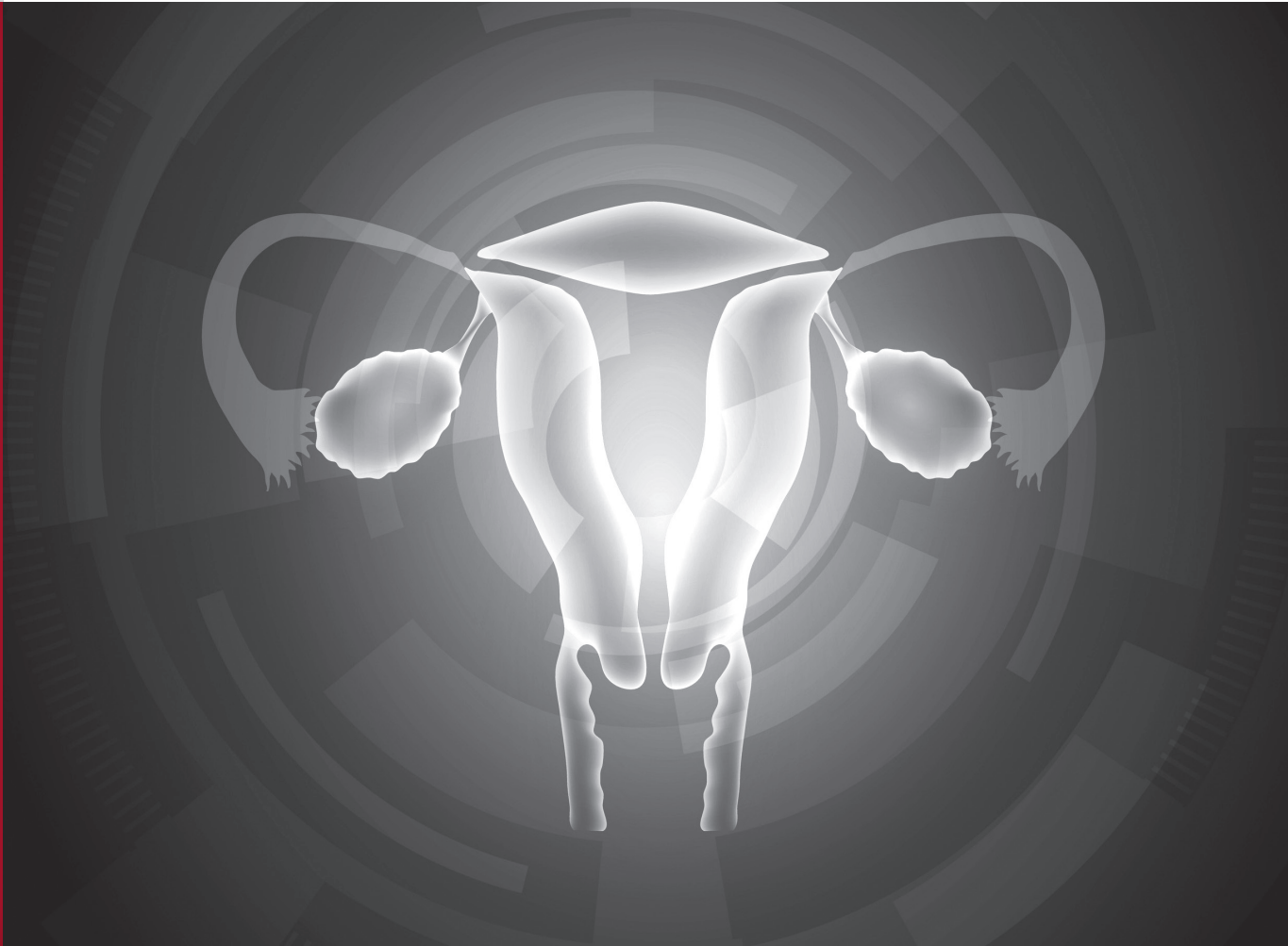


# TONTARRA

ENDOSCOPY



GYNECOLOGY  
Hysteroscopy | Resectoscopy







## YOUR SPECIALIST IN THE WORLD CENTER OF MEDICAL TECHNOLOGY

For more than 55 years “made by TONTARRA, Germany” is a synonym for state-of-the-art surgical and endoscopic instruments and equipment of high quality and precision. The success of TONTARRA derives from innovation, commitment and a strong focus on our continuing tradition.

A product range with over 20.000 articles is distributed worldwide under our own brand as well as OEM. Indispensable ‘tools’ for maturing a new idea into the surgical instrument of highest precision include our state-of-the-art manufacturing facility with 6.000 m<sup>2</sup>, the ingenuity and strong commitment of our entire team of technicians and skilled workers and a location which for more than 100 years has been the very world center – with a high manufacturing penetration – for developing and producing all types of innovative and patient-oriented surgical instrumentation for distinguished physicians across the globe.



**+ 55**  
years of experience



**+ 150**  
skilled employees



**+ 20.000**  
upmarket products



0° Endoscopes



12° Endoscopes



30° Endoscopes



Function length



Round sheath



Oval sheath



Drop style sheath



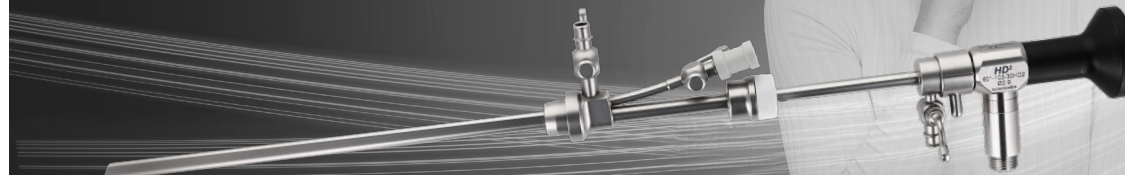
Rotatable sheath

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>► Diagnostic and Operative Hysteroscopy</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 008 – 029 |
| <ul style="list-style-type: none"><li>- For Ø 2.0 mm Endoscopes</li><li>- For Ø 2.9 mm Endoscopes</li><li>- For Ø 4.0 mm Endoscopes</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |           |
| <b>► Micro-Instruments</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 031 – 041 |
| <ul style="list-style-type: none"><li>- Non-HF Micro-Instruments</li><li>- HF Micro-Instruments</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |           |
| <b>► Hybrid Resectoscopes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 043 – 074 |
| <ul style="list-style-type: none"><li>- 14.9 Fr. Resectoscope (<i>GUBBINIellipse</i>)</li><li>- 16.0 Fr. Resectoscope (<i>GUBBINIoriginal</i>)</li><li>- 18.5 Fr. Resectoscope (<i>GUBBINImidi</i>)</li><li>- 19/22 Fr. Resectoscope</li><li>- 24/26 Fr. Resectoscope</li></ul>                                                                                                                                                                                                                                                                                                                                       |           |
| <b>► Endoor-Tower &amp; Accessories</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 076 – 115 |
| <ul style="list-style-type: none"><li>- Endoor Compact All-in-one Endoscope Camera System</li><li>- Camera Controllers and Camera Heads</li><li>- Medical Monitors</li><li>- Light Source, Light Guide Cables, Connectors and Adapters</li><li>- Documentation Units, Video Signal Converter, Keyboards</li><li>- Multi-Indication Pump</li><li>- HF Generator and Cables</li><li>- Equipment Carts</li></ul>                                                                                                                                                                                                         |           |
| <b>► Spare Parts</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 118 – 120 |
| <b>► Accessories</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 121 – 124 |
| <b>► Cleaning, Sterilization &amp; Storage</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 125 – 127 |
| <b>► Recommended Sets</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 129 – 169 |
| <ul style="list-style-type: none"><li>- Compact Video Set</li><li>- Basic Video Set</li><li>- Basic Sets Diagnostic Hysteroscopy</li><li>- Basic Sets Operative Hysteroscopy</li><li>- Basic Set Operative Hysteroscopy Ricciardi All-In Scope (<i>RAIS</i>)</li><li>- Basic Set 14.9 Fr. Resectoscope (<i>GUBBINIellipse</i>)</li><li>- Basic Set 16.0 Fr. Resectoscope (<i>GUBBINIoriginal</i>)</li><li>- Basic Set 18.5 Fr. Resectoscope (<i>GUBBINImidi</i>)</li><li>- Basic Set 22 Fr. Resectoscope</li><li>- Basic Set 26 Fr. Resectoscope</li><li>- Basic Set Kruschinski Modular Scope (<i>KMS</i>)</li></ul> |           |

## RAIS

Ricciardi **All In Scope**

COMPACT OFFICE HYSTEROSCOPE  
by Dr. Ricciardi

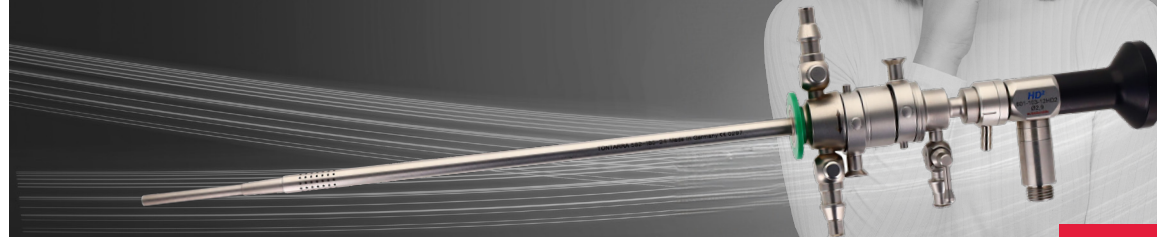


▶ see page 18

## KMS

Kruschinski **Modular Scope**

AWAKE HYSTEROSCOPY  
by Dr. Kruschinski



▶ see page 21

## GUBBINI

Mini-Hystero-Resectoscope

HYSTERO RESECTOSCOPY  
by Dr. Gubbini



▶ see page 44



**PiRUETTO**  
Fully Rotatable Micro Instruments

**360°**  
Full rotation

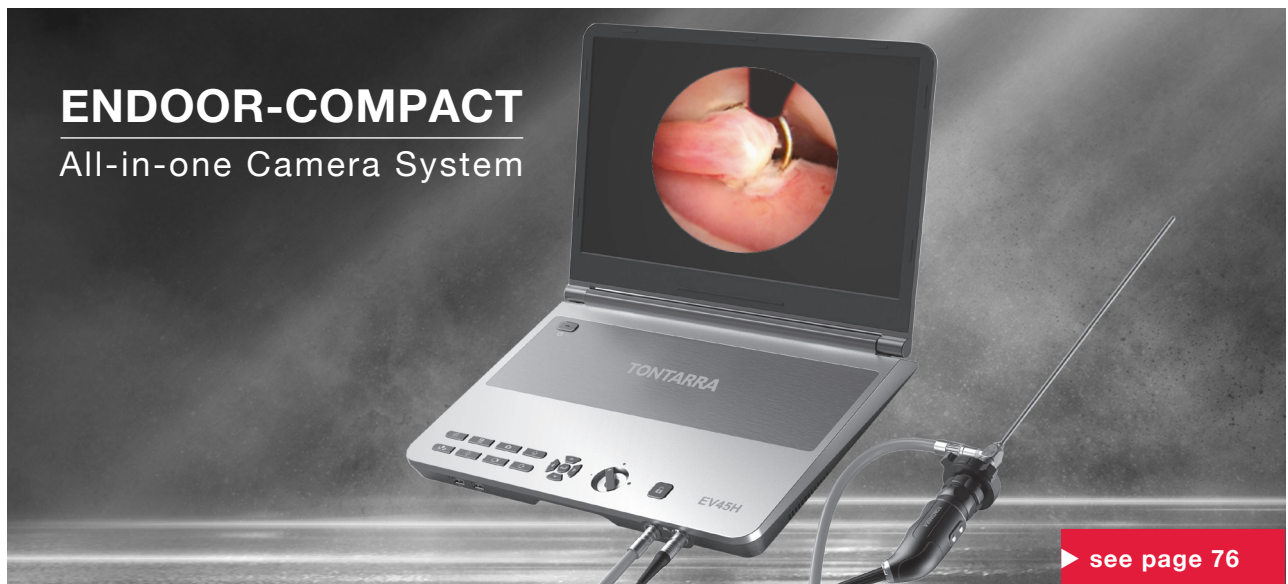
**Insert**  
exchangeable

▶ see page 32

The advertisement features a central circular inset with a red border showing a surgical instrument with a yellow handle and a metal shaft. Two red curved arrows indicate a full 360-degree rotation. To the left, a pair of surgical scissors is shown in a faded, artistic style. To the right, a ballerina's legs in a tutu are shown in motion, with white motion lines trailing behind them. The background is dark and textured.

**ENDOOR-COMPACT**  
All-in-one Camera System

▶ see page 76

The advertisement shows a silver, laptop-sized device with the TONTARRA logo and model number EV45H. The screen displays a circular inset showing a close-up of a surgical procedure. A long, thin, flexible endoscopic tube is connected to the device. The background is dark and atmospheric.

**HD+4 HYSTEROSCOPES**  
4K Ultra HD Endoscopes

▶ see page 11

The advertisement features a close-up of a human eye on the right side, looking directly at the viewer. On the left, a hysteroscope is shown, consisting of a long, thin tube with a small camera at the end. The background is dark and textured.

## TONTARRA Endoscopes

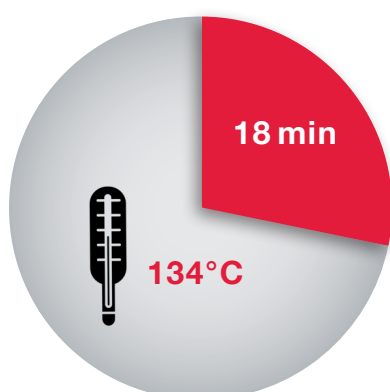
TONTARRA Endoscopes provide precision optical components and latest manufacturing standards. To reflect different requirements, the endoscopes are available in various levels such as HD, HD+, HD+2 and HD+4.

Below table indicates the differences of the above mentioned levels:



|                                 | SD | HD Ready | FULL HD | 4K Ultra HD |
|---------------------------------|----|----------|---------|-------------|
|                                 | HD | HD+      | HD+2    | HD+4        |
| Resolution in center            |    |          |         |             |
| Resolution from center to edge  |    |          |         |             |
| Brightness                      |    |          |         |             |
| Color rendering                 |    |          |         |             |
| Contrast / MTF                  |    |          |         |             |
| Depth of field                  |    |          |         |             |
| Modified for 4k imaging systems | No | No       | No      | Yes         |

► Please note: 2.0 mm Hysteroscopes come with fiber bundles instead of optical glass.



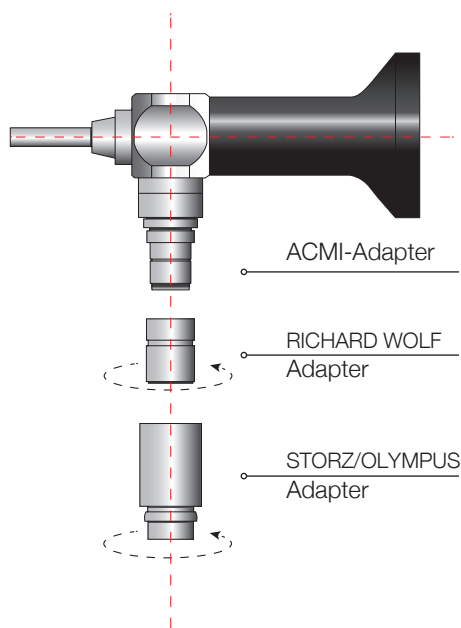
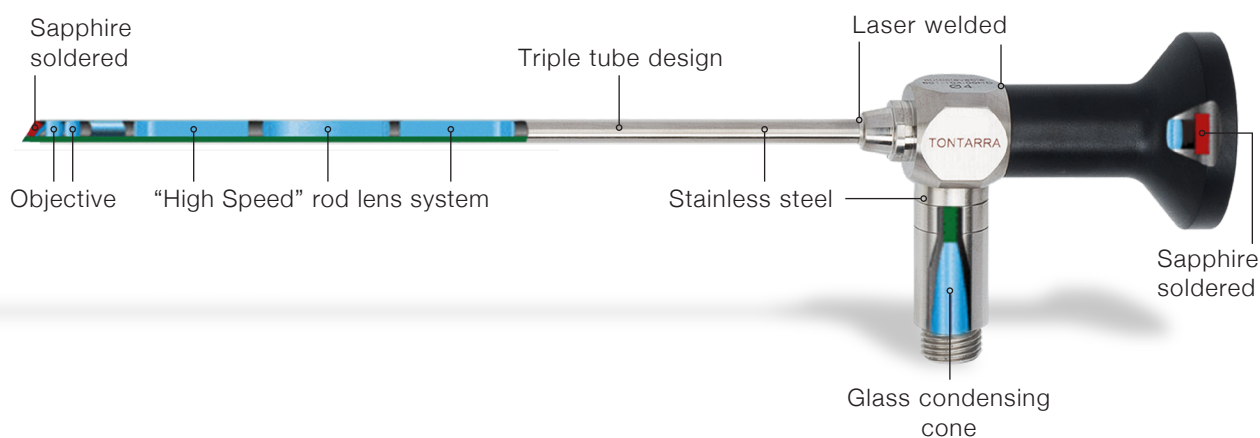
### A masterful sealing technology avoids leakage

- Laser welding or soldering of relevant components
- No use of adhesives or o-rings

\* applies for hysteroscopes with rod lens system

## Key Benefits & Features

- Stainless steel telescope body
- Sapphire lens at distal and proximal end
- Triple tube design with 3 different channels
- Sapphire glass for scratch resistance



