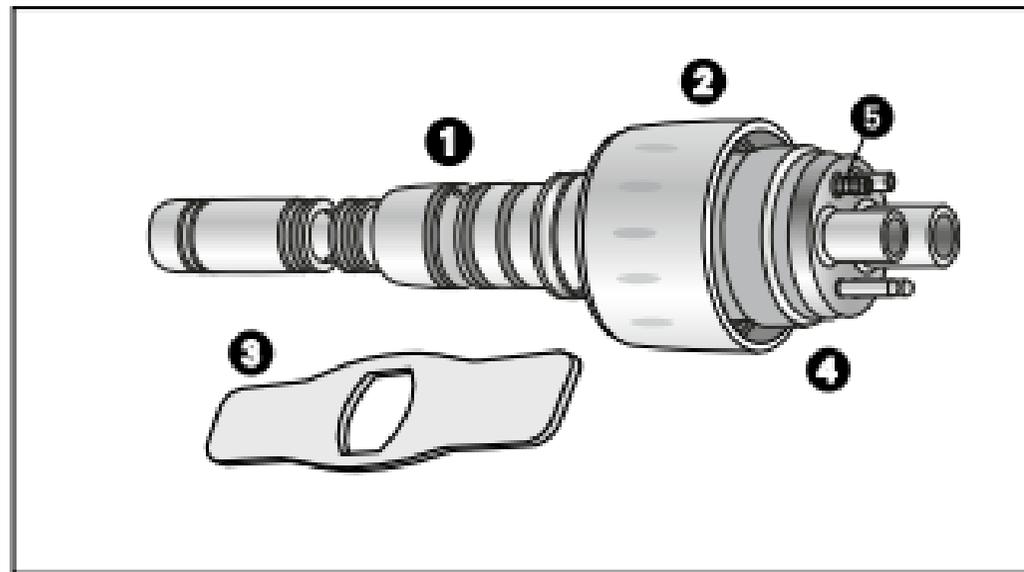


- > Only use supply hoses which comply with EN ISO 9168.
- > Always ensure that the correct operating conditions exist and that the coolant is working properly.
- > As cooling air, only use air which has been processed by dental compressors and which is filtered, free of oil and cooled.
- > Before using the coupling, always check it for damage and loose parts.
- > Do not use the coupling as a light probe.
- > Avoid direct eye contact with the light source.

Hygienic maintenance prior to initial use

The coupling is in a clean condition and sealed in PE-film when delivered.

3. Product description



- ❶ O-rings
- ❷ Spray regulation ring
- ❸ Key
- ❹ RM seal
- ❺ Water filter with resuction stop



Cooling water lines

The coupling is 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.

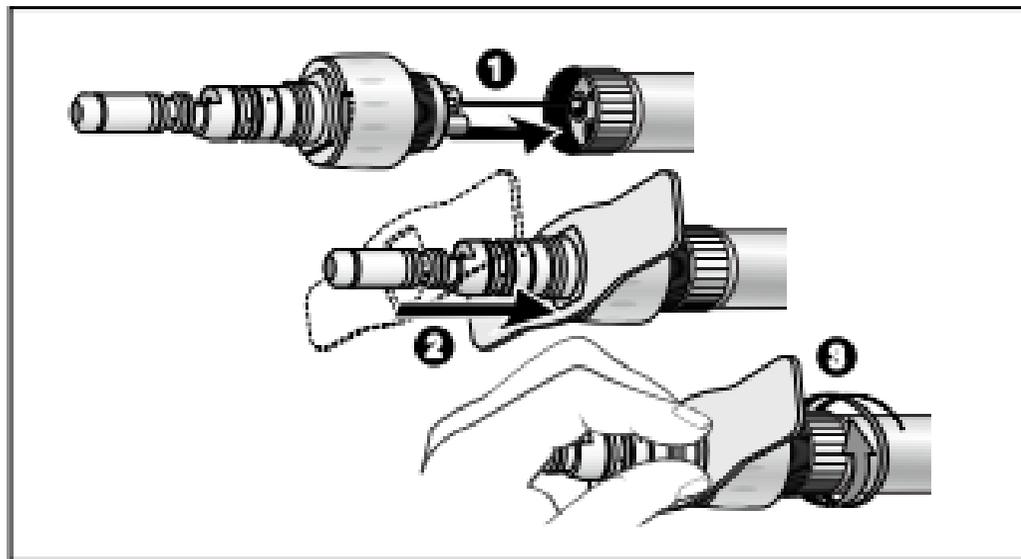
In the event of blocked or incorrectly routed cooling water lines, please contact an authorized W&H service partner (see page 31).



