Instructions

OPTIFLOW Single Sheath
(Operating Hysteroscope)

8974351
Important general instructions for use

Ensure that this product is used only as intended and described in this instruction manual, by adequately trained and qualified personnel, and that maintenance and repair is only carried out by authorized specialized technicians.

Use this product only with the combinations and with the accessories and spare parts listed in this instruction manual. Use other combinations, accessories and replacement parts only if they are expressly intended for this use and if the performance and safety requirements are met.

Reprocess the products before every application and before returning them for repair as required by the instruction manual in order to protect the patient, user or third parties.

Subject to technical changes!
Due to continuous development of our products, illustrations and technical data may deviate slightly from the data in this manual.

CAUTION:
Federal law restricts this device to sale by or on the order of a physician.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Level of danger</th>
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<tbody>
<tr>
<td>⚠️</td>
<td>WARNING! Failure to observe can result in death or serious injury.</td>
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<tr>
<td>⚠️</td>
<td>CAUTION! Failure to observe can result in slight injury or damage to the product.</td>
</tr>
<tr>
<td>⚠️</td>
<td>IMPORTANT! Failure to observe can result in damage to the product or surrounding.</td>
</tr>
<tr>
<td>⚠️</td>
<td>NOTE! Tips for optimum use and other useful information.</td>
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**USA**

RICHARD WOLF Medical Instruments Corp.
353 Corporate Woods Parkway
Vernon Hills, Illinois 60061
Telephone: +1 847-913-1113
Telefax: +1 847-913-1488
sales&marketing@richardwolfusa.com
www.richardwolfusa.com

**GERMANY**

RICHARD WOLF GmbH
75436 Knittlingen
Pforzheimerstr. 32
Telephone: +49 70 43 35-0
Telefax: +49 70 43 35-300
MANUFACTURER
info@richard-wolf.com
www.richard-wolf.com

**UK**

RICHARD WOLF UK Ltd.
Waterside Way
Wimbledon
SW17 0HB
Telephone: + 44 20 89 44 74 47
Telefax: + 44 20 89 44 1311
admin@richardwolf.uk.com
www.richardwolf.uk.com

**BELGIUM / NETHERLANDS**

N.V. Endoscopie
RICHARD WOLF Belgium S.A.
Industriezone Drongen
Landegemstraat 6
9031 Gant Drongen
Telephone: +32 92 80 81 00
Telefax: +32 92 82 92 16
endoscopy@richard-wolf.be
www.richard-wolf.be

**FRANCE**

RICHARD WOLF France S.A.R.L.
Rue Daniel Berger
Z.A.C. La Neuvillette
51100 Reims
Telephone: +33 3 26 87 02 89
Telefax: +33 3 26 87 60 33
endoscopes@richardwolf.fr

**AUSTRALIA**

RICHARD WOLF Austria Ges.m.b.H.
Wihlhelmenstraße 93 a
1160 Vienna
Telephone: +43 14 05 51 51
Telefax: +43 14 05 51 45
info@richard-wolf.at
www.richard-wolf.at

**INDIA**

RICHARD WOLF India Private Ltd.
JMD Pacific Square
No. 211 A, Second Floor
Behind 32nd Milestone
Gurgaon - 122 001
National Capitol Region
Telephone: + 91 12 44 31 57 00
Telefax: + 91 12 44 31 57 05
india@richard-wolf.com
www.richard-wolf.com
Contents