For more information  
please see our  
Endoscopes presentation



<https://qrco.de/endoscopes>

## Ø 2.0 mm Endoscopes



### 601-112-00

Hysteroscope HD; Ø 2.0 mm; **0°**; 260 mm; autoclavable



### 601-112-30

Hysteroscope HD; Ø 2.0 mm; **30°**; 260 mm; autoclavable



### 601-132-00

Hysteroscope HD; Ø 2.0 mm; **0°**; 300 mm; autoclavable



### 601-132-30

Hysteroscope HD; Ø 2.0 mm; **30°**; 300 mm; autoclavable



## Ø 2.9 mm Endoscopes



### 601-115-00HD2

Hysteroscope HD+2; Ø 2.9 mm; **0°**; 300 mm; autoclavable



### 601-115-12HD2

Hysteroscope HD+2; Ø 2.9 mm; **12°**; 300 mm; autoclavable



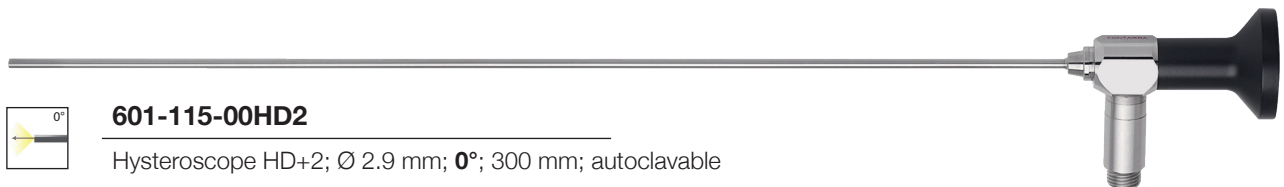
### 601-115-30HD2

Hysteroscope HD+2; Ø 2.9 mm; **30°**; 300 mm; autoclavable



### 601-115-12SHD2

Hysteroscope HD+2; Ø 2.9 mm; **12°**; 300 mm; autoclavable  
**specially for GUBBINImidi**





## Ø 4.0 mm Endoscopes



### 601-113-00HD

Hysteroscope HD+; Ø 4.0 mm; **0°**; 300 mm; autoclavable

### 601-113-00HD2

Hysteroscope HD+2; Ø 4.0 mm; **0°**; 300 mm; autoclavable

### 601-113-00HD4

Hysteroscope HD+4; Ø 4.0 mm; **0°**; 300 mm; autoclavable



### 601-113-12HD

Hysteroscope HD+; Ø 4.0 mm; **12°**; 300 mm; autoclavable

### 601-113-12HD2

Hysteroscope HD+2; Ø 4.0 mm; **12°**; 300 mm; autoclavable

### 601-113-12HD4

Hysteroscope HD+4; Ø 4.0 mm; **12°**; 300 mm; autoclavable



### 601-113-30HD

Hysteroscope HD+; Ø 4.0 mm; **30°**; 300 mm; autoclavable

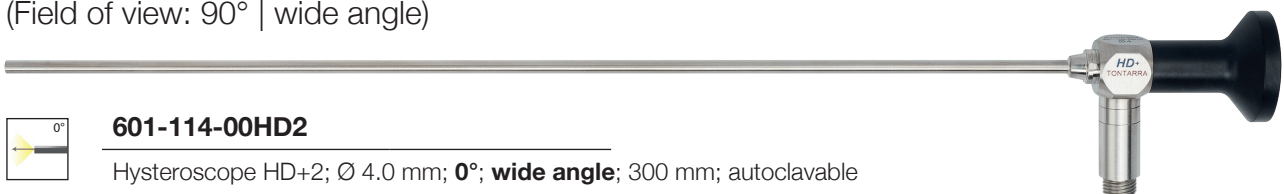
### 601-113-30HD2

Hysteroscope HD+2; Ø 4.0 mm; **30°**; 300 mm; autoclavable

### 601-113-30HD4

Hysteroscope HD+4; Ø 4.0 mm; **30°**; 300 mm; autoclavable

(Field of view: 90° | wide angle)



### 601-114-00HD2

Hysteroscope HD+2; Ø 4.0 mm; **0°**; **wide angle**; 300 mm; autoclavable



### 601-114-30HD2

Hysteroscope HD+2; Ø 4.0 mm; **30°**; **wide angle**; 300 mm; autoclavable

► **Please note: wide angle endoscopes cannot be used with resectoscopes!**

► for **2.0 mm** Endoscopes (260 mm function length)



**601-112-00**

Hysteroscope HD; Ø 2.0 mm; **0°**; 260 mm; autoclavable



**601-112-30**

Hysteroscope HD; Ø 2.0 mm; **30°**; 260 mm; autoclavable



**640-010-20** ● RED

Hysteroscopy Diagnostic Sheath; **0°**; 1 rotatable stopcock; Ø 2.9 mm; 228 mm

**640-010-23** ● RED

Hysteroscopy Diagnostic Sheath; **30°**; 1 rotatable stopcock; Ø 2.9 mm; 228 mm



**640-015-24** ● RED

Diagnostic Inner Sheath; **30°**; **Quick-Lock**; Ø 2.9 mm; 218 mm



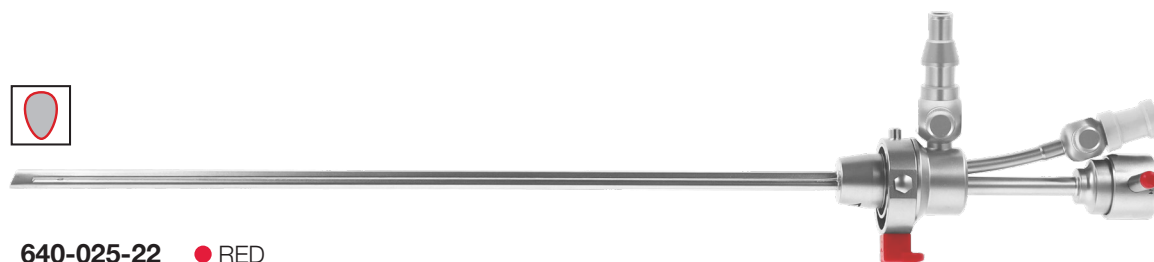
**640-015-21** ● RED

Diagnostic Outer Sheath; **Quick-Lock**; Ø 3.7 mm; 200 mm

**640-010-25** ● RED

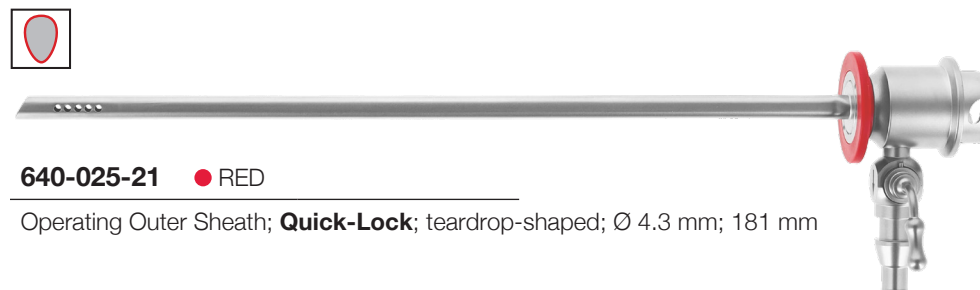
Obturator for Hysteroscopy Diagnostic Sheath; Ø 2.9 mm

► for **2.0 mm** Endoscopes (260 mm function length)



**640-025-22** ● RED

Operating Inner Sheath; **Quick-Lock**; teardrop-shaped; 5 Fr. working channel; 30°



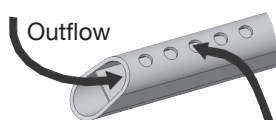
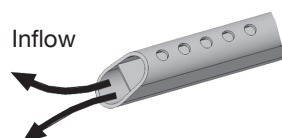
**640-025-21** ● RED

Operating Outer Sheath; **Quick-Lock**; teardrop-shaped; Ø 4.3 mm; 181 mm



**640-022-43** ● RED

High-Flow Compact Operating Sheath; with stopcock; 5 Fr. working channel; Ø 4.3 mm; 30°; 173 mm



► for **2.0 mm** Endoscopes (300 mm function length)



## **601-132-00**

Hysteroscope HD; Ø 2.0 mm; **0°**; 300 mm; autoclavable



## **601-132-30**

Hysteroscope HD; Ø 2.0 mm; **30°**; 300 mm; autoclavable

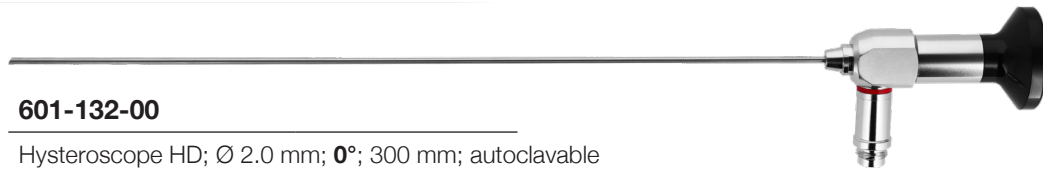


## **640-010-27** ● RED

Hysteroscopy Diagnostic Sheath; **0°**; 1 rotatable stopcock; Ø 2.9 mm; 270 mm

## **640-010-28** ● RED

Hysteroscopy Diagnostic Sheath; **30°**; 1 rotatable stopcock; Ø 2.9 mm; 270 mm

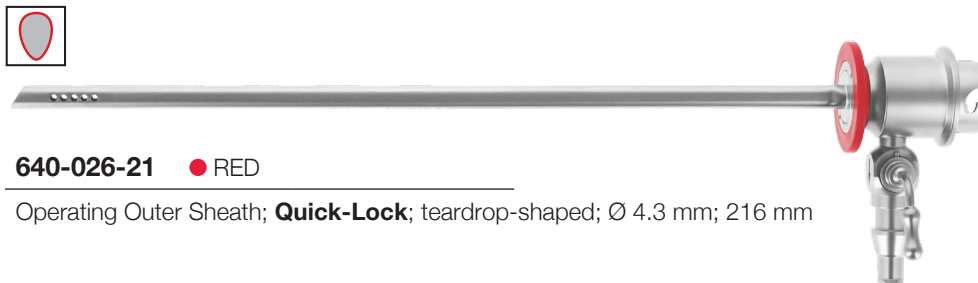


► for **2.0 mm** Endoscopes (300 mm function length)



**640-026-22** ● RED

Operating Inner Sheath; **Quick-Lock**; teardrop-shaped; 5 Fr. working channel; 30°



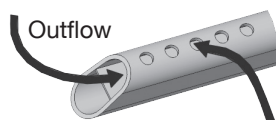
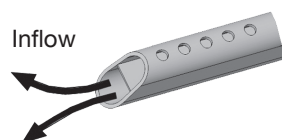
**640-026-21** ● RED

Operating Outer Sheath; **Quick-Lock**; teardrop-shaped; Ø 4.3 mm; 216 mm



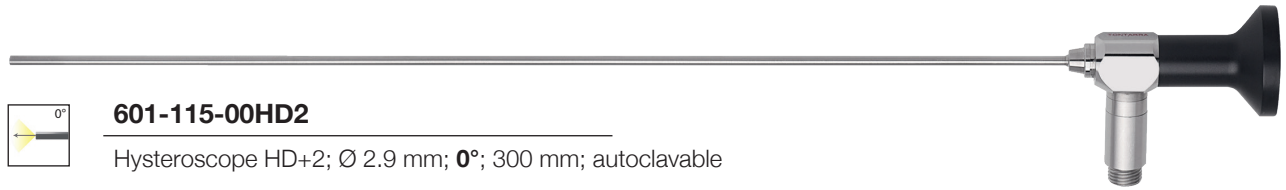
**640-022-53** ● RED

High-Flow Compact Operating Sheath; with stopcock; 5 Fr. working channel; Ø 4.3 mm; 30°; 215 mm





► for **2.9 mm** Endoscopes (300 mm function length)



## **601-115-00HD2**

Hysteroscope HD+2; Ø 2.9 mm; **0°**; 300 mm; autoclavable



## **601-115-30HD2**

Hysteroscope HD+2; Ø 2.9 mm; **30°**; 300 mm; autoclavable



## **640-010-30** ○ WHITE

Hysteroscopy Diagnostic Sheath; **0°**; 1 rotatable stopcock; Ø 4.0 mm; 270 mm

## **640-010-33** ○ WHITE

Hysteroscopy Diagnostic Sheath; **30°**; 1 rotatable stopcock; Ø 4.0 mm; 270 mm

► for **2.9 mm** Endoscopes (300 mm function length)



**640-015-34** ○ WHITE

Diagnostic Inner Sheath; **30°**; **Quick-Lock**; Ø 4.0 mm; 260 mm



**640-015-31** ○ WHITE

Diagnostic Outer Sheath; **Quick-Lock**; Ø 5.0 mm; 244 mm



**640-010-35** ○ WHITE

Obturator for Hysteroscopy Diagnostic Sheath; Ø 4.0 mm

► for **2.9 mm** Endoscopes (300 mm function length)



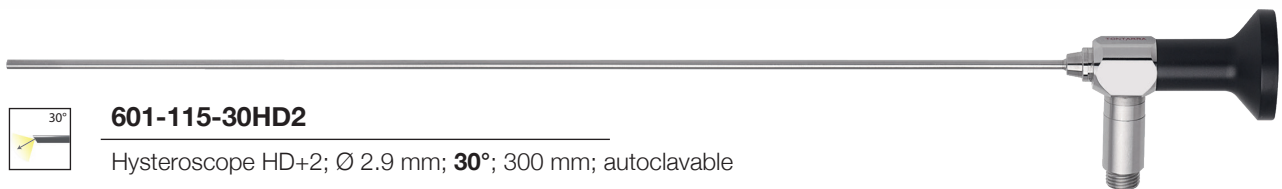
## **RAIS** - Ricciardi **All In Scope**

**Compact Office Hysteroscope**

by Dr. Raffaele Ricciardi



- For use with standard 2.9 mm 30° hysteroscope
- Outer sheath can slide on top of inner sheath
- D-shaped inner sheath with inflow channel and with guiding rod for instruments
- First introduction into the uterine cavity with only 3.5 mm
- Oval shaped outer sheath with 5 Fr. working channel
- No reduction of inflow when inserting an instrument



**601-115-30HD2**

Hysteroscope HD+2; Ø 2.9 mm; **30°**; 300 mm; autoclavable



**640-027-32**

**RAIS** Inner Sheath; oval; with stopcock; Ø 3.5 mm; 292 mm



**640-027-31**

**RAIS** Outer Sheath; oval; 5 Fr. working channel; Ø 5 mm; 162 mm

For more information  
please see our  
RAIS brochure



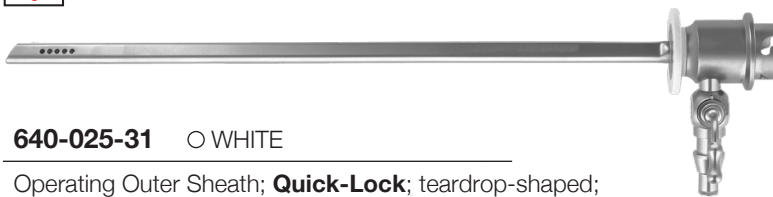
<https://qrco.de/rais-brochure>

► for **2.9 mm** Endoscopes (300 mm function length)



**640-025-32** ○ WHITE

Operating Inner Sheath; **Quick-Lock**; teardrop-shaped; 5 Fr. working channel; 30°



**640-025-31** ○ WHITE

Operating Outer Sheath; **Quick-Lock**; teardrop-shaped;  
Ø 5.0 mm; 192 mm



**640-026-32** ● TURQUOISE

Operating Inner Sheath; **Quick-Lock**; teardrop-shaped; 5 Fr. working channel; 30°



**640-026-31** ● TURQUOISE

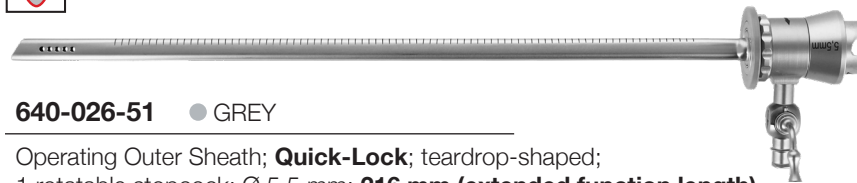
Operating Outer Sheath; **Quick-Lock**; teardrop-shaped;  
Ø 5.0 mm; **216 mm (extended function length)**

► for **2.9 mm** Endoscopes (300 mm function length)



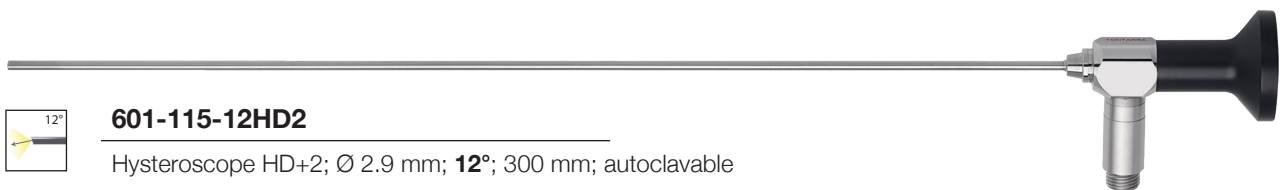
**640-026-52** ● GREY

Operating Inner Sheath; **Quick-Lock**; teardrop-shaped; 7 Fr. working channel; 30°; 1 rotatable stopcock



**640-026-51** ● GREY

Operating Outer Sheath; **Quick-Lock**; teardrop-shaped;  
1 rotatable stopcock; Ø 5.5 mm; **216 mm (extended function length)**



**601-115-12HD2**

Hysteroscope HD+2; Ø 2.9 mm; **12°**; 300 mm; autoclavable



**601-115-30HD2**

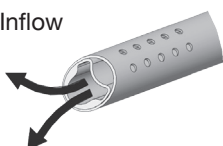
Hysteroscope HD+2; Ø 2.9 mm; **30°**; 300 mm; autoclavable



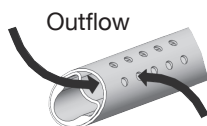
**640-022-33** ○ WHITE

High-Flow Compact Operating Sheath; with stopcock; 5 Fr. working channel; Ø 5.5 mm; 30°; 210 mm

Inflow



Outflow



► for **2.9 mm** Endoscopes (300 mm function length)



## KMS - Kruschinski Modular Scope

### Awake Hysteroscopy

by Dr. Daniel Kruschinski



"In order to implement „Awake Hysteroscopy“ with the „See & Treat“ concept, not only an excellent endoscope is required, but also the matching instrumentation.

This is exactly where the **Kruschinski Modular Scope (KMS)** comes in. Based on standard instrumentation, a combination of diagnostics and therapy can be performed during an appointment in the gynecological practice in the examination chair without anesthesia with the aid of a new visual dilatation obturator. An endometrial biopsy in the case of a desire to have children or bleeding disorders, the removal of a lost IUD, synechiolysis or the removal of small polyps or fibroids can be performed in the practice without anesthesia.

The dilation obturator enables the surgeon to place the operative outer sheath of the GUBBINImidi resectoscope in the patient's cervical canal. A slight dilatation is performed, which the patient hardly feels, as the conical shape of the dilation obturator performs the dilatation as gently as possible.