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.)

4. Operation – Connecting the coupling

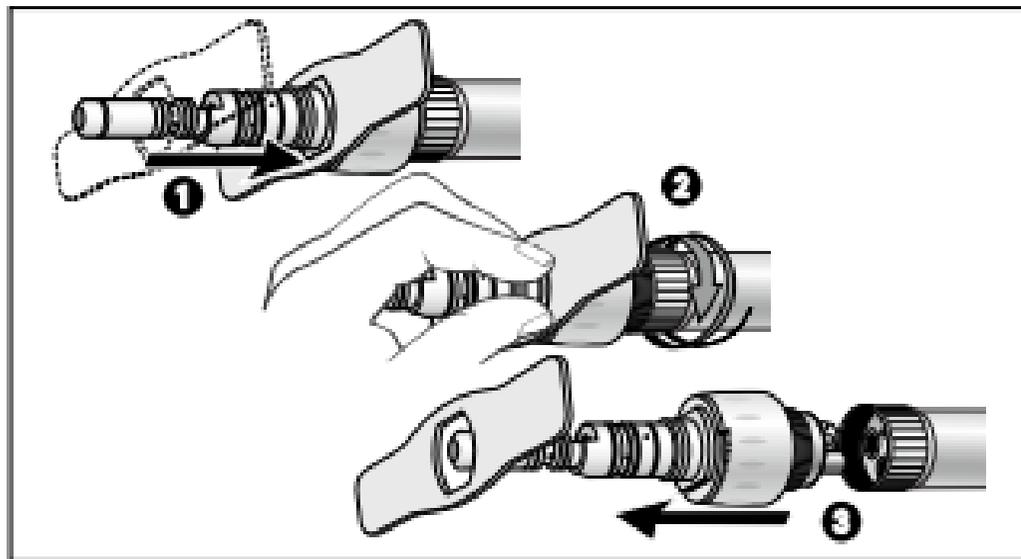


- ➊ Connect the coupling to the turbine hose.
- ➋ Slide the key as far as it will go onto the coupling.
- ➌ Hold the key and coupling in a firm grip.
Screw the union nut onto the coupling in order to ensure that it is leak-tight.



This method of assembly provides a connection for drive air, chip air, water, return air and electricity.

Operation – Disconnecting the coupling



- ➊ Slide the key as far as it will go onto the coupling.
- ➋ Hold the key and coupling in a firm grip.
Unscrew the union nut from the coupling.
- ➌ Pull off the coupling from the turbine hose.

Checking the coupling for leaks

- > Check for leaks between the coupling and turbine hose.
- > Block the water outlet opening with 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, overheating, coolant supply failure or leakage) or discoloration of the LED, **stop the coupling immediately** and contact an authorized W&H service partner (see Page 31).

Operation – Changing air driven instruments

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

* Multiflex® is a registered trade mark of Kaltenbach & Voigt GmbH, Deutschland

Operation – Changing air driven instruments

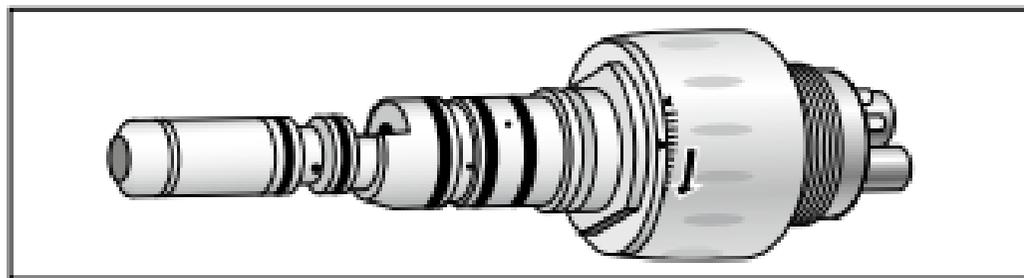


Never connect or disconnect the air driven instrument while the system is running!