1 Technical description ................................................................. 1
2 Intended use ............................................................................. 1
3 Indications and field of use ........................................................ 1
4 Contraindications ..................................................................... 1
5 Combinations ......................................................................... 2
6 Illustration .............................................................................. 3
   6.1 Legend and identification ................................................... 3
7 Use .......................................................................................... 5
   7.1 Preparation ............................................................................ 5
   7.1.1 Inserting PANOVIEW endoscope (1) into OPTIFLOW single sheath (2) ........ 5
   7.1.2 Assembling ergonomic handle (3) ......................................... 6
   7.1.3 Connecting PANOVIEW endoscope (1) to system components ............... 6
   7.2 Continuous irrigation mode .................................................. 7
   7.3 CO₂ mode ............................................................................ 8
   7.4 Additional notes and instructions for use ................................ 9
   7.4.1 Light ............................................................................... 9
   7.4.2 Current .......................................................................... 9
   7.4.3 Image quality ................................................................. 9
   7.4.4 Irrigation fluid ............................................................... 9
   7.5 HF application ..................................................................... 10
   7.6 Laser application .............................................................. 10
   7.7 Inserting auxiliary instruments ............................................ 11
8 Checks ...................................................................................... 12
   8.1 Visual check ....................................................................... 12
   8.2 Functional check .............................................................. 12
   8.2.1 Stopcock plug (2.9.1) ....................................................... 13
   8.2.2 PANOVIEW endoscope (1) ................................................. 13
9 Reprocessing and maintenance .................................................. 14
   9.1 Disassembly before cleaning .............................................. 14
   9.1.1 Stopcock plug (2.9.1) ....................................................... 14
   9.2 Manual reprocessing ...................................................... 14
   9.3 Machine reprocessing .................................................... 15
   9.4 Checks ............................................................................. 15
   9.5 Assembly before sterilization ........................................... 15
   9.5.1 Stopcock plug (2.9.1) ....................................................... 15
   9.6 Sterilization ...................................................................... 15
   9.6.1 Steam sterilization .......................................................... 15
   9.6.2 Gas sterilization ........................................................... 15
   9.6.3 High-Level-Disinfection ............................................... 15
10 Technical data and order data ................................................... 16
11 Spare parts and accessories ...................................................... 16
12 Operating, storage, transport and shipping conditions ............... 17
   12.1 Disposal of product, packaging material and accessories .................. 17
13 Literature ............................................................................... 18
14 Warranty and Customer Service ............................................... 20
1 Technical description

The Operating Hysteroscope consists of the following components:

- PANOVIEVE endoscope
- OPTIFLOW single sheath
- Ergonomic handle
- Auxiliary instruments

2 Intended use

Operating Hysteroscopes are used for visualizing and inflating the cervical channel, the cavum uteri and the tube ostia (using liquid or CO2 gas). They are applied via the natural passage. Furthermore, this instrument can also be used for diagnosing the lower urinary tract.

- PANOVIEVE endoscope
  - for visualizing the inside of the patient via the natural passage.
- OPTIFLOW single sheath
  - houses and automatically locks the PANOVIEVE endoscope.
  - for supplying the dilation medium via the supply stopcock.
  - for inserting auxiliary instruments into the working channel via the insertion stopcock.
  - for pressure regulation and draining of the dilation medium via the drain stopcock.
- Ergonomic handle
  - housed and fixes the OPTIFLOW single sheath.
  - for fatigue-free work.

3 Indications and field of use

For examination, diagnosis and therapy in gynecology (hysteroscopy) or Cystoscopy in conjunction with endoscopic accessories.

The following examinations represent indications:

- Gynecology (hysteroscopy)
  - Abnormal bleedings
  - Infertility
  - Complaints in the lower abdomen
  - Myomas, polyps, ablation of the endometrium
  - Tube sterilization
- Cystoscopy
  - Urine incontinence
  - Bladder check
    - e. g. during hysterectomy or TVT

**NOTE**

We recommend reading relevant literature regarding the planned use.

*see also section 13 “Literature”*

4 Contraindications

- Acute inflammation of the lower abdomen
- Infection of the vagina
- Pregnancy

Contraindications directly related to the product are presently unknown. On the basis of the patient’s general condition, the physician/surgeon in charge must decide whether the planned use is possible or not. For further information see the latest medical literature.
5 Combinations

The Operating Hysteroscope is used in conjunction with:

- Light sources and fiber light cables
- Cameras and objective lenses
- Hystero pumps or hystero CO₂ pneumatic insufflators
- Irrigators
- HF surgical devices
- Laser
- Endoscopic accessories, e.g.
  - Forceps, scissor, electrodes, laser fibers

⚠️ CAUTION!

Be careful if products are incorrectly combined!

Injury may result to the patient, user or others, and damage may result to the product.

Different products should only be used in combination if their intended uses and relevant technical data (working length, diameter, peak voltage, etc.) are the same.

Follow the instruction manuals of the products used in conjunction with this product.

Fig. 1

- The cold-light connector (1.1) can be unscrewed and replaced by suitable adaptors to connect fiber light cables of other manufacturers.