Once the operative outer sheath of the GUBBINImidi resectoscope is placed in the uterus, the surgeon removes the diagnostic shaft, dilatation obturator and endoscope. A smooth change to the working sheath with instrument channel or to the resectoscope is now given and the surgical procedure can immediately follow the diagnostic procedure in the same session without anesthesia („See & Treat“).



### 601-115-12HD2

Hysteroscope HD+2; Ø 2.9 mm; 12°; 300 mm; autoclavable



### 640-016-32

Diagnostic Inner Sheath; Quick-Lock; Ø 4.0 mm; 0°; 260 mm



### 640-016-35

Kruschinski Visual Dilator; for use with Diagnostic Inner Sheath

For more information  
please see our  
KMS brochure



► The complete KMS-Set and its usage is indicated on pages 164-169

<https://qrco.de/kms-brochure>

- for **4.0 mm** Endoscopes (300 mm function length)

## Field of view: 70°



### **601-113-00HD**

Hysteroscope HD+; Ø 4.0 mm; **0°**; 300 mm; autoclavable

### **601-113-00HD2**

Hysteroscope HD+2; Ø 4.0 mm; **0°**; 300 mm; autoclavable

### **601-113-00HD4**

Hysteroscope HD+4; Ø 4.0 mm; **0°**; 300 mm; autoclavable



### **601-113-30HD**

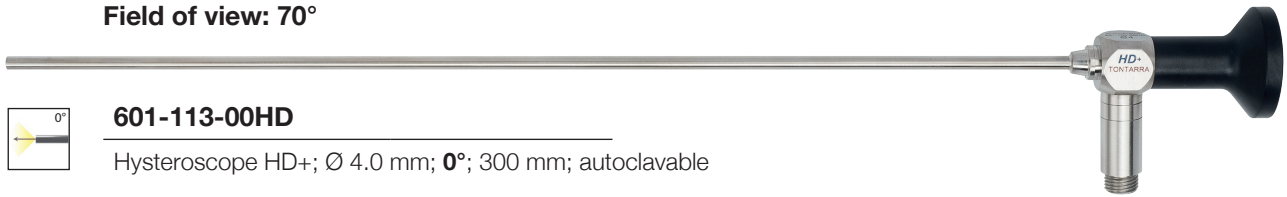
Hysteroscope HD+; Ø 4.0 mm; **30°**; 300 mm; autoclavable

### **601-113-30HD2**

Hysteroscope HD+2; Ø 4.0 mm; **30°**; 300 mm; autoclavable

### **601-113-30HD4**

Hysteroscope HD+4; Ø 4.0 mm; **30°**; 300 mm; autoclavable



## Field of view: 90° | wide angle



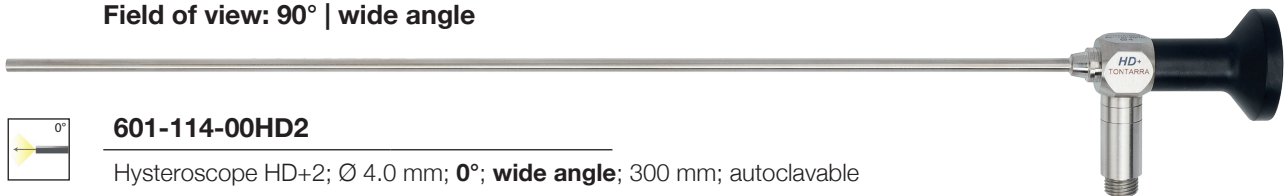
### **601-114-00HD2**

Hysteroscope HD+2; Ø 4.0 mm; **0°**; **wide angle**; 300 mm; autoclavable



### **601-114-30HD2**

Hysteroscope HD+2; Ø 4.0 mm; **30°**; **wide angle**; 300 mm; autoclavable



- **Please note: wide angle endoscopes cannot be used with resectoscopes!**



# Diagnostic and Operative Hysteroscopes

**TONTARRA**

► for **4.0 mm** Endoscopes (300 mm function length)



**640-010-40** ● BLUE

Hysteroscopy Diagnostic Sheath; **0°**; 1 rotatable stopcock; Ø 5.0 mm; 270 mm

**640-010-43** ● BLUE

Hysteroscopy Diagnostic Sheath; **30°**; 1 rotatable stopcock; Ø 5.0 mm; 270 mm



**640-015-44** ● BLUE

Diagnostic Inner Sheath; **30°**; Quick-Lock; Ø 5.4 mm; 260 mm



**640-015-41** ● BLUE

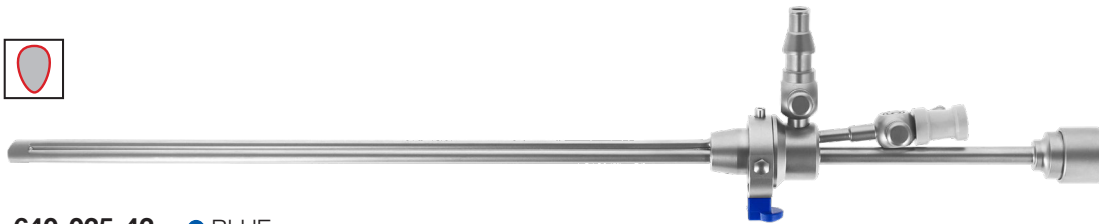
Diagnostic Outer Sheath; **Quick-Lock**; Ø 6.5 mm; 240 mm



**640-010-45** ● BLUE

Obturator for Hysteroscopy Diagnostic Sheath; Ø 5.0 mm

► for **4.0 mm** Endoscopes (300 mm function length)



**640-025-42** ● BLUE

Operating Inner Sheath; **Quick-Lock**; teardrop-shaped; 5 Fr. working channel; 30°



**640-025-41** ● BLUE

Operating Outer Sheath; **Quick-Lock**; teardrop-shaped;  
Ø 6.5 mm; 192 mm



**640-026-42** ● BLUE

Operating Inner Sheath; **Quick-Lock**; teardrop-shaped; 5 Fr. working channel; 30°



**640-026-41** ● BLUE

Operating Outer Sheath; **Quick-Lock**; teardrop-shaped;  
Ø 6.5 mm; **216 mm (extended function length)**

► for **4.0 mm** Endoscopes (300 mm function length)



**640-025-52** ● GREEN

Operating Inner Sheath; **Quick-Lock**; teardrop-shaped; 7 Fr. working channel; 30°



**640-025-51** ● GREEN

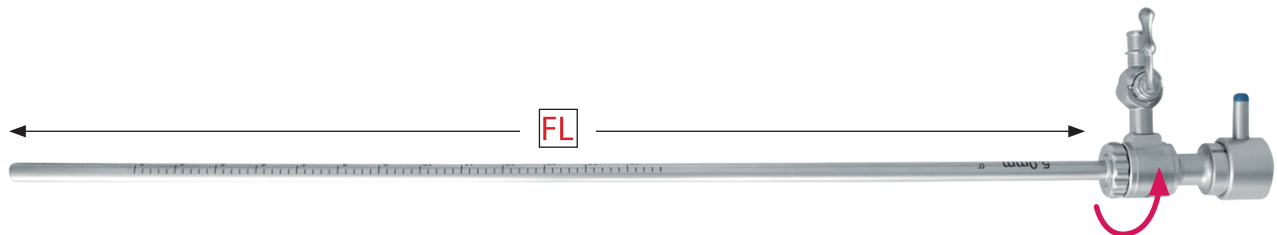
Operating Outer Sheath; **Quick-Lock**; teardrop-shaped;  
Ø 7.0 mm; 192 mm

## Hysteroscopy CO<sub>2</sub> Diagnostic Sheath

- 1 rotating stopcock

Available for:

- Ø 2.0 mm endoscopes 0° or 30°
- Ø 2.9 mm endoscopes 0° or 30°
- Ø 4.0 mm endoscopes 0° or 30°



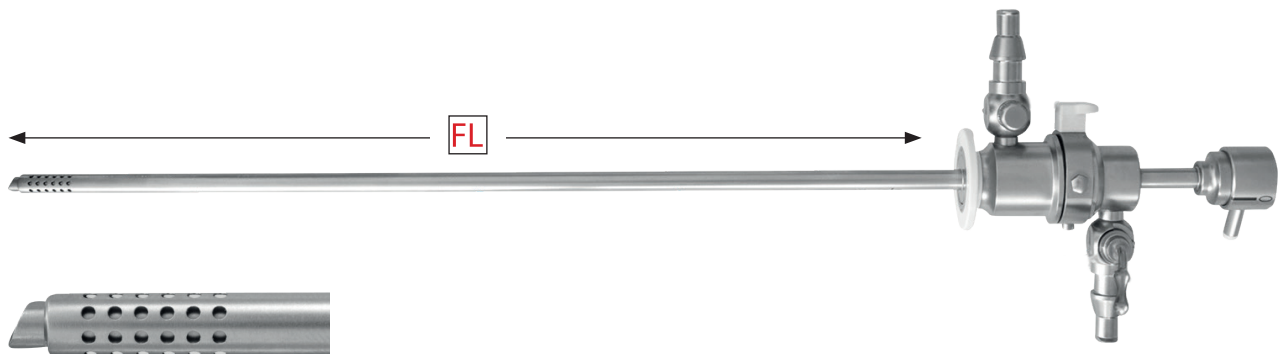
| for Ø 2.0 mm endoscopes | FL 270 mm | Color code | Art. No.   |                                                              |
|-------------------------|-----------|------------|------------|--------------------------------------------------------------|
| DIAGNOSTIC SHEATH 0°    |           | ■ red      | 640-010-27 | 601-132-00                                                   |
| for Ø 2.0 mm endoscopes | FL 228 mm | Color code | Art. No.   |                                                              |
| DIAGNOSTIC SHEATH 0°    |           | ■ red      | 640-010-20 | 601-112-00                                                   |
| DIAGNOSTIC SHEATH 30°   |           | ■ red      | 640-010-23 | 601-112-30                                                   |
| OBTURATOR               |           | ■ red      | 640-010-25 |                                                              |
| for Ø 2.9 mm endoscopes | FL 270 mm | Color code | Art. No.   |                                                              |
| DIAGNOSTIC SHEATH 0°    |           | □ white    | 640-010-30 | 601-115-00HD2                                                |
| DIAGNOSTIC SHEATH 30°   |           | □ white    | 640-010-33 | 601-115-30HD2                                                |
| OBTURATOR               |           | □ white    | 640-010-35 |                                                              |
| for Ø 4.0 mm endoscopes | FL 270 mm | Color code | Art. No.   |                                                              |
| DIAGNOSTIC SHEATH 0°    |           | ■ blue     | 640-010-40 | 601-113-30HD, 601-113-30HD2,<br>601-113-30HD4, 601-114-30HD2 |
| DIAGNOSTIC SHEATH 30°   |           | ■ blue     | 640-010-43 |                                                              |
| OBTURATOR               |           | ■ blue     | 640-010-45 |                                                              |

## Hysteroscopy **Continuous Flow** Diagnostic Sheath

- 2 fixed stopcocks
- Quick-Lock

Available for:

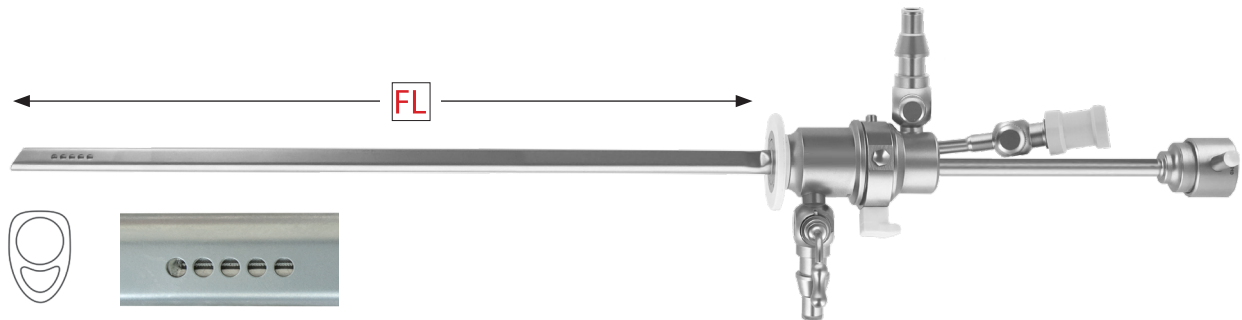
- Ø 2.0 mm endoscopes 0° or 30°
- Ø 2.9 mm endoscopes 0° or 30°
- Ø 4.0 mm endoscopes 0° or 30°



| for Ø 2.0 mm endoscopes                      | FL     | Color code | Art. No.   |                                                                                                                                                 |
|----------------------------------------------|--------|------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>OUTER</b> DIAGNOSTIC SHEATH; Ø 3.7 mm     | 200 mm | ■ red      | 640-015-21 |                                                                                                                                                 |
| DIAGNOSTIC <b>INNER</b> SHEATH 30°; Ø 2.9 mm | 218 mm | ■ red      | 640-015-24 |  601-112-30                                                |
| OBTURATOR                                    |        | ■ red      | 640-015-25 |                                                                                                                                                 |
| for Ø 2.9 mm endoscopes                      | FL     | Color code | Art. No.   |                                                                                                                                                 |
| <b>OUTER</b> DIAGNOSTIC SHEATH; Ø 5.0 mm     | 244 mm | □ white    | 640-015-31 |                                                                                                                                                 |
| DIAGNOSTIC <b>INNER</b> SHEATH 30°; Ø 4.0 mm | 260 mm | □ white    | 640-015-34 |  601-115-30HD2                                             |
| OBTURATOR                                    |        | □ white    | 640-010-35 |                                                                                                                                                 |
| for Ø 4.0 mm endoscopes                      | FL     | Color code | Art. No.   |                                                                                                                                                 |
| <b>OUTER</b> DIAGNOSTIC SHEATH; Ø 6.5 mm     | 240 mm | ■ blue     | 640-015-41 |                                                                                                                                                 |
| DIAGNOSTIC <b>INNER</b> SHEATH 30°; Ø 5.4 mm | 260 mm | ■ blue     | 640-015-44 |  601-113-30HD, 601-113-30HD2, 601-113-30HD4, 601-114-30HD2 |
| OBTURATOR                                    |        | ■ blue     | 640-015-45 |                                                                                                                                                 |

## Hysteroscopy Operating Sheaths 'TEARDROP-SHAPED'

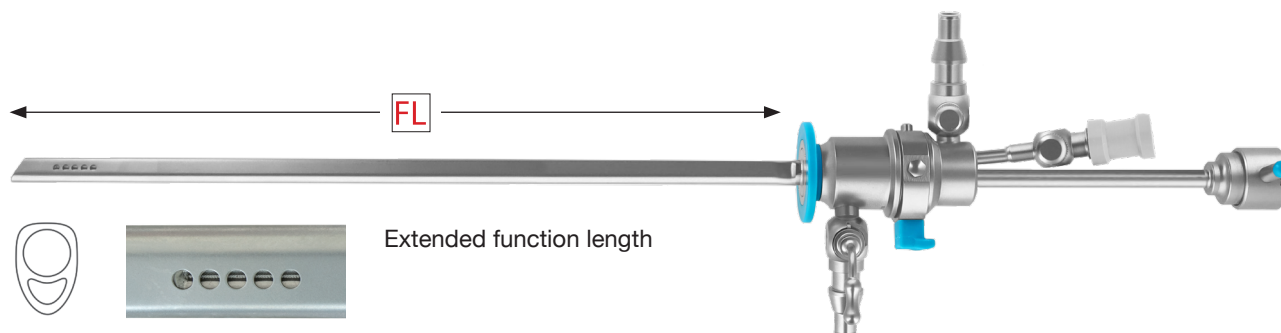
- 2 fixed stopcocks
  - Quick-Lock
  - Shape acc. to anatomy of cervical os
- Available for:
- Ø 2.0 mm endoscopes 30° with working channel 5 Fr.
  - Ø 2.9 mm endoscopes 30° with working channel 5 Fr.
  - Ø 4.0 mm endoscopes 30° with working channel 5 Fr. & 7 Fr.



| for Ø 2.0 mm endoscopes         |                                                                                           |            |                                                                                                                                                          |  |
|---------------------------------|-------------------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Ø 4.3 mm; working channel 5 Fr. | FL 181 mm                                                                                 |            |                                                                                                                                                          |                                                                                       |
| Description                     | Color code                                                                                | Art. No.   | Information                                                                                                                                              |                                                                                       |
| OUTER OPERATING SHEATH 30°      |  red   | 640-025-21 | <br>601-112-30                                                      |                                                                                       |
| INNER OPERATING SHEATH 30°      |  red   | 640-025-22 |                                                                                                                                                          |                                                                                       |
| for Ø 2.9 mm endoscopes         |                                                                                           |            |                                                                                                                                                          |  |
| Ø 5.0 mm; working channel 5 Fr. | FL 192 mm                                                                                 |            | Information                                                                                                                                              |                                                                                       |
| OUTER OPERATING SHEATH 30°      |  white | 640-025-31 | <br>601-115-30HD2                                                   |                                                                                       |
| INNER OPERATING SHEATH 30°      |  white | 640-025-32 |                                                                                                                                                          |                                                                                       |
| for Ø 4.0 mm endoscopes         |                                                                                           |            |                                                                                                                                                          |  |
| Ø 6.5 mm; working channel 5 Fr. | FL 192 mm                                                                                 |            | Information                                                                                                                                              |                                                                                       |
| OUTER OPERATING SHEATH 30°      |  blue  | 640-025-41 | <br>601-113-30HD<br>601-113-30HD2<br>601-113-30HD4<br>601-114-30HD2 |                                                                                       |
| INNER OPERATING SHEATH 30°      |  blue  | 640-025-42 |                                                                                                                                                          |                                                                                       |
| Ø 7.0 mm; working channel 7 Fr. | FL 192 mm                                                                                 |            |                                                                                                                                                          |                                                                                       |
| OUTER OPERATING SHEATH 30°      |  green | 640-025-51 |                                                                                                                                                          |                                                                                       |
| INNER OPERATING SHEATH 30°      |  green | 640-025-52 |                                                                                                                                                          |                                                                                       |

Hysteroscopy Operating Sheaths 'TEARDROP-SHAPED' with extended function length

- 2 stopcocks for continuous-flow
  - Quick-Lock
  - Extended length same scope
  - Shape acc. to anatomy of cervical os
- Available for:
- Ø 2.0 mm endoscopes 30° with working channel 5 Fr.
  - Ø 2.9 mm endoscopes 30° with working channel 5 Fr. & 7 Fr.
  - Ø 4.0 mm endoscopes 30° with working channel 5 Fr.