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

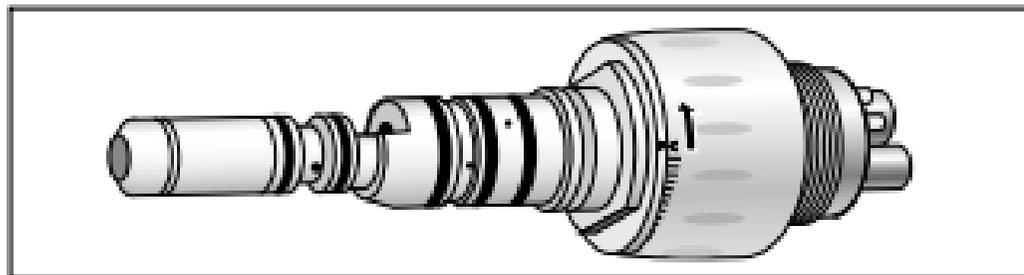
Regulating the spray water

The water quantity is regulated directly via the spray control ring of the coupling or via the adjustable valves on the unit.



To increase the quantity of water

> Turn the spray control ring anti-clockwise.



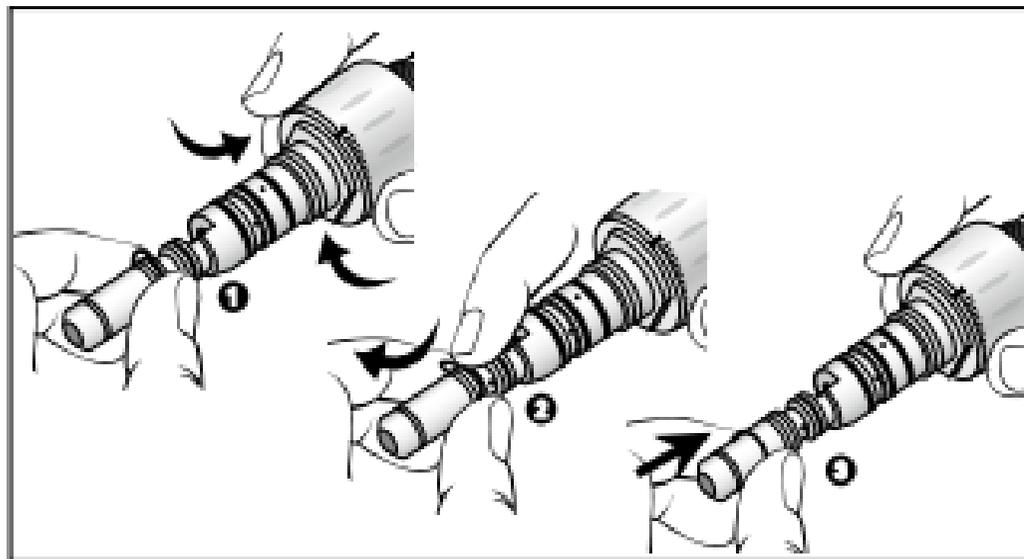
To reduce the quantity of water

> Turn the spray control ring clockwise.

Test run

- > Connect the coupling to the turbine hose.
- > Attach the air driven instrument onto the coupling until it audibly engages.
- > Start the air driven instrument.
- > If you observe problems (e.g. vibrations, unusual noise, overheating, coolant supply failure or leakage) or discoloration of the LED, **stop the coupling immediately** and contact an authorized W&H service partner (see Page 31).

Operation – Changing O-rings



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

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

5. Hygienic maintenance



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



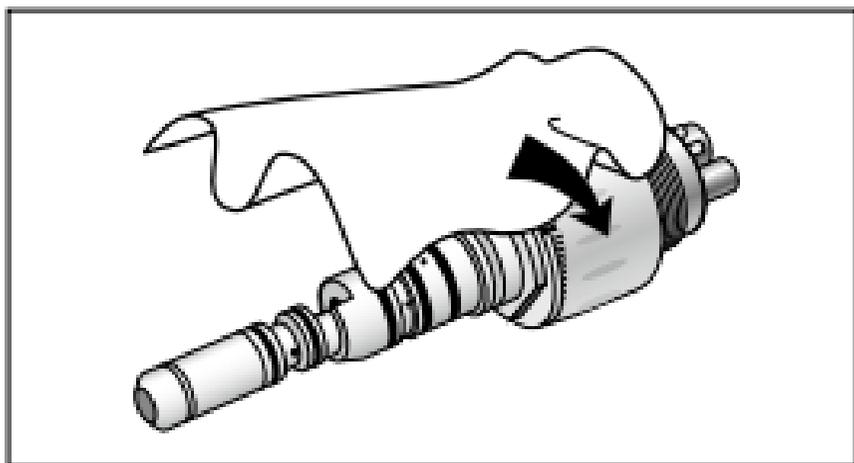
> Wear protective clothing.