For order data please refer to the latest catalog sheet.
6.1 Legend and identification

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<td>PANOVIEVE endoscope</td>
<td>2.9</td>
<td>Stopcock assembly</td>
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<tr>
<td>1.1</td>
<td>Cold-light connector</td>
<td>2.9.1</td>
<td>Stopcock plug</td>
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<td>1.2</td>
<td>Fiber bundle diameter</td>
<td>2.9.2</td>
<td>Stopcock housing</td>
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<tr>
<td>2</td>
<td>OPTIFLOW single sheath</td>
<td>2.9.3</td>
<td>Luer fitting</td>
</tr>
<tr>
<td>2.1</td>
<td>Suction holes</td>
<td>2.9.4</td>
<td>Passage identification on</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>- stopcock housing</td>
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<tr>
<td>2.2</td>
<td>Sheath tube</td>
<td>3</td>
<td>Ergonomic handle</td>
</tr>
<tr>
<td>2.3</td>
<td>Supply stopcock</td>
<td>3.1</td>
<td>Handle</td>
</tr>
<tr>
<td>2.4</td>
<td>Slide</td>
<td>3.2</td>
<td>Locking lever</td>
</tr>
<tr>
<td>2.5</td>
<td>Nose</td>
<td>3.3</td>
<td>Locking ring</td>
</tr>
<tr>
<td>2.6</td>
<td>Insertion stopcock (instrument port)</td>
<td>4</td>
<td>Rubber cap</td>
</tr>
<tr>
<td>2.7</td>
<td>Drain stopcock</td>
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<td>2.8</td>
<td>Size of working channel in Fr.</td>
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Fig. 2
<table>
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<td>!</td>
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<td>Lot identification number</td>
</tr>
<tr>
<td>SN</td>
<td>Serial number</td>
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<td>Identification in conformity with Medical Devices Directive 93/42/EEC only valid if the product and/or packaging are marked with this symbol. Products of category IIa and above, as well as sterile products or products with measuring function in category I, are additionally marked with the code number of the notified body (0124).</td>
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7 Use

⚠️ CAUTION!
The products have only limited strength!
Exerting excessive force will cause damage, impair the function and therefore endanger the patient.
Immediately before and after each use, check the products for damage, loose parts and completeness.
Ensure that no missing instrument parts remain in the patient.
Do not use products which are damaged, incomplete or have loose parts.

7.1 Preparation

- Check assembly: section 9.5
- Keep measuring system ready: section 7.2
- Carry out a check: sections 8 and 8.1
- Tighten the cold-light connector (1.1).

7.1.1 Inserting PANOVIEW endoscope (1) into OPTIFLOW single sheath (2)

**Inserting**

Fig. 3
- Insert the PANOVIEW endoscope (1) axially into the OPTIFLOW single sheath (2), until the tab (2.4) clicks into place.
- The groove (a) and the nose (2.5) must be aligned.

**Remove**

Fig. 4
- Push down the tab (2.4), keep depressed, and remove PANOVIEW endoscope (1).
7.1.2 Assembling ergonomic handle (3)

![Fig. 5]

**Fig. 5**

**Locking:**
- The locking lever (3.2) is in position “I”.
- Insert the OPTIFLOW single sheath (2) into the ergonomic handle (3).
- Pin (b) engages in groove (c).
- Turn the locking lever (3.2) to position “II”.
- Both components are locked together.

**Unlocking:**
- The locking lever (3.2) is in position “II”.
- Turn the locking lever (3.2) to position “I”.
- The locking mechanism is unlocked.
- Remove the ergonomic handle (3).

7.1.3 Connecting PANOVIEW endoscope (1) to system components

![Fig. 6]

**Fig. 6**

- Connect the fiber light cable via the cold-light connector to a suitable light source.

**NOTE!**
To obtain optimum light transmission, the diameters of the fiber core of the endoscope and of the fiber light cable must be the same.

Possible causes when using a fiber light cable that:
- is too large:
  - the coupling point with the endoscope may become excessively hot
- is too small:
  - the light output is reduced

For a suitable fiber bundle diameter (1.2) please check the product number of the fiber light cable.
- the code number on the cold-light connector (1.1) must correspond with the two digits to the right of the decimal point of the product number

**Exception:** The fiber light cable 8061.933 has a fiber bundle diameter of 3.5 mm.

**CAUTION!**
Intense heat due to high light energy!
In the case of unfavorable combinations, using the highly temperature-resistant fiber light cable 8063.353 can cause a temperature increase at the coupling point between the fiber light cable and the endoscope.
The user may get burns and the endoscope can become damaged.
Reduce the light output, if necessary use fiber light cable with product no. 8061.xxx / 8062.xxx.