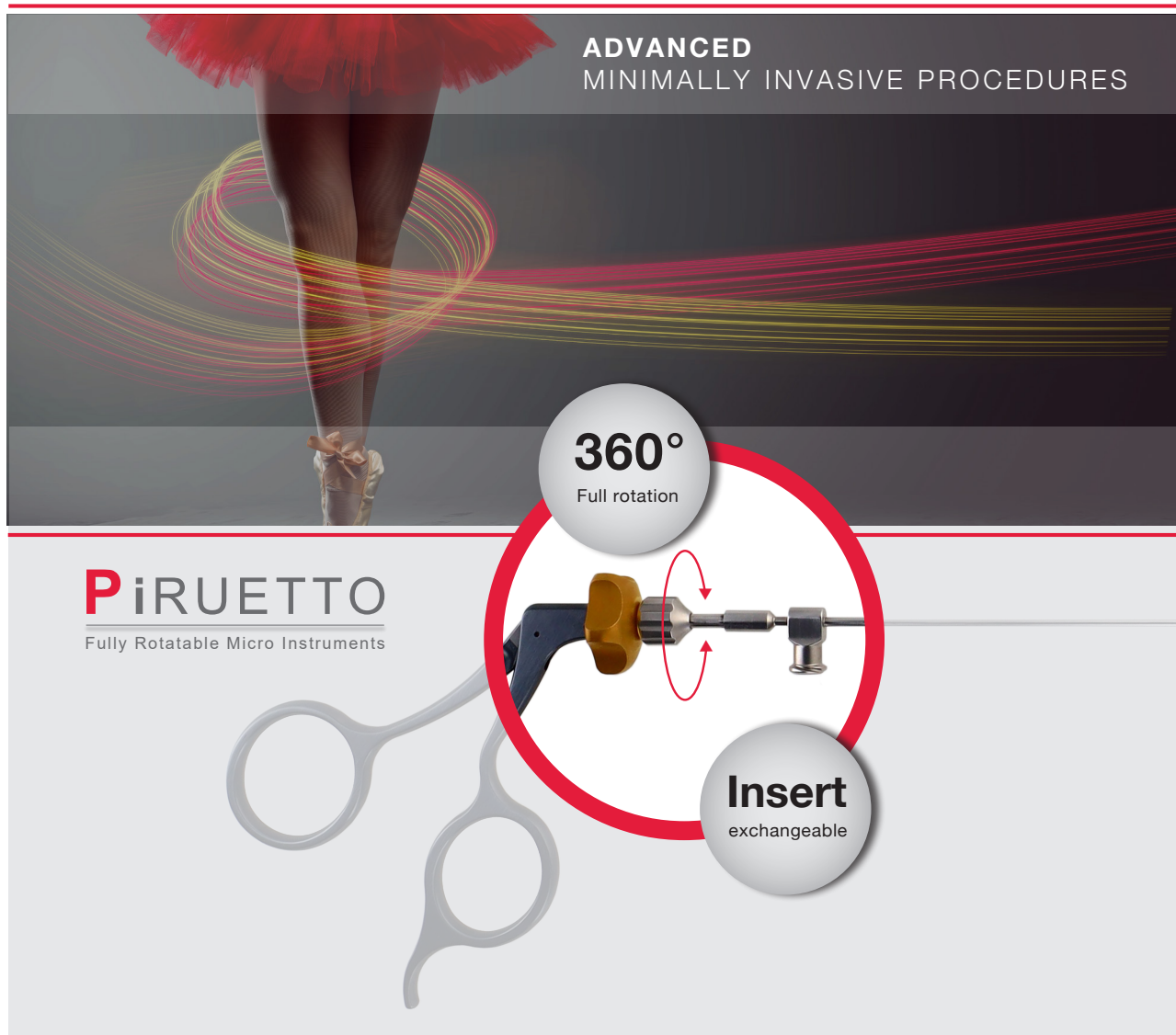
| for Ø 2.0 mm endoscopes                          |                                                                                               |            |                                                                                                                                                          |  |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Ø 4.3 mm; working channel 5 Fr.                  | FL 216 mm                                                                                     |            |                                                                                                                                                          |                                                                                       |
| Description                                      | Color code                                                                                    | Art. No.   | Information                                                                                                                                              |                                                                                       |
| OUTER OPERATING SHEATH 30°                       |  red       | 640-026-21 | <br>601-132-30                                                      |                                                                                       |
| INNER OPERATING SHEATH 30°                       |  red       | 640-026-22 |                                                                                                                                                          |                                                                                       |
| for Ø 2.9 mm endoscopes                          |                                                                                               |            |                                                                                                                                                          |  |
| Ø 5.0 mm; working channel 5 Fr.                  | FL 216 mm                                                                                     |            | Information                                                                                                                                              |                                                                                       |
| OUTER OPERATING SHEATH 30°                       |  turquoise | 640-026-31 | <br>601-115-30HD2                                                   |                                                                                       |
| INNER OPERATING SHEATH 30°                       |  turquoise | 640-026-32 |                                                                                                                                                          |                                                                                       |
| Ø 5.5 mm; working channel 7 Fr.                  | FL 216 mm                                                                                     |            |                                                                                                                                                          |                                                                                       |
| OUTER OPERATING SHEATH 30°; 1 rotatable stopcock |  grey      | 640-026-51 |                                                                                                                                                          |                                                                                       |
| INNER OPERATING SHEATH 30°; 1 rotatable stopcock |  grey      | 640-026-52 |                                                                                                                                                          |                                                                                       |
| for Ø 4.0 mm endoscopes                          |                                                                                               |            |                                                                                                                                                          |  |
| Ø 6.5 mm; working channel 5 Fr.                  | FL 216 mm                                                                                     |            | Information                                                                                                                                              |                                                                                       |
| OUTER OPERATING SHEATH 30°                       |  blue      | 640-026-41 | <br>601-113-30HD<br>601-113-30HD2<br>601-113-30HD4<br>601-114-30HD2 |                                                                                       |
| INNER OPERATING SHEATH 30°                       |  blue      | 640-026-42 |                                                                                                                                                          |                                                                                       |





- For use with Operative Hysteroscopes/ Resectoscope Working Sheaths

### OFFICE HYSTEROSCOPY WITH THE USE OF MICRO-INSTRUMENTS



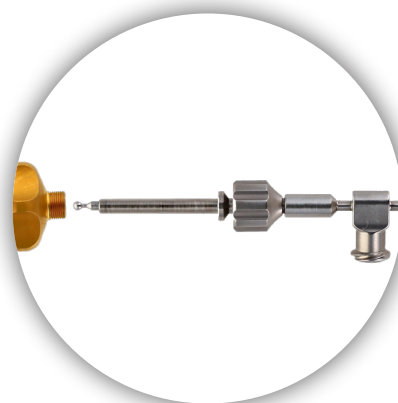
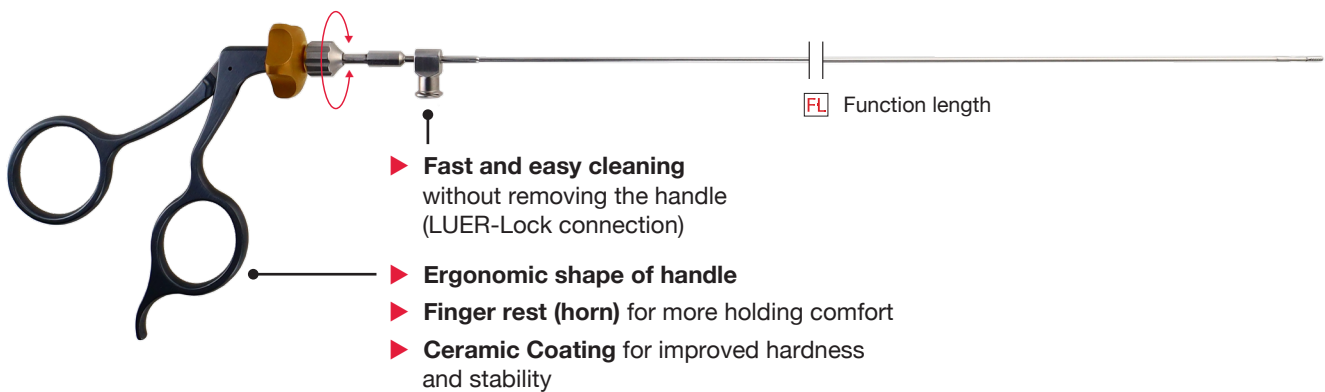
Nowadays, (office) hysteroscopy is the golden standard when examining the female uterus. Various types of findings can be identified, such as polyps, myomas, etc. while performing a diagnostic hysteroscopy. It is often possible to treat some findings in the same procedure using a hysteroscope with a working channel. This working channel allows to introduce semi-rigid Non-HF and HF 5 Fr. instruments for performing minor surgical interventions like:

- Removal of small polyps
- Removal of small myomas
- Septum dissection in infertile patients
- Taking a biopsy under visual control
- Dilatation of the narrowed cervical canal

## PIRUETTO

Fully Rotatable Micro Instruments

- **360° rotation of insert**  
via rotating wheel on handle
- **Rotation with haptic feedback**  
allows precise maneuvering
- **Extended Lifetime**  
due to overload protection
- **Economic solution**  
using only one handle with exchangeable inserts



For more information  
please see our  
PIRUETTO brochure



<https://qrco.de/piruetto>

- **Self-holding handle**  
for easy connection and  
exchange of inserts
- **Quick and easy exchange of insert**  
perfect grip through ripples on union nut  
while (dis-)assembling

### LUER-Lock Caps (for better identification of the inserts)

|                                                                                     |                             |                                                                                            |                   |
|-------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------|-------------------|
|  | ► e.g. for Biopsy Forceps   |  red    | <b>087-960-01</b> |
|  | ► e.g. for Scissors         |  yellow | <b>087-965-01</b> |
|  | ► e.g. for Grasping Forceps |  black  | <b>087-970-01</b> |
|  | ► e.g. for Punches          |  green  | <b>087-975-01</b> |

► For use with Operative Hysteroscopes/ Resectoscope Working Sheaths

## PIRUETTO 360° Rotatable Semi-Rigid Instruments

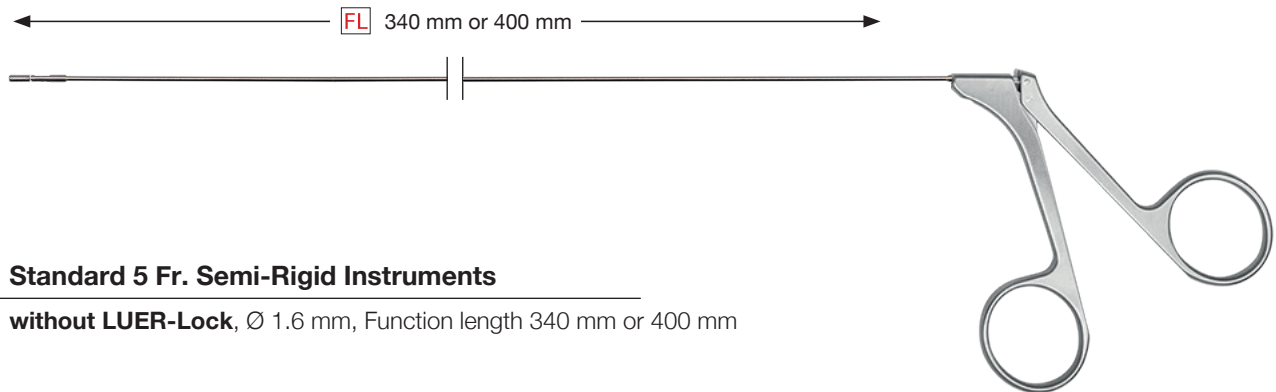
with Exchangeable\* Inserts

|                                                                                     | Version                                          | Length (FL) | 5 Fr.               | 7 Fr.               |
|-------------------------------------------------------------------------------------|--------------------------------------------------|-------------|---------------------|---------------------|
|    | BIOPSY FORCEPS                                   | 400 mm      | <b>584-012-16LL</b> | <b>584-012-23LL</b> |
|                                                                                     | ► Oval<br>► Double action                        | 340 mm      | <b>584-212-16LL</b> | <b>584-212-23LL</b> |
|    | SCISSORS                                         | 400 mm      | <b>584-022-16LL</b> | <b>584-022-23LL</b> |
|                                                                                     | ► Blunt<br>► Single action                       | 340 mm      | <b>584-222-16LL</b> | <b>584-222-23LL</b> |
|    | SCISSORS                                         | 400 mm      | <b>584-023-16LL</b> | <b>584-023-23LL</b> |
|                                                                                     | ► Pointed<br>► Single action                     | 340 mm      | <b>584-223-16LL</b> | <b>584-223-23LL</b> |
|  | BIOPSY FORCEPS                                   | 400 mm      | <b>584-056-16LL</b> | -                   |
|                                                                                     | ► Oval   Serrated<br>► 1x2 teeth   Double Action | 340 mm      | <b>584-256-16LL</b> | -                   |
|  | GRASPING FORCEPS                                 | 400 mm      | <b>584-062-16LL</b> | <b>584-062-23LL</b> |
|                                                                                     | ► Alligator jaw<br>► Double action               | 340 mm      | <b>584-262-16LL</b> | <b>584-262-23LL</b> |
|  | PUNCH                                            | 400 mm      | <b>584-058-16LL</b> | -                   |
|                                                                                     | ► Through-cutting<br>► Single action             | 340 mm      | <b>584-258-16LL</b> | -                   |
|  | TENCACULUM FORCEPS                               | 400 mm      | <b>584-078-16LL</b> | <b>584-078-23LL</b> |
|                                                                                     | ► 1x1 spike<br>► Double action                   | 340 mm      | <b>584-278-16LL</b> | <b>584-278-23LL</b> |
|  | BIOPSY FORCEPS                                   | 400 mm      | <b>584-050-16LL</b> | -                   |
|                                                                                     | ► Oval   with pin<br>► Double action             | 340 mm      | <b>584-250-16LL</b> | -                   |
|                                                                                     | HANDLE only                                      |             | <b>584-305-00CC</b> | <b>584-305-00CC</b> |

\* To purchase an insert only, please add „A“ behind the part number.

**Please note:** 5 Fr. instruments with FL 400 mm are recommended for sheaths with extended function length.

► For use with Operative Hysteroscopes/ Resectoscope Working Sheaths



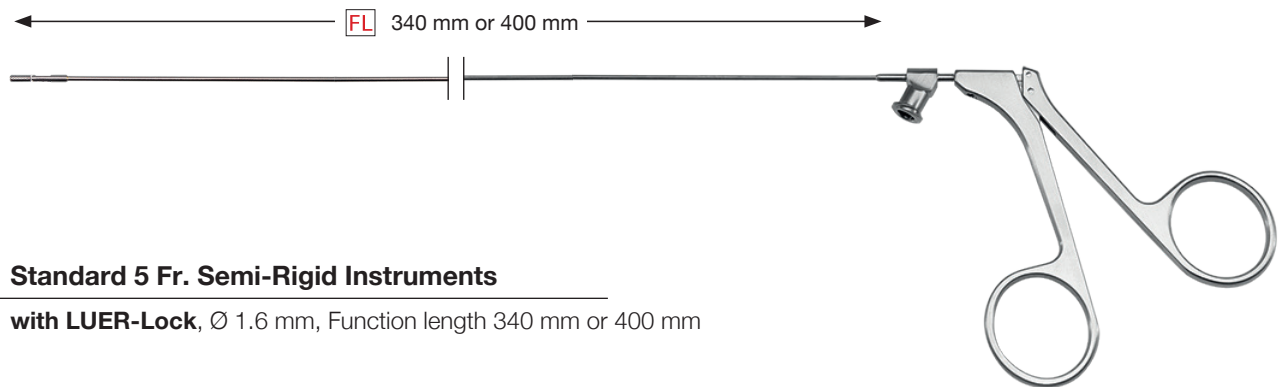
## Standard 5 Fr. Semi-Rigid Instruments

without LUER-Lock, Ø 1.6 mm, Function length 340 mm or 400 mm

|                                                                                     | Version                                        | FL 340 mm          | FL 400 mm *        |
|-------------------------------------------------------------------------------------|------------------------------------------------|--------------------|--------------------|
|    | Biopsy Forceps<br>► Double Action              | <b>583-214-16</b>  | <b>583-014-16</b>  |
|  | Scissors, blunt<br>► Single Action             | <b>583-228-16</b>  | <b>583-028-16</b>  |
|  | Scissors, pointed<br>► Single Action           | <b>583-229-16</b>  | <b>583-029-16</b>  |
|  | Tenaculum Forceps<br>► Double Action           | <b>583-278-16</b>  | <b>583-078-16</b>  |
|  | Punch, through cutting<br>► Single Action      | <b>583-258-16</b>  | <b>583-058-16</b>  |
|  | Biopsy and Grasping Forceps<br>► Double Action | <b>583-256-16</b>  | <b>583-056-16</b>  |
|  | Biopsy Forceps, with Pin<br>► Double Action    | <b>583-250-16G</b> | <b>583-250-40G</b> |