> Remove the coupling from the turbine hose.

> Clean and disinfect the coupling **immediately after every treatment.**



> The coupling is **not approved for sterilisation.**

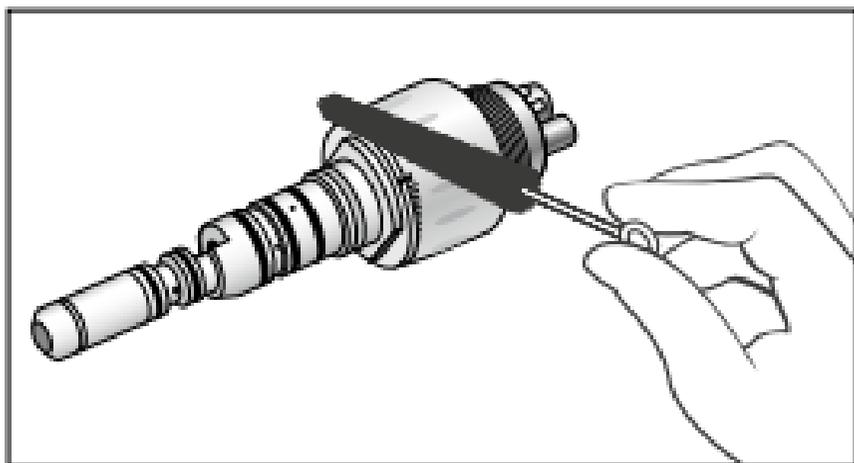


Pre-disinfection

> If heavily soiled: Clean first with disinfectant cloths.



Only use disinfectants that have no protein-fixing effects.

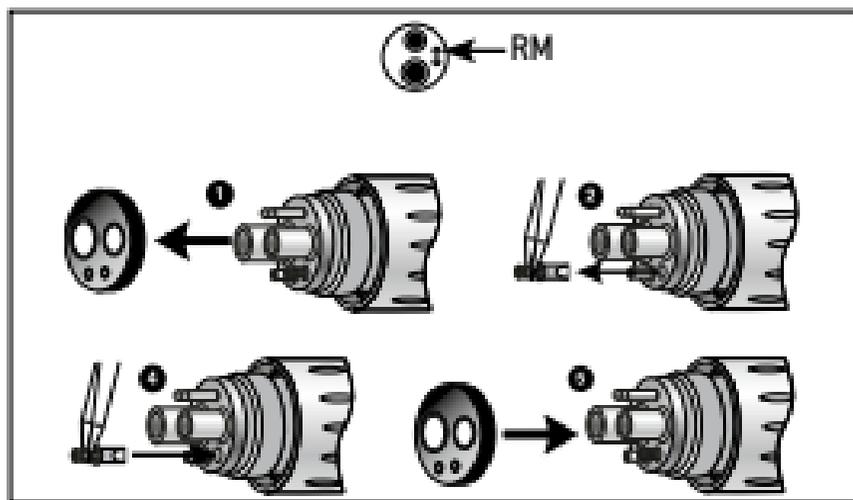


Manual cleaning internal and external

- ➊ Rinse under demineralized water (< 38 °C / < 100 °F) with the aid of a brush.
- ➋ Remove any liquid residues [absorbent cloth, blow dry with compressed air].