- Perform a functional check: section 8.2
7.2 Continuous irrigation mode

If liquid such as isotonic saline or Purisole® is used as dilation medium, hysteroscopy is performed under continuous irrigation with the help of the irrigator or hystero pump.

In CO₂ hysteroscopy, CO₂ gas is applied as a means of dilation through a suitable hystero CO₂ Pneu automatic insufflator.

If necessary, the cervical channel is dilated with the help of a Hegar dilator corresponding to the diameter of the hysteroscope sheath.

Fig. 7

- The dilation medium is supplied via the supply stopcock (2.3), and drained via drain stopcock (2.7).
- Auxiliary instruments can be inserted via instrument port stopcock (2.6).

Fig. 7

- Perform a functional check: section 8.2

**NOTE!**

Open the supply stopcock (2.3) when inserting the hysteroscope. The liquid supplied distally will dilate the passage facilitating insertion of the hysteroscope.

The supply tube must be free of air bubbles.

The drain stopcock (2.7) serves to control the pressure

**OPEN:** High flow → low pressure

**CLOSE:** No flow → high pressure.

The pressure is controlled by means of the irrigation height (1.40 m - 1.65 m above height of patient) or by setting the corresponding value on the hystero pump.

**WARNING!**

Danger of a fluid overload syndrome when using a liquid dilation medium.

Record the fluid balance carefully.

Discontinue the operation at a fluid difference of 1 liter!
7.3 CO₂ mode

◊ The dilation medium is supplied via supply stopcock (2.3), the insertion stopcock (instrument port) (2.6) and the drain stopcock (2.7) are closed.

Fig. 8

◊ Perform a functional check: section 8.2


NOTE !
Open the supply stopcock (2.3) supply when inserting the hysteroscope. The CO₂ gas supplied from the distal end of the hysteroscope will dilate the passage facilitating insertion of the hysteroscope.
The pressure is controlled by the Hystero CO₂ Pneu automatic insufflator.

WARNING !
Air in the supply system !
Danger of embolism !
Before use, purge the supply system for one minute at a flow of 100ml / min.
7.4 Additional notes and instructions for use

7.4.1 Light

**IMPORTANT!**
Use only products with type BF or CF applied parts in conjunction with the Operating Hysteroscope.

**WARNING!**
Heat may be generated due to high light energy!
Danger of unintentional tissue damage
- due to insufficient distance between the light exit area and tissue
- due to soiling/contamination in the light exit area
- if high-performance light source are used.
Do not touch the light exit area and avoid direct contact with the tissue.
Remove any soiling/contamination.

**WARNING!**
Fire hazard!
Do not place the light exit area against heat-sensitive flammable surfaces (dark drapes etc.) as this can lead to excessively high temperatures or even ignition.
Lay down the Operating Hysteroscope in a safe place.
Switch off the light source if the Operating Hysteroscope will not be used for a period of time.

**CAUTION!**
Danger of burns!
As a result of the high level of light energy at the cold-light connector, the connector is extremely hot when it is disconnected from the light source.
Burns may result from unintentional contact with the connector.
Do not touch the cold-light connector before it has cooled down.

7.4.2 Current

**WARNING!**
Danger of electrical shock!
Patient leakage currents can add up if endoscopes are combined with electrically powered endoscopic accessories.
Make sure that the combinations do not exceed the permissible patient leakage currents.

7.4.3 Image quality

**CAUTION!**
Increased danger potential if image is blurred!
Patient may be injured.
Stop operation for safety reasons if image is blurred.
Check image quality of endoscope before use (section 8.2.2).

7.4.4 Irrigation fluid

**CAUTION!**
Irrigation fluids can be electrically conductive!
The user must choose a low-conductivity irrigation fluid suitable for the application.
Do not use NaCl (saline) for HF applications.
7.5 HF application

Make sure you observe the “Instructions and notes on HF applications”, order no.: GA-S 002 as well as the HF device manufacturer’s instructions.

⚠️ WARNING !
Danger of injury if HF instrument is not visible through the scope !
Inadvertent tissue damage as well as damage to the distal end of the Operating Hysteroscope and the instrument parts is possible.
HF instruments should therefore be used only within the scope of their specifications as to electric strength, mode of operation.
Activate HF instruments only if the live high-frequency part is fully visible through the Operating Hysteroscope and contacts with the area to be treated.