\* 5 Fr. with FL 400 mm recommended for sheaths with extended function length

► For use with Operative Hysteroscopes/ Resectoscope Working Sheaths



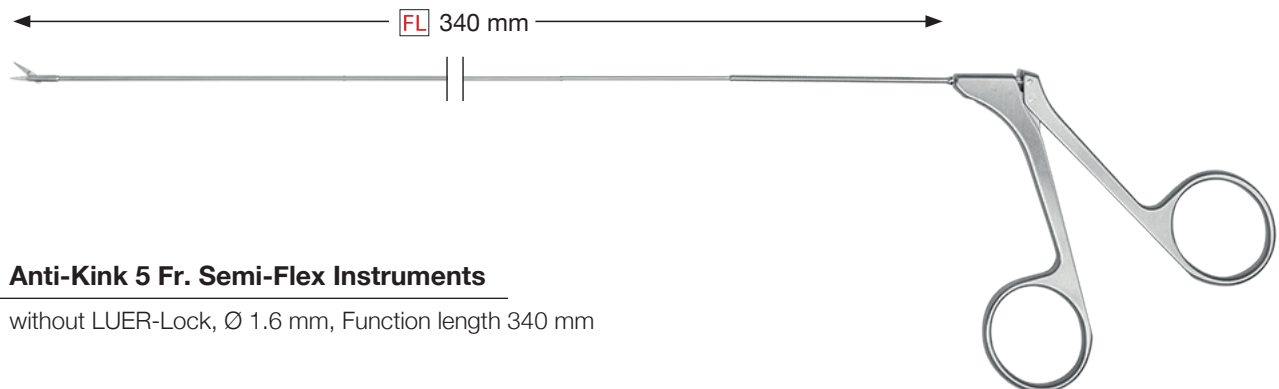
## Standard 5 Fr. Semi-Rigid Instruments

with LUER-Lock, Ø 1.6 mm, Function length 340 mm or 400 mm

|                                                                                     | Version                                        | FL 340 mm           | FL 400 mm *         |
|-------------------------------------------------------------------------------------|------------------------------------------------|---------------------|---------------------|
|    | Biopsy Forceps<br>► Double Action              | <b>583-214-16LL</b> | <b>583-014-16LL</b> |
|  | Scissors, blunt<br>► Single Action             | <b>583-228-16LL</b> | <b>583-028-16LL</b> |
|  | Scissors, pointed<br>► Single Action           | <b>583-229-16LL</b> | <b>583-029-16LL</b> |
|  | Tenaculum Forceps<br>► Double Action           | <b>583-278-16LL</b> | <b>583-078-16LL</b> |
|  | Punch, through cutting<br>► Single Action      | <b>583-258-16LL</b> | <b>583-058-16LL</b> |
|  | Biopsy and Grasping Forceps<br>► Double Action | <b>583-256-16LL</b> | <b>583-056-16LL</b> |

\* 5 Fr. with FL 400 mm recommended for sheaths with extended function length

- For use with Operative Hysteroscopes/ Resectoscope Working Sheaths



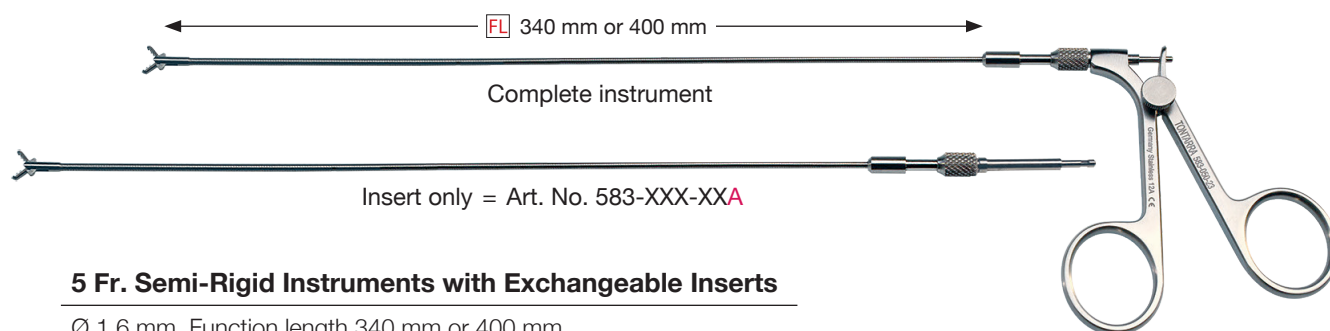
## **Anti-Kink 5 Fr. Semi-Flex Instruments**

without LUER-Lock, Ø 1.6 mm, Function length 340 mm

- To reduce the risk of damages due to bending TONTARRA has developed special “Anti-Kink” 5 Fr. instruments. These consist of a semi-rigid distal part as known of the other semi-rigid instruments. The proximal part is flexible which allows a higher bending resistance compared with a standard semi-rigid instrument.

|                                                                                     | Version                              | Anti-Kink           |
|-------------------------------------------------------------------------------------|--------------------------------------|---------------------|
|  | Scissors, blunt<br>► Single Action   | <b>583-228-16FS</b> |
|  | Scissors, pointed<br>► Single Action | <b>583-229-16FS</b> |
|  | Tenaculum Forceps<br>► Double Action | <b>583-278-16FS</b> |

► For use with Operative Hysteroscopes/ Resectoscope Working Sheaths



## 5 Fr. Semi-Rigid Instruments with Exchangeable Inserts

Ø 1.6 mm, Function length 340 mm or 400 mm

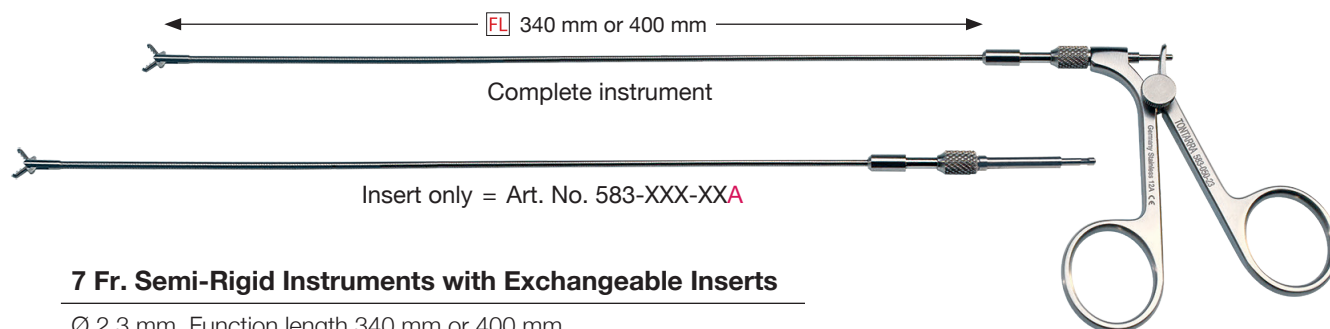
|  | Version                     | FL 340 mm            | FL 400 mm *            |
|--|-----------------------------|----------------------|------------------------|
|  | Biopsy Forceps              | <b>583-212-16</b>    | <b>583-012-16</b>      |
|  | ► Double Action             | <b>583-212-16A</b>   | <b>583-012-16A</b>     |
|  | Scissors, blunt             | <b>583-222-16</b>    | <b>583-022-16</b>      |
|  | ► Single Action             | <b>583-222-16A</b>   | <b>583-022-16A</b>     |
|  | Scissors, pointed           | <b>583-223-16</b>    | <b>583-023-16</b>      |
|  | ► Single Action             | <b>583-223-16A</b>   | <b>583-023-16A</b>     |
|  | Hook Scissors               | <b>583-232-16</b>    | <b>583-032-16</b>      |
|  | ► Single Action             | <b>583-232-16A</b>   | <b>583-032-16A</b>     |
|  | Biopsy Forceps, serrated    | <b>583-252-16</b>    | <b>583-052-16</b>      |
|  | ► Double Action             | <b>583-252-16A</b>   | <b>583-052-16A</b>     |
|  | Biopsy and Grasping Forceps | <b>583-256-16/R</b>  | <b>583-256-16/R40</b>  |
|  | ► Double Action             | <b>583-256-16/RA</b> | <b>583-256-16/RA40</b> |
|  | Alligator Forceps           | <b>583-262-16</b>    | <b>583-062-16</b>      |
|  | ► Double Action             | <b>583-262-16A</b>   | <b>583-062-16A</b>     |
|  | Long Grasping Forceps       | <b>583-272-16</b>    | <b>583-072-16</b>      |
|  | ► Double Action             | <b>583-272-16A</b>   | <b>583-072-16A</b>     |
|  | Handle only                 | <b>583-305-00</b>    | <b>583-305-00</b>      |

Article numbers ending with **A** = Insert only.

\* 5 Fr. with FL 400 mm recommended for sheaths with extended function length



► For use with Operative Hysteroscopes/ Resectoscope Working Sheaths



## 7 Fr. Semi-Rigid Instruments with Exchangeable Inserts

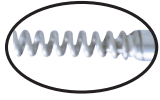
Ø 2.3 mm, Function length 340 mm or 400 mm

|  | Version                  | FL 340 mm          | FL 400 mm *        |
|--|--------------------------|--------------------|--------------------|
|  | Biopsy Forceps           | <b>583-212-23</b>  | <b>583-012-23</b>  |
|  | ► Double Action          | <b>583-212-23A</b> | <b>583-012-23A</b> |
|  | Scissors, blunt          | <b>583-222-23</b>  | <b>583-022-23</b>  |
|  | ► Single Action          | <b>583-222-23A</b> | <b>583-022-23A</b> |
|  | Scissors, pointed        | <b>583-223-23</b>  | <b>583-023-23</b>  |
|  | ► Single Action          | <b>583-223-23A</b> | <b>583-023-23A</b> |
|  | Hook Scissors            | <b>583-232-23</b>  | <b>583-032-23</b>  |
|  | ► Single Action          | <b>583-232-23A</b> | <b>583-032-23A</b> |
|  | Biopsy Forceps, serrated | <b>583-252-23</b>  | <b>583-052-23</b>  |
|  | ► Double Action          | <b>583-252-23A</b> | <b>583-052-23A</b> |
|  | Alligator Forceps        | <b>583-262-23</b>  | <b>583-062-23</b>  |
|  | ► Double Action          | <b>583-262-23A</b> | <b>583-062-23A</b> |
|  | Tenaculum Forceps        | <b>583-278-23</b>  | -                  |
|  | ► Double Action          | <b>583-278-23A</b> | -                  |
|  | Handle only              | <b>583-305-00</b>  | <b>583-305-00</b>  |

Article numbers ending with **A** = Insert only.

\* 7 Fr. with FL 400 mm recommended for sheaths with extended function length

► For use with Operative Hysteroscopes/ Resectoscope Working Sheaths



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**583-280-00**

Myoma Fixation Instrument; 340 mm



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**583-285-00**

Palpation Probe; graduated; **340 mm**

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**583-280-00L**

Palpation Probe, graduated; **400 mm**

- For use with Operative Hysteroscopes/ Resectoscope Working Sheaths



### Polyp Retraction Basket for Hysteroscopy

by Dr. Zizza



**640-060-20**

Handle for Dr. Zizza System; with LUER-Lock and Stopper



**640-060-16**

Tubus for Dr. Zizza System; semi-flexible; 5 Fr.; FL 432 mm



**640-060-04**

Dr. Zizza Retraction Basket; 4 wires; atraumatic tip; basket only

► For use with Operative Hysteroscopes/ Resectoscope Working Sheaths



## Monopolar Instruments

Flexible monopolar electrodes



### 582-510-05

Button Electrode; **5 Fr.**; 470 mm

### 582-510-07

Button Electrode; **7 Fr.**; 470 mm



### 582-511-05

Needle Electrode; **5 Fr.**; angled; 470 mm

### 582-511-07

Needle Electrode; **7 Fr.**; angled; 470 mm



### 582-514-05

Loop Electrode; **5 Fr.**; 470 mm

### 582-514-07

Loop Electrode; **7 Fr.**; 470 mm



## Bipolar Instruments

Semi-rigid bipolar electrodes



### 582-515-05

Button Electrode; 5 Fr.; 360 mm



### 582-516-05

Needle Electrode; 5 Fr.; **45° angled**; 360 mm



### 582-518-05

Needle Electrode; 5 Fr.; **90° angled**; 360 mm



### 582-517-05

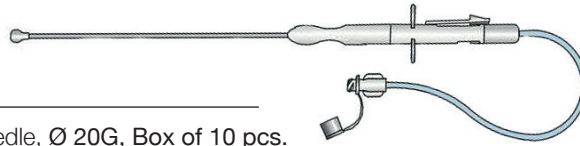
Needle Electrode; 5 Fr.; **straight**; 360 mm

► **Please note: HF-Connection Cables on pages 110-112!**

- Pain reduction made easy, safe and reliable.

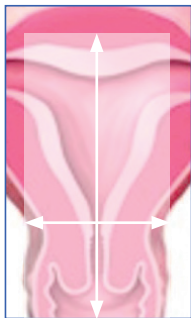
## BELO/2-PB02N

HYSTERO-BLOCK Needle, Ø 20G, Box of 10 pcs.



## PARACERVICAL LOCAL BLOCKADE IN HYSTEROSCOPY (hysteroscopes up to approx. Ø 5.0 mm) & MINI-RESECTOSCOPY

**With more than 60,000 diagnostic and operative hysteroscopic procedures Dr. Raffaele Ricciardi is one of the top experts in the field.** He also published and co-authored several studies and articles. Dr. Ricciardi annually performs 1.300 surgeries, of these over 700 with paracervical local blockades.



Anesthetized area

"Criteria to apply local anesthesia on the patient's side are anatomic circumstances (for example patients who never gave birth may experience more pain), or the anticipated anxiety and stress level during an intervention; **applying local anesthesia is reassuring for patient and gynecologist alike.**

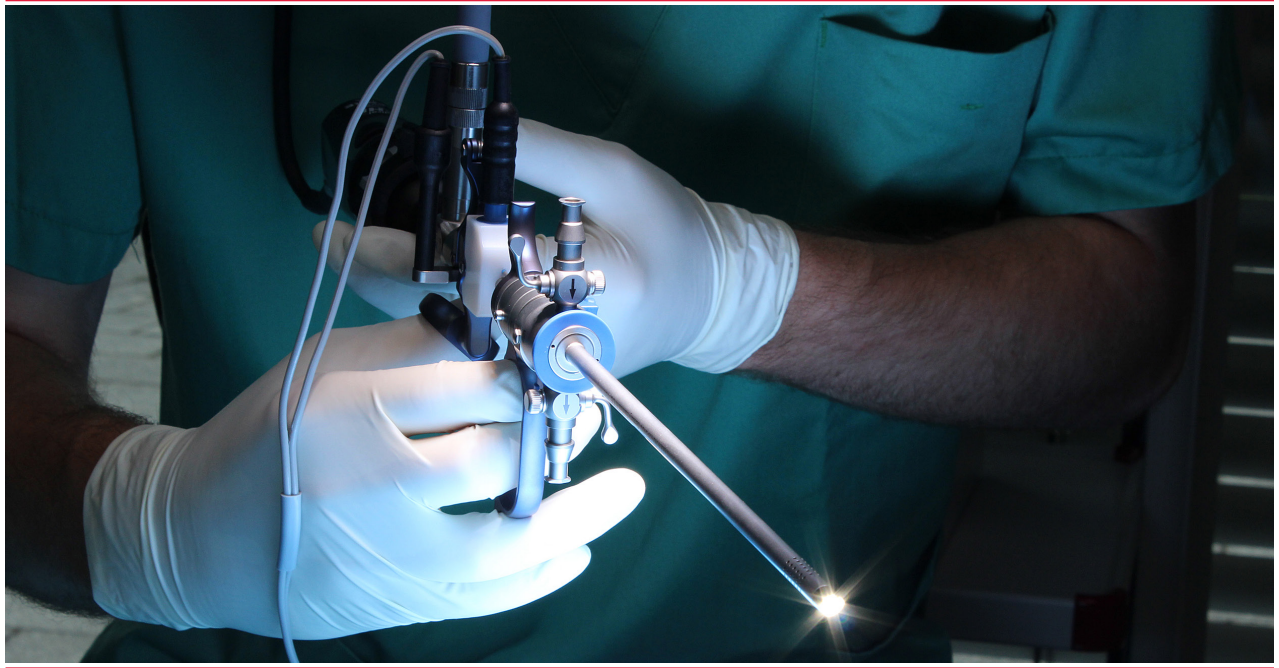
Another criteria is of course the intervention itself; its duration is a determining factor for pain sensation. In any case: Anesthesia assistance should be within reach in case of an emergency."



**Dr. Raffaele RICCIARDI**

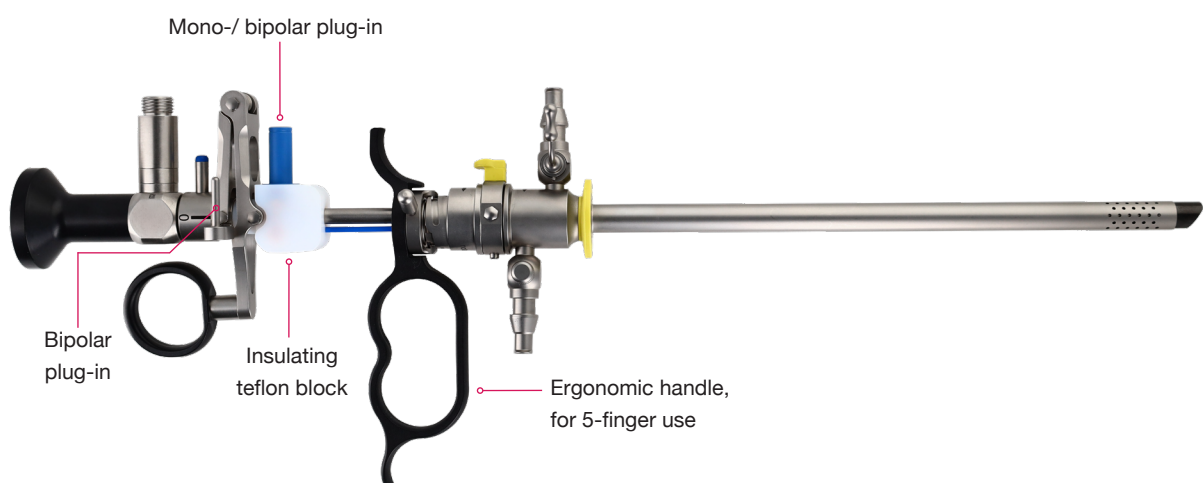
Director of Hysteroscopy  
Department, Abano Terme, Italy  
Member of Executive Council  
and Operative Hysteroscopy  
School "Arbor Vitae"

## RESECTOSCOPY



While bipolar resection has become gold standard, the monopolar resection is still widely spread.

For enabling the use of the resectoscopes in both ways, TONTARRA has developed **HYBRID resectoscopes**. They allow the surgeon to use monopolar or bipolar current in combination with the corresponding HF electrodes and cables.



## WELCOME TO THE GENTLE SIDE OF GYNECOLOGY



The Gubbini Resectoscopy Systems have revolutionized procedures in minimally invasive gynecology towards a more “gentle” approach with less traumatizing interventions.

- No dilatation of the cervical canal necessary
- Apt for treatment in office setting: It enables the treatment of pathologies which up to date often are still performed under general anesthesia, and/or require hospitalization.
- Optimization of the “See & Treat” approach: by simply exchanging the diagnostic working sheath with the inner continuous flow resectoscopic sheath – without the need of re-introduction of the outer sheath. Diagnostic hysteroscopy and therapeutic resectoscopy can be performed during one single session.
- The bipolar mode increases safety by using saline solution as physiologic distension medium (NaCl 0,9%). Other important safety aspects are the reduced risk of intra- and post-operative complications.
- Cost minimization (shorter operating times, less anesthesia, less complication risk, less hospitalization).