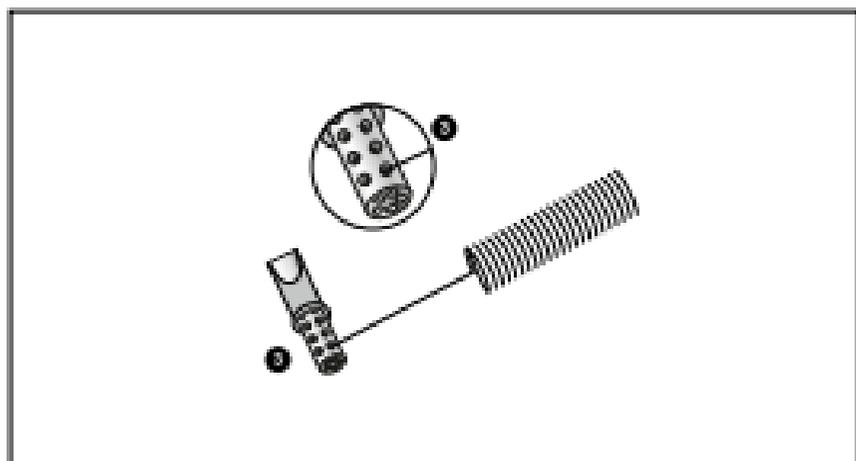


Do not place the coupling in liquid disinfectant or in an ultrasonic bath!



Changing the water filter (RM)

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



Clean the water filter (RM)

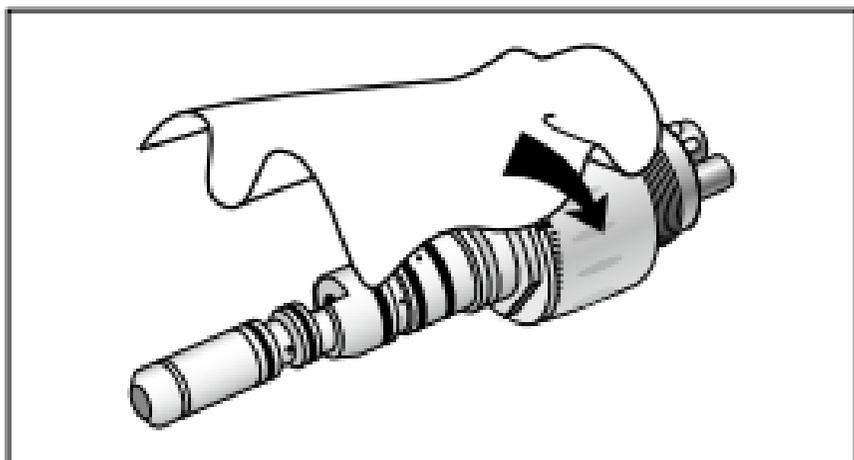
- ③ Use the nozzle cleaner carefully to remove dirt and deposits from the water filter outlets.



The water filter can be cleaned in an ultrasonic bath.



> 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 coupling is normally firmly screwed between the air driven instrument and the turbine hose and stored on the turbine hose.

6. W&H Accessories



Use only original W&H accessories and spare parts!

Suppliers: W&H partners

10403410 Coupling RM-34 LED with a standard 4-hole connection, 2 electrical contacts,
adjustable spray, non-retraction valve

02207300 RM seal

02675810 O-ring, large

04198810 O-ring, small

06580700 Key

7. Technical data

Hose type:	ISO 9168 type 3
Voltage range:	3.0 – 5.0 V DC 3.0 – 4.0 V AC
Nominal voltage:	3.2 ± 0.1 V AC/DC
Current consumption:	< 0.3 A (at nominal voltage)
Physical characteristics	
Temperature for storage:	-40 °C to +70 °C (-40 °F to +158 °F)
Air humidity for storage:	8 % to 80 % (relative), non-condensing
Ambient temperature during operation:	+10 °C to +35 °C (+50 °F to +86 °F)
Air humidity during operation:	15 % to 80 % (relative), non-condensing

8. Recycling and disposal

Recycling

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



Disposal of the 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 the 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

W&H IMPEX INC., 14300 Henn Road, Dearborn, MI 48126, USA
t + 1 519 9446739, f + 1 519 9746121, E-Mail: service.us@wh.com

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

Manufacturer

W&H Dentalwerk Bürmoos GmbH

Ignaz-Glaser-Straße 53, 5111 Bürmoos, Austria

t + 43 6274 6236-0, f + 43 6274 6236-55

office@wh.com wh.com

Form-Nr. 50726 AEN

Rev. 003 / 18.03.2015

Subject to alterations