⚠️ WARNING !
HF arcing !
Danger of injury due to incorrect HF application and insufficient distance between live HF instruments and other conductive parts.
Live high-frequency parts of HF instruments must be kept at a safe distance of at least 10mm from the distal end of the OPTIFLOW single sheath (2) (Fig. 9) when they are activated.

⚠️ CAUTION !
Take care when selecting the HF output power. Do not use excessive HF output power !
The patient may be injured and the product may become damaged.
The power must be set in accordance with the experience and / or training of the surgeon with regard to the respective indication.

7.6 Laser application

When using lasers, make sure you observe the laser device manufacturer’s instructions as well as the general instructions on the use of lasers.
Wear the required personal protection gear.

⚠️ CAUTION !
Do not work outside the scope’s field of view !
Inadvertent tissue damage as well as damage to the distal end of the Operating Hysteroscope and instrument parts can occur.
Activate the laser only after
♦ the tip of the laser fiber has become fully visible through the Operating Hysteroscope and
♦ the area to be treated makes contact by means of the pilot beam.

⚠️ CAUTION !
High temperatures due to highly coherent laser beam !
The heat generated by the laser beam reduces the strength of instrument parts.
Do not direct the laser beam at instrument parts, in particular not at plastic parts.
Keep a safe distance.

⚠️ CAUTION !
Danger of eye injury when using lasers without filter attachment !
Use a suitable filter attachment on the endoscope eyepiece.
7.7 Inserting auxiliary instruments

\[\text{CAUTION !} \]
Danger of injury and damage to the Operating Hysteroscope if forceps and scissors are inserted or retracted with open jaw sections!

Inadvertent tissue damage, damage to the distal end of the Operating Hysteroscopes as well as loss of particles on the jaw sections are possible.

Insert and retract/withdraw forceps and scissors only with closed jaw sections and under visual control.

Fig. 10
- Place the rubber cap (4) onto the insertion stopcock (instrument port) (2.6).
- Open insertion stopcock (instrument port) (2.6).
- Insert the auxiliary instrument (x).

Fig. 10
8 Checks

CAUTION!
Be careful if products are damaged or incomplete!
Injury may result to the patient, user or others.
Run through the checks before and after each use.
Do not use products which are damaged or incomplete or have loose parts.
Return damaged products together with loose parts for repair.
Do not attempt to do any repairs yourself.

8.1 Visual check

- Check the instruments, in particular their distal areas, and accessories for:
  - damage
  - sharp edges
  - loose or missing parts
  - rough surfaces.
- Any lettering, labeling or identification necessary for the safe intended use must be legible.
- Missing or illegible lettering, labeling or identification which may lead to wrong handling and reprocessing must be restored.

Fig. 11
- Check that the distal lateral suction openings (2.1) in the sheath tube (2.2) are not clogged.

Fig. 12
- Replace damaged or brittle rubber caps (4).

8.2 Functional check

- Check the individual components for compatibility.
- Check that the connections are securely locked.
- Check that the individual instruments can be assembled and locked together easily. Replace the instruments if the connection although locked is not secure cannot be locked or is difficult to lock.
- Check the supply (2.3), drain (2.7) and instrument port stopcock (2.6) for easy operation.
- Check that the auxiliary instruments can be inserted easily through instrument port stopcock (2.6).
- Rinse out the supply stopcock(2.3) and drain stopcock (2.7) using the irrigator.
  - On the distal side the dilation medium must form a spray jet.
  - in the case of CO₂ gas no pressure must build up.
- Check the entire system for leak-tightness and patency (free passage).
8.2.1 Stopcock plug (2.9.1)

Check that the stopcock plug (2.9.1) snaps into the stopcock housing (2.9.2).

Check the stopcocks (2.9) for leak-tightness.

- Turn the stopcock plug (2.9.1) to the locked position.
- If stopcocks leak, replace stopcock plug (2.9.1).

Check the stopcock plug (2.9.1) for easy operation in the housing (2.9.2).

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8.2.2 PANOVIEW endoscope (1)

- Check image quality and light output in conjunction with the system components.
- Check glass surfaces for deposits.
  - Any deposits on the glass surfaces may result in a spotted or blurred field of vision and can considerably impair light transmission.
  - Clean the glass surfaces with a swab soaked with alcohol (wooden swab carrier, not metal or plastic), remove hard-to-remove deposits with instrument cleaner (Fig. 14).