*“The Mini Resectoscopes can be applied to nearly all standard endo-uterine procedures.”*

**Prof. Dr.  
Giampietro Gubbini**

Round tip with small diameter: **16 Fr.**

**GUBBINI**original



Elliptic formed tip for an easier introduction into the cervical canal. Average diameter: **14.9 Fr.**

**GUBBINI**ellipse



Oblique formed tip, **18.5 Fr.**  
(Dilatation and anesthesia required).

**GUBBINI**midi







## Results from clinical studies are:

- Shorter operation times in comparison to conventional 24/26 Fr. systems and other small instrument systems of competitors<sup>1</sup>.
- Significantly less pain sensation – measured by VAS (Visual Analog Scale), even if compared to treatments under anesthesia with standard systems<sup>1,2</sup>.
- Progressive learning curve: The intuitive system enables surgeons to improve their technique with growing experience. To master the system, usually thirty procedures are required until a fast and nearly painless operation can be performed<sup>2</sup>.
- Optimally adjusted electrodes – even 90° resections are possible, despite the small diameters of the resectoscopic sheaths<sup>2</sup>.

## Clinical Validations:

<sup>1</sup> Using a 16-French resectoscope as an alternative device in the treatment of uterine lesions: a randomized controlled trial.

Ricciardi R, Lanzone A, Tagliaferri V, Di Florio C, Ricciardi L, Selvaggi L, Guido M.;

Source: Obstetrics and Gynecology; Date of publication: 2012 July; 120(1):160-5.

<sup>2</sup> Feasibility and Acceptability of Office-Based Polypectomy with a 16F Mini-Resectoscope: A Multicenter Clinical Study.

Dealberti D, Riboni F, Cosma S, Pisani C, Montella F, Saitta S, Calagna G, Di Spiezio Sardo A. J Minimal Invasive Gynecology;

Date of publication: 2016 Mar-Apr; 23(3): 418-24.



**GUBBINI**ellipse

**14.9 Fr.**



## 601-115-00HD2

Hysteroscope HD+2; Ø 2.9 mm; **0°**; 300 mm; autoclavable



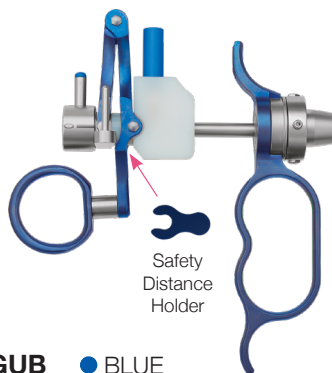
## 601-115-12HD2

Hysteroscope HD+2; Ø 2.9 mm; **12°**; 300 mm; autoclavable



## 601-115-30HD2

Hysteroscope HD+2; Ø 2.9 mm; **30°**; 300 mm; autoclavable



► Hysteroscope HD+2



## 582-150-00GUB ● BLUE

GUBBINIoriginal/ellipse Working Element; **passive**; hybrid; **Quick-Lock**; titan

## 582-150-02GUB

Safety Distance Holder; width: 2 mm

► **Please note: HF-Connection Cables on pages 110-112!**



## 582-150-21GUE ● GREY

GUBBINIellipse Inner Sheath; 13.4 Fr.; non-rotatable; Quick-Lock



## 582-150-24GUE ● GREY

GUBBINIellipse Outer Sheath; 14.9 Fr.; non-rotatable; **Quick-Lock**; ceramic tip



## 582-150-39GUE ● GREY

GUBBINIellipse Working Insert; 13.4 Fr.; **Quick-Lock**; 5 Fr. working channel

► Hysteroscope HD+2

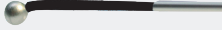


**GUBBINE**ellipse

**14.9 Fr.**

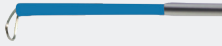
## HF Electrodes, bipolar

**sterile**; single-use; Box of 5 pcs.

|                                                                                   | Version                                  | Color code                                                                              | Bipolar (sterile)       |
|-----------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------|
|  | Loop Electrode<br>► 90° angled; teardrop |  blue  | <b>582-150-40GUBE-S</b> |
|  | Ball Electrode<br>► angled               |  black | <b>582-150-42GUB-S</b>  |
|  | Knife Electrode<br>► angled              |  black | <b>582-150-43GUB-S</b>  |

## HF Electrodes, monopolar

**non-sterile**; reusable

|                                                                                     | Version                                       | Color code                                                                               | Monopolar (non-sterile) |
|-------------------------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------|-------------------------|
|  | Loop Electrode<br>► small; size 1; 90° angled |  blue | <b>582-150-40GU</b>     |
|  | Ball Electrode<br>► angled                    |  blue | <b>582-150-42GU</b>     |
|  | Knife Electrode<br>► angled                   |  blue | <b>582-150-43GU</b>     |



## 590-000-03

Protection Tube; for electrodes; for sterilization and storing; stainless steel; 25 mm x 295 mm

**GUBBINI**original

**16 Fr.**



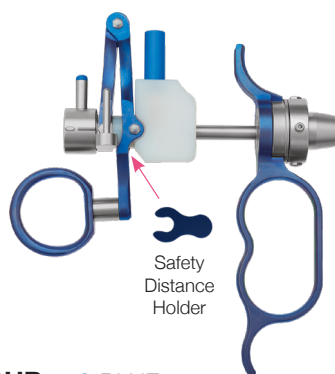
## 601-115-00HD2

Hysteroscope HD+2; Ø 2.9 mm; **0°**; 300 mm; autoclavable



## 601-115-30HD2

Hysteroscope HD+2; Ø 2.9 mm; **30°**; 300 mm; autoclavable



► Hysteroscope HD+2



## 582-150-00GUB ● BLUE

GUBBINIoriginal/ellipse Working Element; **passive**; hybrid; **Quick-Lock**; titan

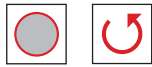
## 582-150-02GUB

Safety Distance Holder; width: 2 mm

► **Please note: HF-Connection Cables on pages 110-112!**

## GUBBINIoriginal

16 Fr.



**582-150-26GU** ● BLUE

GUBBINIoriginal Inner Sheath; 14.4 Fr.; **rotatable**; **Quick-Lock**



**582-150-21GU** ● BLUE

GUBBINIoriginal Inner Sheath; 14.4 Fr.; **non-rotatable**; **Quick-Lock**



**582-150-24GU** ● BLUE

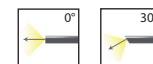
GUBBINIoriginal Outer Sheath; 16 Fr.; non-rotatable;  
**Quick-Lock**; ceramic tip



**582-150-30GU** ● BLUE

GUBBINIoriginal Visual Obturator; 14.4 Fr.; non-rotatable; **Quick-Lock**

► Hysteroscope HD+2



**582-150-39 GU** ● BLUE

GUBBINIoriginal Working Insert; 14.4 Fr.; **Quick-Lock**; 5 Fr. working channel

► Hysteroscope HD+2

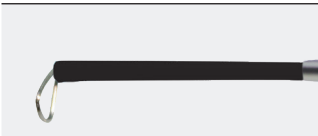
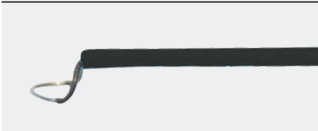
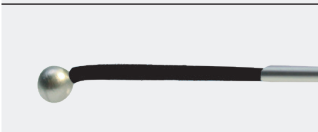
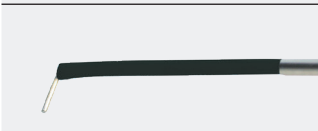


**GUBBINI**original

**16 Fr.**

## HF Electrodes, bipolar

**sterile**; single-use; Box of 5 pcs.

|                                                                                     | Version                                       | Color code | Bipolar (sterile)      |
|-------------------------------------------------------------------------------------|-----------------------------------------------|------------|------------------------|
|    | Loop Electrode<br>► small; size 1; 90° angled | ■ black    | <b>582-150-40GUB-S</b> |
|    | Loop Electrode<br>► large; size 2; 90° angled | ■ black    | <b>582-150-41GUB-S</b> |
|   | Loop Electrode<br>► straight                  | ■ black    | <b>582-150-44GUB-S</b> |
|  | Ball Electrode<br>► angled                    | ■ black    | <b>582-150-42GUB-S</b> |
|  | Knife Electrode<br>► angled                   | ■ black    | <b>582-150-43GUB-S</b> |



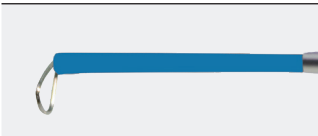
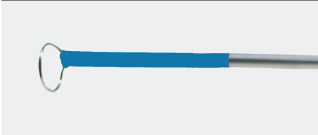
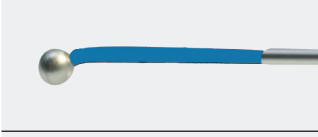
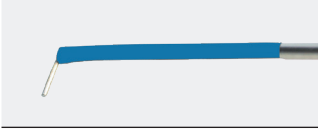
► **Sterile packaging: Box of 5 pieces.**

**GUBBINI**original

**16 Fr.**

## HF Electrodes, monopolar

**non-sterile**; reusable

|                                                                                     | Version                                       | Color code                                                                               | Monopolar (non-sterile) |
|-------------------------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------|-------------------------|
|    | Loop Electrode<br>► small; size 1; 90° angled |  blue   | <b>582-150-40GU</b>     |
|    | Loop Electrode<br>► large; size 2; 90° angled |  blue   | <b>582-150-41GU</b>     |
|   | Loop Electrode<br>► straight                  |  blue  | <b>582-150-44GU</b>     |
|  | Ball Electrode<br>► angled                    |  blue | <b>582-150-42GU</b>     |
|  | Knife Electrode<br>► angled                   |  blue | <b>582-150-43GU</b>     |



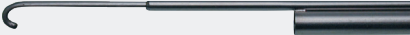
**590-000-03**

Protection Tube; for electrodes; for sterilization and storing; stainless steel; 25 mm x 295 mm

## GUBBINIoriginal 16 Fr.

### Preparation Loops („Cold Loops“)

non-sterile; currentless

|                                                                                     | Version                              | Non-HF (non-sterile) |
|-------------------------------------------------------------------------------------|--------------------------------------|----------------------|
|    | Preparation Loop<br>► J-Hook; small  | <b>582-150-45GU</b>  |
|    | Preparation Loop<br>► J-Hook; medium | <b>582-150-46GU</b>  |
|    | Preparation Loop<br>► circular       | <b>582-150-47GU</b>  |
|    | Preparation Loop<br>► lanceolate     | <b>582-150-48GU</b>  |
|  | Preparation Loop<br>► spatulate      | <b>582-150-49GU</b>  |

### Advantages of “Cold Loops” and the mechanical enucleation technique:

- Less traumatizing intervention: less weakening of the myometrium
- Avoidance of thermal damage to blood vessels: the vascularized connective tissue bridges are lacerated without use of any type of HF current
- No forming of fibrotic scarring during the healing process

### The method in short:

Following the elimination of the intracavitary component using the traditional resectoscopic „slicing“ technique with a monopolar or bipolar current, the intramural component gets removed by using „Cold Loops“ by exercising force in the cleavage space between the myoma and the surrounding myometrium to separate the myoma from the uterine wall. Thus, the intramural component of the myoma is transformed into an intracavitary component, which can then be removed using the traditional technique.

### Clinical Validations:

- Hysteroscopic myomectomy: a comprehensive review of surgical techniques  
*Attilio Di Spiezio Sardo, Ivan Mazzon, Silvia Bramante, Stefano Bettocchi, Giuseppe Bifulco, Maurizio Guida and Carmine Nappi*  
Source: *Human Reproduction Update*, Volume 14, Issue 2, Pages 101–119, March/April 2008
- Is Cold Loop Hysteroscopic Myomectomy a Safe and Effective Technique for the Treatment of Submucous Myomas With Intramural Development? A Series of 1434 Surgical Procedures  
*Ivan Mazzon, MD, Alessandro Favilli, MD, Mario Grasso, MD, Stefano Horvath, MD, Gian Carlo Di Renzo, MD, PhD, and Sandro Gerli, MD*  
Source: *JMIG*; Volume 22, Issue 5, pages 792-798, July 2015

**GUBBINI**original

16 Fr.

## **SCOUT Preparation Electrode („Graduated Cold Loop“)**

**non-sterile**; currentless; spear-shaped



The **“Scout Cold Loop”** was specially designed to help with the preparation of the cervical channel in patients with cervical stenosis. With the help of Scout and its special profile it is, according to Dr. Gubbini, extremely helpful to dissolve stenoses and create an open cervical channel to easily introduce the resectoscope into the patient.



## **582-150-50GU**

Preparation Electrode SCOUT; spear-shaped; blunt; currentless; 40° angled



**Prof. Dr.  
Giampietro Gubbini**

„The Graduated SCOUT Preparation Loop also helps to assume the length of a uterine septum before and after treatment as well as the dimensions of intracavitary uterine pathologies. Therefore, it represents a perfect completion to the existing preparation loops and HF-electrodes that can be used with the GUBBINIoriginal and GUBBINIellipse Mini-Hystero-Resectoscopes.

Extreme uterine retroversion or anteversion and cervical stenosis may limit the ability to access to the uterine cavity. In order to minimize the risk of perforation and cervical trauma the SCOUT Preparation Loop should be used to overcome uterine malposition and cervical stenosis. Thanks to its special shape it helps the physician to drastically reduce difficult navigation during instrument insertion through the endocervical channel, especially in difficult conditions.“



## **590-000-03**

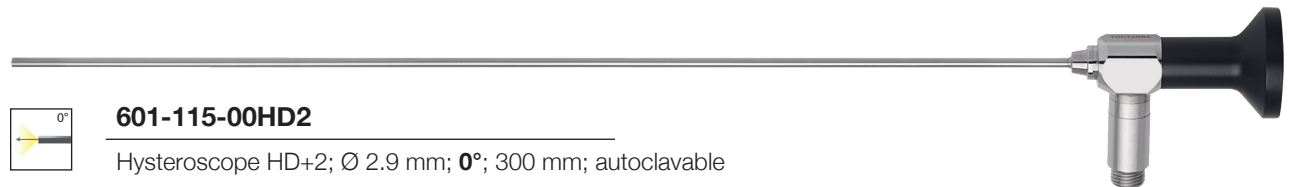
Protection Tube; for electrodes; for sterilization and storing; stainless steel; 25 mm x 295 mm



► for **2.9 mm** Endoscopes

**GUBBINImidi**

**18.5 Fr.**



## **601-115-00HD2**

Hysteroscope HD+2; Ø 2.9 mm; **0°**; 300 mm; autoclavable



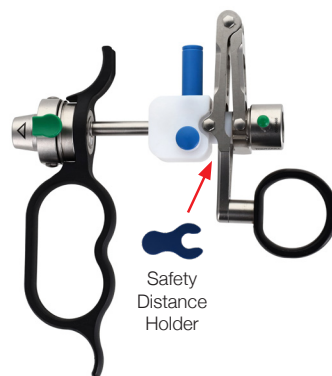
## **601-115-12SHD2**

Hysteroscope HD+2; Ø 2.9 mm; **12°**; 300 mm; autoclavable



## **601-115-30HD2**

Hysteroscope HD+2; Ø 2.9 mm; **30°**; 300 mm; autoclavable



► Hysteroscope HD+2



## **582-180-00B** ● GREEN

GUBBINImidi Working Element; **passive**; hybrid; **Quick-Lock**

## **582-150-02GUB**

Safety Distance Holder; width: 2 mm

► **Please note: HF-Connection Cables on pages 110-112!**

# Hybrid Resectoscopes

► for 2.9 mm Endoscopes

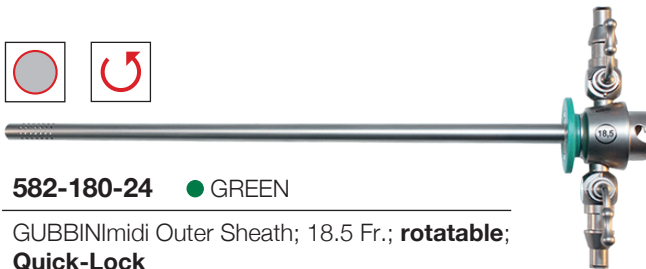
**TONTARRA**

## GUBBINImidi 18.5 Fr.



**582-180-26** ● GREEN

GUBBINImidi Inner Sheath; 17.5 Fr.; **rotatable**; **Quick-Lock**; ceramic tip



**582-180-24** ● GREEN

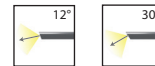
GUBBINImidi Outer Sheath; 18.5 Fr.; **rotatable**; **Quick-Lock**



**582-180-39** ● GREEN

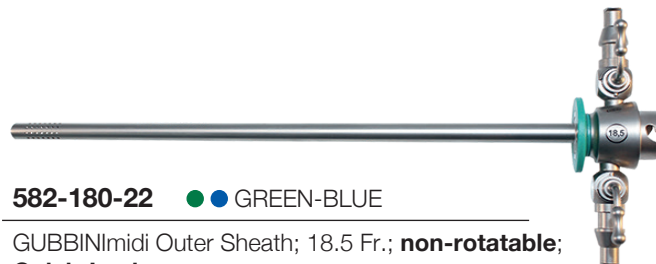
GUBBINImidi Working Insert; 17.5 Fr.; **rotatable**; **Quick-Lock**; 5 Fr. working channel

► Hysteroscope HD+2



**582-180-21** ● GREEN

GUBBINImidi Inner Sheath; 17.5 Fr.; **non-rotatable**; **Quick-Lock**; ceramic tip



**582-180-22** ● ● GREEN-BLUE

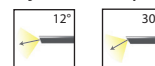
GUBBINImidi Outer Sheath; 18.5 Fr.; **non-rotatable**; **Quick-Lock**



**582-180-38** ● ● GREEN-BLUE

GUBBINImidi Working Insert; 17.5 Fr. **non-rotatable**; **Quick-Lock**; 5 Fr. working channel

► Hysteroscope HD+2



**582-180-23** ● GREEN

Obturator for **rotatable** and **non-rotatable** sheaths; **Quick-Lock**

## GUBBINImidi **18.5 Fr.**

### HF Electrodes, hybrid

**non-sterile;** reusable

|                                                                                     | Version                        | Color code | Bipolar (non-sterile) |
|-------------------------------------------------------------------------------------|--------------------------------|------------|-----------------------|
|    | Loop Electrode<br>► 30° angled | ■ green    | <b>582-180-40B</b>    |
|    | Loop Electrode<br>► straight   | ■ green    | <b>582-180-41B</b>    |
|   | Knife Electrode<br>► angled    | ■ green    | <b>582-180-42B</b>    |
|  | Ball Electrode<br>► Ø 2 mm     | ■ green    | <b>582-180-43B</b>    |
|  | Roller Electrode<br>► Ø 2 mm   | ■ green    | <b>582-180-44B</b>    |



### **590-000-03**

Protection Tube; for electrodes; for sterilization and storing; stainless steel; 25 mm x 295 mm

## GUBBINImidi **18.5 Fr.**

### HF Electrodes, hybrid

**sterile**; single-use; Box of 5 pcs.

|                                                                                     | Version                        | Color code | Bipolar (sterile)    |
|-------------------------------------------------------------------------------------|--------------------------------|------------|----------------------|
|    | Loop Electrode<br>► 30° angled | ■ green    | <b>582-180-40B-S</b> |
|    | Loop Electrode<br>► straight   | ■ green    | <b>582-180-41B-S</b> |
|   | Knife Electrode<br>► angled    | ■ green    | <b>582-180-42B-S</b> |
|  | Ball Electrode<br>► Ø 2 mm     | ■ green    | <b>582-180-43B-S</b> |



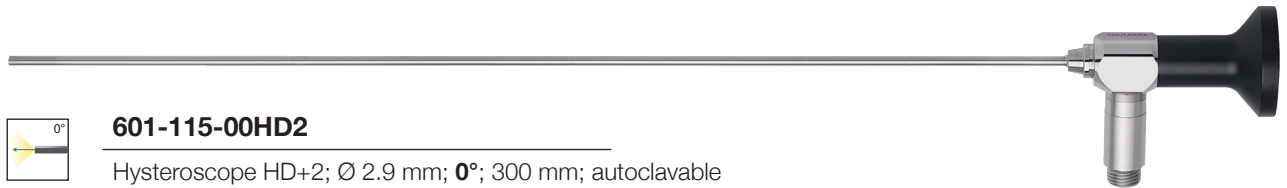
► **Sterile packaging: Box of 5 pieces.**

# Hybrid Resectoscopes

**TONTARRA**

► for **2.9 mm** Endoscopes

**19/22 Fr.**



**601-115-00HD2**

Hysteroscope HD+2; Ø 2.9 mm; **0°**; 300 mm; autoclavable



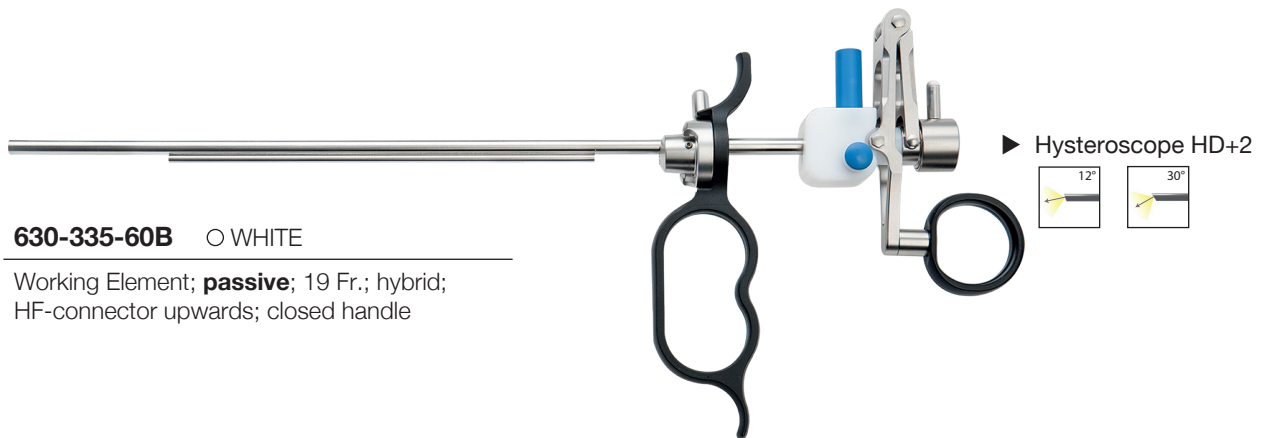
**601-115-12HD2**

Hysteroscope HD+2; Ø 2.9 mm; **12°**; 300 mm; autoclavable



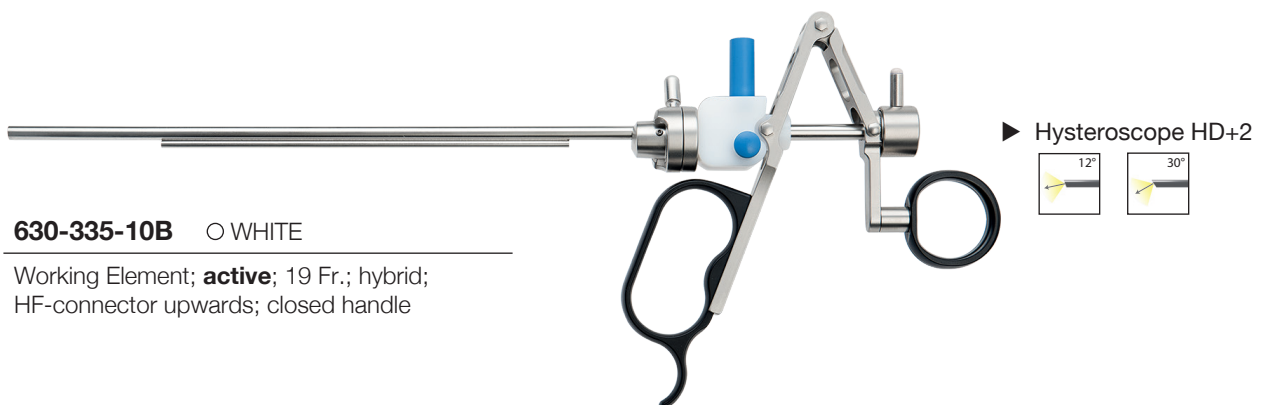
**601-115-30HD2**

Hysteroscope HD+2; Ø 2.9 mm; **30°**; 300 mm; autoclavable



**630-335-60B** ○ WHITE

Working Element; **passive**; 19 Fr.; hybrid;  
HF-connector upwards; closed handle



**630-335-10B** ○ WHITE

Working Element; **active**; 19 Fr.; hybrid;  
HF-connector upwards; closed handle

► **Please note:** Monopolar Working Elements are also available on request.

► **Please note:** HF-Connection Cables on pages 110-112!

# Hybrid Resectoscopes

► for **2.9 mm** Endoscopes

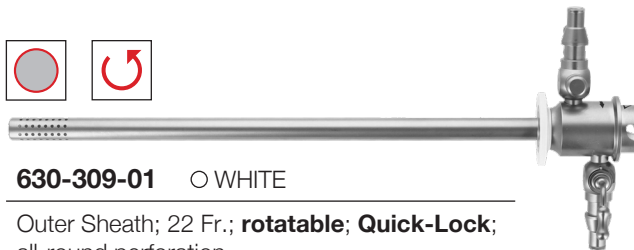
**TONTARRA**

**19/22 Fr.**



**630-309-21** ○ WHITE

Inner Sheath; 19 Fr.; **rotatable**; **Quick-Lock**; ceramic tip



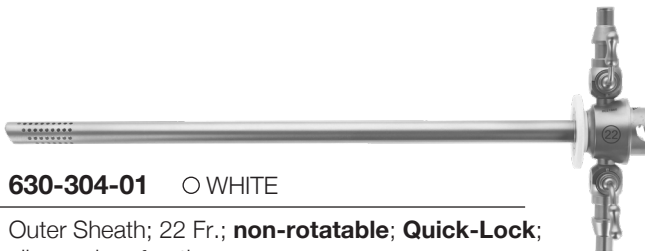
**630-309-01** ○ WHITE

Outer Sheath; 22 Fr.; **rotatable**; **Quick-Lock**; all-round perforation



**630-304-21** ○ WHITE

Inner Sheath; 19 Fr.; **non-rotatable**; **Quick-Lock**; ceramic tip



**630-304-01** ○ WHITE

Outer Sheath; 22 Fr.; **non-rotatable**; **Quick-Lock**; all-round perforation



**630-315-19** ○ WHITE

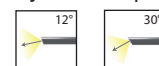
Obturator 19 Fr.; Bayonet Lock



**630-325-19** ○ WHITE

Visual Obturator 19 Fr.; Bayonet Lock

► **Hysteroscope HD+2**



**19/22 Fr.**

## HF Electrodes, monopolar

**19 Fr.; non-sterile;** reusable

|                                                                                     | Version                      | Color code                     | Monopolar (non-sterile) |
|-------------------------------------------------------------------------------------|------------------------------|--------------------------------|-------------------------|
|    | Loop Electrode<br>► angled   | <input type="checkbox"/> white | <b>630-340-00</b>       |
|    | Loop Electrode<br>► straight | <input type="checkbox"/> white | <b>630-340-05</b>       |
|   | Ball Electrode<br>► Ø 3 mm   | <input type="checkbox"/> white | <b>630-340-10</b>       |
|  | Knife Electrode<br>► angled  | <input type="checkbox"/> white | <b>630-340-15</b>       |
|  | Roller Electrode<br>► Ø 3 mm | <input type="checkbox"/> white | <b>630-340-20</b>       |



**590-000-03**

Protection Tube; for electrodes; for sterilization and storing; stainless steel; 25 mm x 295 mm

**19/22 Fr.**

## HF Electrodes, bipolar

**19 Fr.; non-sterile;** reusable

|                                                                                     | Version                      | Color code                                                                                     | Bipolar (non-sterile) |
|-------------------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------------------------------------|-----------------------|
|    | Loop Electrode<br>► angled   |  white/blue   | <b>630-340-00B</b>    |
|    | Loop Electrode<br>► straight |  white/blue   | <b>630-340-05B</b>    |
|    | Ball Electrode<br>► Ø 3 mm   |  white/blue   | <b>630-340-10B</b>    |
|  | Knife Electrode<br>► angled  |  white/blue | <b>630-340-15B</b>    |
|  | Roller Electrode<br>► Ø 3 mm |  white/blue | <b>630-340-20B</b>    |



**590-000-03**

Protection Tube; for electrodes; for sterilization and storing; stainless steel; 25 mm x 295 mm



**19/22 Fr.**

## HF Electrodes, bipolar

**19 Fr.;** sterile; single-use; Box of 5 pcs.

|                                                                                    | Version                      | Color code                                                                                    | Bipolar (sterile)    |
|------------------------------------------------------------------------------------|------------------------------|-----------------------------------------------------------------------------------------------|----------------------|
|   | Loop Electrode<br>► angled   |  white/blue  | <b>630-340-00B-S</b> |
|   | Loop Electrode<br>► straight |  white/blue  | <b>630-340-05B-S</b> |
|   | Ball Electrode<br>► Ø 3 mm   |  white/blue  | <b>630-340-10B-S</b> |
|  | Knife Electrode<br>► angled  |  white/blue | <b>630-340-15B-S</b> |



► **Sterile packaging: Box of 5 pieces.**

**19/22 Fr.**

## Preparation Loops („Cold Loops“)

**19 Fr.; non-sterile;** currentless; mechanical cutting

|                                                                                   | Version                               | Non-HF (non-sterile) |
|-----------------------------------------------------------------------------------|---------------------------------------|----------------------|
|  | Preparation Loop<br>► right-angled    | <b>630-255-00</b>    |
|  | Preparation Knife<br>► 90° angled     | <b>630-255-10</b>    |
|  | Preparation Knife<br>► arithmetic 90° | <b>630-255-25</b>    |

## Advantages of “Cold Loops” and the mechanical enucleation technique:

- Less traumatizing intervention: less weakening of the myometrium
- Avoidance of thermal damage to blood vessels: the vascularized connective tissue bridges are lacerated without use of any type of HF current
- No forming of fibrotic scarring during the healing process

## The method in short:

Following the elimination of the intracavitary component using the traditional resectoscopic „slicing“ technique with a monopolar or bipolar current, the intramural component gets removed by using „Cold Loops“ by exercising force in the cleavage space between the myoma and the surrounding myometrium to separate the myoma from the uterine wall. Thus, the intramural component of the myoma is transformed into an intracavitary component, which can then be removed using the traditional technique.

## Clinical Validations:

- Hysteroscopic myomectomy: a comprehensive review of surgical techniques  
*Attilio Di Spiezio Sardo, Ivan Mazzon, Silvia Bramante, Stefano Bettocchi, Giuseppe Bifulco, Maurizio Guida and Carmine Nappi*  
Source: *Human Reproduction Update*, Volume 14, Issue 2, Pages 101–119, March/April 2008
- Is Cold Loop Hysteroscopic Myomectomy a Safe and Effective Technique for the Treatment of Submucous Myomas With Intramural Development? A Series of 1434 Surgical Procedures  
*Ivan Mazzon, MD, Alessandro Favilli, MD, Mario Grasso, MD, Stefano Horvath, MD, Gian Carlo Di Renzo, MD, PhD, and Sandro Gerli, MD*  
Source: *JMIG*; Volume 22, Issue 5, pages 792-798, July 2015



**590-000-03**

Protection Tube; for electrodes; for sterilization and storing; stainless steel; 25 mm x 295 mm

**24/26 Fr.**



## **601-113-00HD**

Hysteroscope HD+; Ø 4.0 mm; **0°**; 300 mm; autoclavable

## **601-113-00HD2**

Hysteroscope HD+2; Ø 4.0 mm; **0°**; 300 mm; autoclavable

## **601-113-00HD4**

Hysteroscope HD+4; Ø 4.0 mm; **0°**; 300 mm; autoclavable



## **601-113-12HD**

Hysteroscope HD+; Ø 4.0 mm; **12°**; 300 mm; autoclavable

## **601-113-12HD2**

Hysteroscope HD+2; Ø 4.0 mm; **12°**; 300 mm; autoclavable

## **601-113-12HD4**

Hysteroscope HD+4; Ø 4.0 mm; **12°**; 300 mm; autoclavable



## **601-113-30HD**

Hysteroscope HD+; Ø 4.0 mm; **30°**; 300 mm; autoclavable

## **601-113-30HD2**

Hysteroscope HD+2; Ø 4.0 mm; **30°**; 300 mm; autoclavable

## **601-113-30HD4**

Hysteroscope HD+4; Ø 4.0 mm; **30°**; 300 mm; autoclavable

► for **4.0 mm** Endoscopes

**24/26 Fr.**

**630-235-60B** ● BLUE

Working Element; **passive**; 24 Fr.; hybrid;  
HF-connector upwards; closed handle

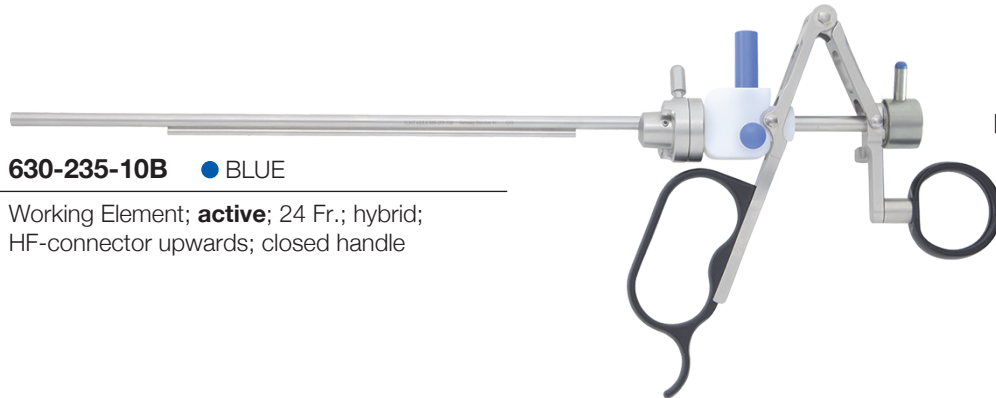


► Hysteroscope HD+2



**630-235-10B** ● BLUE

Working Element; **active**; 24 Fr.; hybrid;  
HF-connector upwards; closed handle



► Hysteroscope HD+2



► **Please note:** Monopolar Working Elements are also available on request.

► **Please note:** HF-Connection Cables on pages 110-112!



**630-209-26** ● YELLOW

Inner Sheath; 24 Fr.; **rotatable**; **Quick-Lock**; ceramic tip



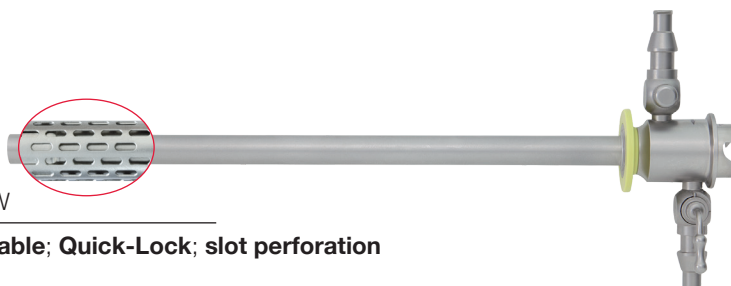
**630-209-06** ● YELLOW

Outer Sheath; 26 Fr.; **rotatable**; **Quick-Lock**; **all round perforation**



**630-209-07** ● YELLOW

Outer Sheath; 26 Fr.; **rotatable**; **Quick-Lock**; **slot perforation**



# Hybrid Resectoscopes

► for 4.0 mm Endoscopes

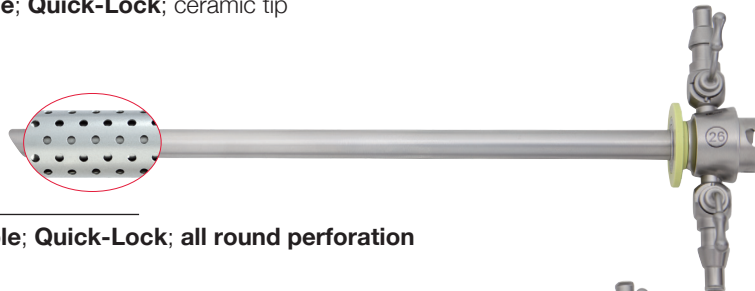
**TONTARRA**

**24/26 Fr.**



**630-204-26** ● YELLOW

Inner Sheath; 24 Fr.; **non-rotatable; Quick-Lock; ceramic tip**



**630-204-06** ● YELLOW

Outer Sheath; 26 Fr.; **non-rotatable; Quick-Lock; all round perforation**



**630-204-07** ● YELLOW

Outer Sheath; 26 Fr.; **non-rotatable; Quick-Lock; slot perforation**



**630-215-24** ● YELLOW

Obturator; 24 Fr.; Bayonet Lock



**630-220-24** ● YELLOW

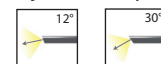
Obturator; 24 Fr.; Bayonet Lock; **moveable tip**



**630-225-24** ● YELLOW

Visual Obturator; 24 Fr.; Bayonet Lock

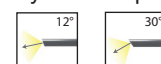
► Hysteroscope HD+2



**630-230-24** ● YELLOW

Visual Obturator; 24 Fr.; 5 Fr. working channel

► Hysteroscope HD+2



# Hybrid Resectoscopes

► for 4.0 mm Endoscopes

**TONTARRA**

**24/26 Fr.**

**630-235-60B/QL** ● BLUE

Working Element; **passive**; 24 Fr.; hybrid; **Quick-Lock**;  
HF-connector upwards; closed handle

► Hysteroscope HD+2



**630-235-10B/QL** ● BLUE

Working Element; **active**; 24 Fr.; hybrid; **Quick-Lock**;  
HF-connector upwards; closed handle

► Hysteroscope HD+2



► Please note: HF-Connection Cables on pages 110-112!