- Check light output without system components.
  - Hold the distal end of the endoscope towards a light source.
  - Broken fibers appear as black dots in the cold-light connector. If more than 30% of the fibers are broken, the light output is no longer sufficient (Fig. 15).
9 Reprocessing and maintenance

9.1 Disassembly before cleaning

- Remove auxiliary instrument.
- Remove all connections between the Operating Hysteroscopes and the system components.
- Remove all parts used:
  - PANOVIEW endoscope (1): section 7.1.1
  - Cold-light connector (1.1)
  - Ergonomic handle (3): section 7.1.2
  - Rubber cap (4)

9.1.1 Stopcock plug (2.9.1)

Fig. 16

Without disassembly tool
- Remove the stopcock plug (2.9.1).
  - Stopcock plug (2.9.1) snaps out of stopcock housing (2.9.2).

Fig. 17

With disassembly tool
- Remove the stopcock plug (2.9.1).
  - Slide on the tool as far as it will go and compress, as shown in Fig. 17.
  - The stopcock plug (2.9.1) disengages from the stopcock housing (2.9.2).
- Remove the stopcock plug (2.9.1).

9.2 Manual reprocessing

- Wet preparation at the point of use
- Disassembly before cleaning: section 9.1
- Manual cleaning / disinfection

Fig. 18

- Clean the suction holes (2.1) with a suitable cleaning brush and rinse out.
9.3 Machine reprocessing

- Dry preparation at the point of use
- Disassembly before cleaning: section 9.1
- Machine cleaning / disinfection
  - Manual precleaning of the suction holes (2.1): section 9.2

**NOTE!**
For automatic (machine) reprocessing of the stopcock plugs (2.9.1) use a small parts sieve.

9.4 Checks
- Perform a visual check: sections 8 and 8.1

9.5 Assembly before sterilization

**NOTE!**
Before sterilization screw on screw connections only loosely
  - to allow adequate flow of the sterilization medium
  - to avoid stress cracks
Tighten all screw connections before use.

- Screw on the cold-light connector (1.1) loosely only 1–2 turns.

9.5.1 Stopcock plug (2.9.1)

**Fig. 19**
- Insert the stopcock plug (2.9.1) into the stopcock housing (2.9.2).
  - You can feel and hear the stopcock plug (2.9.1) engage in the housing.
- Open the stopcock plug (2.9.1).

9.6 Sterilization

9.6.1 Steam sterilization
- Steam sterilization at 132°C (270°F) using a Pre-Vac cycle at an exposure time of 4 minutes with a 20 minute dry time.

9.6.2 Gas sterilization
- Gas sterilization using ethylene oxide (EtO).

9.6.3 High-Level-Disinfection
- CIDEX OPA Solution provides a high-level disinfection and is compatible with all Richard Wolf products.
  - Follow the immersion time and concentration specified by the disinfectant manufacturer.
- GLUTARALDEHYDE Solution allows a high-level disinfection.
  - Follow the immersion time and concentration specified by the disinfectant manufacturer.

**CONTRAINDICATIONS**

**CAUTION!**
CIDEX OPA Solution should not be utilized to process instrumentation for patients with known sensitivity to CIDEX OPA Solution or any of its components.
10 Technical data and order data

For additional information on the reprocessing, see Manual GA-J020 “Reprocessing of RICHARD WOLF Heat Stable Instruments”.

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<th>Illustration</th>
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<td>8974351</td>
<td>OPTIFLOW single sheath</td>
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<td></td>
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<td>Total length = 318 mm;</td>
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<td></td>
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<td>working length = 219 mm;</td>
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<td></td>
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<td>outside dia. = 5.5 mm;</td>
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<td></td>
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11 Spare parts and accessories

<table>
<thead>
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<th>Item</th>
<th>Illustration</th>
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<td>1</td>
<td></td>
<td>8974.402</td>
<td>PANOVIEW endoscope</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8974.412</td>
<td>Total length = 371 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>working length = 318 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>outside dia. = 2.7 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>viewing direction = 30°;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>image angle = 80°</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>8986.251</td>
<td>Ergonomic handle</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>8642.6002</td>
<td>Biopsy forceps (spoon)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total length = 495 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>working length = 340 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 Fr.</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>8642.6502</td>
<td>Grasping forceps, pike-mouth shaped</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total length = 495 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>working length = 340 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 Fr.</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>8642.6312</td>
<td>Biopsy punch</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total length = 495 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>working length = 340 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 Fr.</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>8642.6812</td>
<td>Microscissors</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total length = 495 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>working length = 340 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 Fr.</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>8642.60</td>
<td>Biopsie forceps, rigid</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total length = 443 mm;</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>working length = 340 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 Fr.</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>8642.65</td>
<td>Grasping forceps, rigid</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total length = 450 mm;</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>working length = 340 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 Fr.</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>8642.631</td>
<td>Biopsy punch, rigid</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total length = 470 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>working length = 355 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 Fr.</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>8642.681</td>
<td>Scissors, rigid</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>Total length = 500 mm;</td>
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<td></td>
<td></td>
<td>working length = 355 mm;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 Fr.</td>
</tr>
<tr>
<td>Item</td>
<td>Illustration</td>
<td>Product no.</td>
<td>Designation, technical data</td>
</tr>
<tr>
<td>------</td>
<td>--------------</td>
<td>-------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>4</td>
<td><img src="image1" alt="Illustration" /></td>
<td>88.005RE</td>
<td>Rubber cap “RIWO” red for instruments smaller than 3 Fr. packaging unit = 12/pkg.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>88.01RE</td>
<td>Rubber cap “RIWO” rot for instruments up to 7 Fr. packaging unit = 12/pkg.</td>
</tr>
<tr>
<td></td>
<td><img src="image2" alt="Illustration" /></td>
<td>886.00</td>
<td>Luer lock tube connector</td>
</tr>
<tr>
<td>2.9.1</td>
<td><img src="image3" alt="Illustration" /></td>
<td>896.0001</td>
<td>Replacement stopcock plugs, 1.8 mm / 2.5 mm passage identification: 2 pegs packaging unit = 5/pkg.</td>
</tr>
<tr>
<td>2.9.1</td>
<td><img src="image4" alt="Illustration" /></td>
<td>896.0002</td>
<td>Replacement stopcock plugs, 3.0 mm passage identification: 3 pegs packaging unit = 5/pkg.</td>
</tr>
<tr>
<td></td>
<td><img src="image5" alt="Illustration" /></td>
<td>38310.0001</td>
<td>Disassembly tool</td>
</tr>
<tr>
<td></td>
<td><img src="image6" alt="Illustration" /></td>
<td>40605</td>
<td>Cleaning brush for optic channel, disposable, 10/pkg Total length TL = 600 mm; Brush dia. ( \Theta D = 5 \text{ mm} ); Brush length BL = 75 mm</td>
</tr>
<tr>
<td></td>
<td><img src="image7" alt="Illustration" /></td>
<td>7990001</td>
<td>Cleaning brush for inflow / outflow channel, disposable, 10/pkg Total length TL = 1200 mm; Brush dia. ( \Theta D = 2 \text{ mm} ); Brush length BL = 15 mm</td>
</tr>
<tr>
<td></td>
<td><img src="image8" alt="Illustration" /></td>
<td>40604</td>
<td>Cleaning brush for working channel, disposable, 10/pkg Total length TL = 400 mm; Brush dia. ( \Theta D = 2 \text{ mm} ); Brush length BL = 95 mm</td>
</tr>
<tr>
<td></td>
<td><img src="image9" alt="Illustration" /></td>
<td>40999012</td>
<td>Cleaning brush for external surfaces, disposable, 3/pkg Total length 147 mm; Brush length 42 mm</td>
</tr>
</tbody>
</table>

The products can be combined as required provided the relevant technical data and intended uses are observed. For the general overview please refer to the latest catalog sheets and brochures, or contact Richard Wolf or your Richard Wolf representative.

### 12 Operating, storage, transport and shipping conditions

| Operating conditions | +10°C to +40°C, 30% to 75% rel. humidity, atmospheric pressure 700 hPa to 1060 hPa |
| Storage, transport and shipping conditions | -20°C to +60°C, 10% to 90% rel. humidity, atmospheric pressure 700 hPa to 1060 hPa |

**NOTE!**

To prevent damage during transport or shipment of the products we recommend using the original packaging material.

### 12.1 Disposal of product, packaging material and accessories

Observe the regulations and laws valid in your country for disposal.

* For further information please contact the manufacturer.
IMPORTANT!

As we cannot provide a comprehensive bibliography we would ask users to keep themselves informed of all new developments in this field.

- **A multi-centre collaborative study into the treatment of menorrhagia by Nd: YAG laser ablation of the endometrium**

- **Carbon Dioxide Hysteroscopy: Principles and Physiology. In Hysteroscopy, Principles and Practice**

- **Comparison of CO2 and Continuous-Flow Technique for Office Hysteroscopy. In Hysteroscopy Update**

- **Control of intrauterine fluid pressure during operative hysteroscopy**

- **Diagnostic and therapeutic hysteroscopy in the management of abnormal uterine bleeding**

- **Die hysterokopische Resektion submukoser Myome**

- **Distension Media and Fluid Systems. In Endoscopic Surgery for Gynaecologists.**

- **Distention Media. In Lasers in Gynecology.**

- **Endometrial laser ablation. In Endometrial Ablation**

- **Experience with the first 250 endometrial resections for menorrhagia**

- **Fibroids. In Endometrial Ablation**

- **HF Electrosurgery Versus Laser in Hysteroscopy. In Lasers in Gynecology**

- **Hysteroscopic surgery with the Nd: YAG laser**

- **Hysteroscopy**

- **Laser photovaporization of endometrium for the treatment of menorrhagia**

- **Laser Technique versus Electrosurgery in the Hysteroscopic Treatment of Submucous Fibroids. In Hysteroscopy Update**
Operative Hysteroskopie
Hucke J. Gynäkologie 1997 30:392-409

Removal of Submucous Myomata with Intramural Parts. In Hysteroscopy Update

Resection of intrauterine fibroids. In Endometrial Ablation

Resectoscopic myomectomy

The Application of the Nd: YAG Laser in CO2 Hysteroscopy. In Lasers in Gynecology

Trans-cervical Resection of the Endometrium (TCRE). In Endoscopic Surgery for Gynaecologists.

Treatment of Irregular Menstrual Bleeding by Hysteroscopic Resection of Submucous Myomas and Polyps. In Hysteroscopy, Principles and Practice

Warranty and Customer Service

Richard Wolf guarantees our instruments to be free from any defects in materials and workmanship under normal use and service for one year. Richard Wolf general terms and conditions may be found on the back of our invoice.

Parts delivered separately by Richard Wolf are subject to all of the same general terms and conditions for our products, including the limitations of warranty and liability.

All products should be returned to Richard Wolf for any necessary or desired repair or part replacement. No product repair or part replacement should be done other than by Richard Wolf unless the care and instruction manual or other written information indicates that repair or part replacement is authorized. If authorized, parts must be replaced only by parts supplied or specified by Richard Wolf, and product repair and part replacement must be done in strict conformance with Richard Wolf specifications and instructions for repair and part replacement, including post replacement testing and recalibration. Failure to follow this requirement in any way can be dangerous to you, your personnel and your patients and voids the warranty for the product repaired or the product in which the part was replaced and if the part was supplied by Richard Wolf, for that part.

Delivery by Richard Wolf of technical documents such as circuit or other design diagrams does not constitute authorization for product repair or part replacement. Richard Wolf instruments and other products should never be modified or altered under any circumstances.

Contact Richard Wolf if you have any question (1) whether replacement of a part or a repair is authorized by Richard Wolf, or (2) whether you have complete instructions and specifications for part replacement or repair.

These instructions do not attempt to cover all details or variations in equipment, nor to provide for every possible contingency to be met in connection with installation, operation, or maintenance. Should further information be required or should problems arise which are not covered sufficiently for the purchaser's purpose, the matter should be referred to Richard Wolf Medical Instruments Corporation.

Our national sales and service offices, as well as our manufacturing facility, are located in Illinois. Trained manufacturer's representatives are located throughout the U.S. to serve you. For any questions regarding these instruments, or to place an order, contact Richard Wolf customer service department at 847-913-1113 or 800-323-WOLF (9653).

INSTRUMENT ORDERING POLICY
Richard Wolf reserves the right to make substitutions, if necessary, without prior notice.

REPAIR POLICY
Defective merchandise will be repaired or replaced at no charge to the customer, provided the customer delivers such defective merchandise prepaid. Any repairs, maintenance or servicing of Richard Wolf merchandise by anyone other than a factory authorized representative will render our warranty null and void.

REPAIR SHIPMENTS
When returning your instrument for repair, we suggest that you prevent shipping damage to the instrument by reusing the box that it was originally shipped in. Richard Wolf also recommends that the instrument be insured for an amount to cover the cost of replacement.

IMPORTANT
For general safety and health reasons, Richard Wolf requires that you clean and sterilize all instruments before returning them for repair. If instruments are received in an unsanitary condition, Richard Wolf will clean and sterilize each instrument and add a $92.00 cleaning charge for each instrument requiring cleaning.