**630-209-26QL/QL** ● YELLOW

Inner Sheath; 24 Fr.; **rotatable**; **2x Quick-Lock**; ceramic tip



**630-209-06QL/QL** ● YELLOW

Outer Sheath; 26 Fr.; **rotatable**; **2x Quick-Lock**; all round perforation



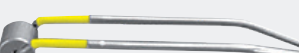
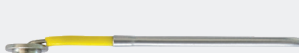
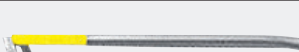
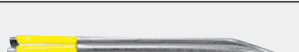
**630-215-24/QL** ● YELLOW

Obturator; 24 Fr.; **Quick-Lock**

**24/26 Fr.**

## HF Electrodes, monopolar

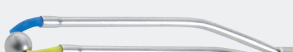
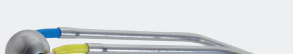
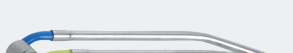
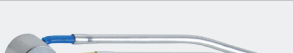
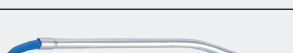
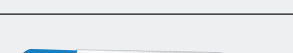
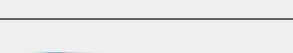
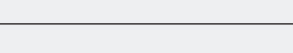
**24 Fr.; non-sterile;** reusable

|                                                                                     | Version                                        | Color code                                                                                  | Monopolar (non-sterile) |
|-------------------------------------------------------------------------------------|------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------|
|    | Loop Electrode<br>► angled                     |  yellow   | <b>630-240-00</b>       |
|    | Loop Electrode<br>► 90°; angled ; 12° scope    |  blue     | <b>630-240-05</b>       |
|    | Loop Electrode<br>► straight                   |  yellow   | <b>630-240-10</b>       |
|    | Ball Electrode<br>► Ø 3 mm                     |  yellow   | <b>630-240-15</b>       |
|   | Ball Electrode<br>► Ø 5 mm                     |  yellow  | <b>630-240-20</b>       |
|  | Roller Electrode<br>► Ø 3 mm                   |  yellow | <b>630-240-25</b>       |
|  | Roller Electrode<br>► Ø 5 mm                   |  yellow | <b>630-240-30</b>       |
|  | Cone Electrode<br>► pointed                    |  yellow | <b>630-240-35</b>       |
|  | Knife Electrode<br>► angled                    |  yellow | <b>630-240-40</b>       |
|  | Vaporisation Electrode<br>► Ø 3 mm; toothed    |  yellow | <b>630-240-45</b>       |
|  | Vaporisation Electrode<br>► Ø 3 mm; smooth     |  yellow | <b>630-240-55</b>       |
|  | Vaporisation Electrode<br>► Ø 5 mm; smooth     |  yellow | <b>630-240-60</b>       |
|  | Strap Electrode<br>► Ø 1.2 mm strap; 30° scope |  yellow | <b>630-240-65</b>       |
|  | Strap Electrode<br>► Ø 1.2 mm strap; 12° scope |  yellow | <b>630-240-70</b>       |

**24/26 Fr.**

## HF Electrodes, bipolar

**24 Fr.; non-sterile;** reusable

|                                                                                     | Version                                     | Color code                                                                                       | Bipolar (non-sterile) |
|-------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------|
|    | Loop Electrode<br>► angled                  |  yellow/blue   | <b>630-240-00B</b>    |
|    | Loop Electrode<br>► PI-Cut                  |  yellow/blue   | <b>630-240-00BPI</b>  |
|    | Loop Electrode<br>► 90°; angled             |  yellow/blue   | <b>630-240-05B</b>    |
|    | Loop Electrode<br>► straight                |  yellow/blue   | <b>630-240-10B</b>    |
|   | Ball Electrode<br>► Ø 3 mm                  |  yellow/blue | <b>630-240-15B</b>    |
|  | Ball Electrode<br>► Ø 5 mm                  |  yellow/blue | <b>630-240-20B</b>    |
|  | Roller Electrode<br>► Ø 3 mm                |  yellow/blue | <b>630-240-25B</b>    |
|  | Roller Electrode<br>► Ø 5 mm                |  yellow/blue | <b>630-240-30B</b>    |
|  | Cone Electrode<br>► pointed                 |  yellow/blue | <b>630-240-35B</b>    |
|  | Knife Electrode<br>► angled                 |  yellow/blue | <b>630-240-40B</b>    |
|  | Vaporisation Electrode<br>► Ø 3 mm; toothed |  yellow/blue | <b>630-240-45B</b>    |
|  | Vaporisation Electrode<br>► Ø 3 mm; smooth  |  yellow/blue | <b>630-240-55B</b>    |
|  | Vaporisation Electrode<br>► Ø 5 mm; smooth  |  yellow/blue | <b>630-240-60B</b>    |
|  | Vaporisation Cone Electrode<br>► blunt      |  yellow/blue | <b>630-240-75B</b>    |

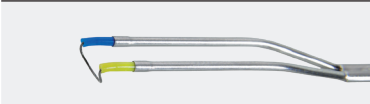
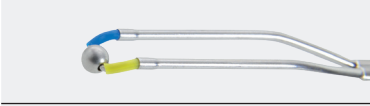
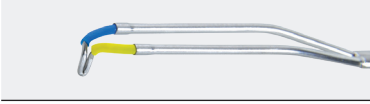


► for **4.0 mm** Endoscopes

**24/26 Fr.**

## HF Electrodes, bipolar

**24 Fr.; sterile;** single-use; Box of 5 pcs.

|                                                                                   | Version                      | Color code                                                                                     | Bipolar (sterile)    |
|-----------------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------------------------------------|----------------------|
|  | Loop Electrode<br>► angled   |  yellow/blue | <b>630-240-00B-S</b> |
|  | Loop Electrode<br>► straight |  yellow/blue | <b>630-240-10B-S</b> |
|  | Ball Electrode<br>► Ø 3 mm   |  yellow/blue | <b>630-240-15B-S</b> |
|  | Knife Electrode<br>► angled  |  yellow/blue | <b>630-240-40B-S</b> |

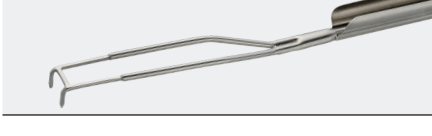


► **Sterile packaging: Box of 5 pieces.**

**24/26 Fr.**

## Preparation Loops („Cold Loops“)

**24 Fr.; non-sterile;** currentless; mechanical cutting

|                                                                                     | Version                               | Non-HF (non-sterile) |
|-------------------------------------------------------------------------------------|---------------------------------------|----------------------|
|    | Preparation Loop<br>► right-angled    | <b>630-250-00</b>    |
|    | Preparation Loop<br>► round           | <b>630-250-05</b>    |
|    | Preparation Knife<br>► 90° angled     | <b>630-250-10</b>    |
|   | Preparation Knife<br>► 45° angled     | <b>630-250-15</b>    |
|  | Preparation Knife<br>► arithmetic 90° | <b>630-250-25</b>    |

## Advantages of “Cold Loops” and the mechanical enucleation technique:

- Less traumatizing intervention: less weakening of the myometrium
- Avoidance of thermal damage to blood vessels: the vascularized connective tissue bridges are lacerated without use of any type of HF current
- No forming of fibrotic scarring during the healing process

## The method in short:

Following the elimination of the intracavitary component using the traditional resectoscopic „slicing“ technique with a monopolar or bipolar current, the intramural component gets removed by using „Cold Loops“ by exercising force in the cleavage space between the myoma and the surrounding myometrium to separate the myoma from the uterine wall. Thus, the intramural component of the myoma is transformed into an intracavitary component, which can then be removed using the traditional technique.

## Clinical Validations:

- Hysteroscopic myomectomy: a comprehensive review of surgical techniques

*Attilio Di Spiezio Sardo, Ivan Mazzon, Silvia Bramante, Stefano Bettocchi, Giuseppe Bifulco, Maurizio Guida and Carmine Nappi  
Source: Human Reproduction Update, Volume 14, Issue 2, Pages 101–119, March/April 2008*

- Is Cold Loop Hysteroscopic Myomectomy a Safe and Effective Technique for the Treatment of Submucous Myomas With Intramural Development? A Series of 1434 Surgical Procedures

*Ivan Mazzon, MD, Alessandro Favilli, MD, Mario Grasso, MD, Stefano Horvath, MD, Gian Carlo Di Renzo, MD, PhD, and Sandro Gerli, MD  
Source: JMIG; Volume 22, Issue 5, pages 792-798, July 2015*

## TONTARRA compatible

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**630-350-55**

Working Element; **passive**; 24 Fr.; bipolar; titan; closed handle; **incl. 2 cone sleeves**



**630-350-05**

Working Element; **active**; 24 Fr.; bipolar; titan; closed handle; **incl. 2 cone sleeves**



**630-350-90**

Cone Sleeve, for **630-350-05** & **630-350-55**

Richard Wolf compatible

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**630-351-55**

Working Element; **passive**; 24 Fr.; bipolar; titan; closed handle; **incl. 1 cone sleeve**



**630-351-05**

Working Element; **active**; 24 Fr.; bipolar; titan; closed handle; **incl. 1 cone sleeve**



**630-351-90**

Cone Sleeve, for **630-351-05** & **630-351-55**

## Olympus compatible

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**630-352-55**

Working Element; **passive**; 24 Fr.; bipolar; titan; open handle; **incl. 1 cone sleeve**



**630-352-05**

Working Element; **active**; 24 Fr.; bipolar; titan; open handle; **incl. 1 cone sleeve**



**630-352-90**

Cone Sleeve, for **630-352-05** & **630-352-55**



### ► Endoor-Compact All-In-one Endoscope Camera System

The **All-in-one Compact Camera System** comes with a 17.3" monitor and LED light source. The portable laptop size unit and the included FULL HD camera head is compatible with a wide range of rigid and flexible endoscopes.

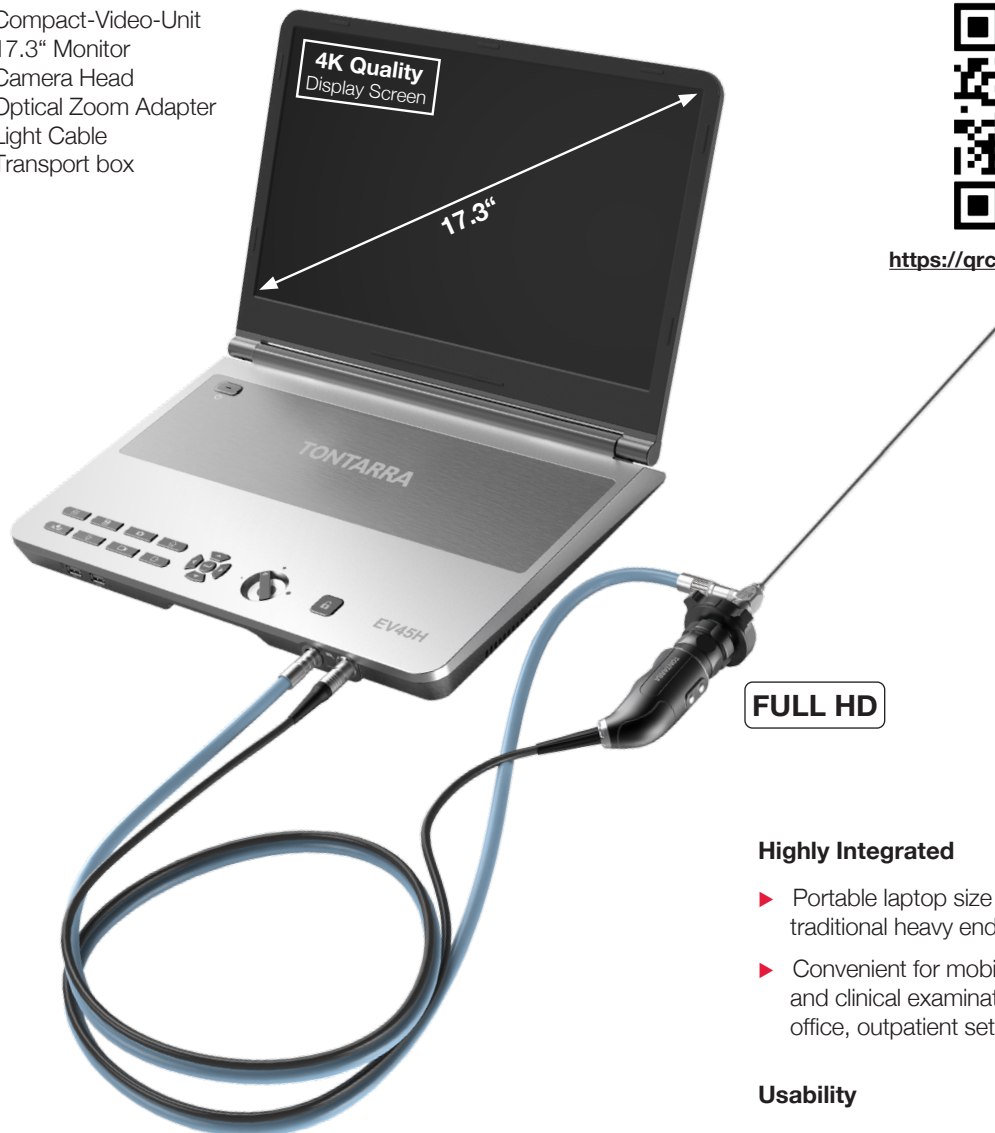
With its portable design, it is the perfect video unit for universal use in doctors' office, outpatient settings, day clinics.

#### NSEO/EV45H

##### Endoor-Compact All-in-one Endoscope Camera System

consisting of:

- Compact-Video-Unit
- 17.3" Monitor
- Camera Head
- Optical Zoom Adapter
- Light Cable
- Transport box



For more information  
please see our  
EndoorCompact presentation



<https://qrco.de/endoor-compact>

#### Highly Integrated

- Portable laptop size unit instead of the traditional heavy endoscope tower
- Convenient for mobile medical treatment and clinical examination, e.g. in doctors' office, outpatient setting and day clinics.

#### Usability

- Buttons for easy and intuitive handling
- Pre-installed specialty settings
- Possibility to store individual specialty settings
- USB ports to connect external devices

| TECHNICAL DATA             |                                     |
|----------------------------|-------------------------------------|
| Screen Size                | 17.3" 4K quality display            |
| Resolution                 | 1920 x 1080; 60 frames              |
| Ports for External Monitor | HDMI & VGA                          |
| Camera Head                | f= 15-25 mm; IPX7 waterproof        |
| Capturing                  | Photos and Videos                   |
| Light Source               | Intergrated LED (60 Watt)           |
| Color Rendering Index      | RA > 92                             |
| Color Temperature          | 5.700 K                             |
| Directive Compliance       | CE mark                             |
| Supply Voltage             | 100-240 V, 5V 12A                   |
| Power Supply               | 80W, 5V 12A                         |
| Product Size               | 413 mm (L) x 291 mm (W) x 40 mm (H) |

## ► ACCESSORIES:



### NSEO/114011301

**Endoor-Compact** camera head FULL-HD;  
resolution 1920x1080



### NSEO/110213046

**Endoor-Compact** Optical zoom adapter; parfocal zoom:  
f = 15-28mm; for camera head FULL-HD





► **Visualization**

Medical Monitors

► **Visualization**

Camera Control Units & Camera Heads

► **Visualization**

LED Light Source

► **Irrigation & Suction**

Multi-Indication Pump

► **Resection**

HF-Generator

For more information  
please see our  
EndoorTower brochure



<https://qrco.de/endoor-tower>

## SCHO/95-3930

### EndoorCam 10 Full HD Camera Controller

#### Features:

- Full HD USB image capture
- Multi-connectivity
- Videoalgorithms:  
selective color enhancement, smoke reduction, grid removal
- Compatible with Full HD camera heads:  
camera head Full HD zoom, Full HD 90° angled



## TECHNICAL DATA

|                                |                                                                         |
|--------------------------------|-------------------------------------------------------------------------|
| <b>Operation control panel</b> | On-Off, menu, white balance, photo                                      |
| <b>Video outputs</b>           | High definition: 2 x DVI (1080p), 2 x 3G-SDI (1080p)                    |
| <b>Remote outputs</b>          | 2 x 3.5 mm phone jack connectors (to connect recording/printer devices) |
| <b>Remote inputs</b>           | 2 x 3.5 mm phone jack connectors (to connect a foot control switch)     |
| <b>Connectivity</b>            | MIS-Bus interface                                                       |
| <b>Dimensions/Weight</b>       | 295 x 100 x 355 mm (W x H x D) / 4.39 kg                                |

## SYSTEM

|                                                                      |                        |
|----------------------------------------------------------------------|------------------------|
| <b>Standard compliance</b>                                           | IEC 60601-1            |
| <b>Directive compliance</b>                                          | CE-mark                |
| <b>Supply voltage</b>                                                | 100 - 240 V~, 50/60 Hz |
| <b>Current consumption</b>                                           | 0.8 - 0.4 A            |
| <b>Protection class as per IEC 60601-1</b>                           | Protection class I     |
| <b>Degree of protection</b>                                          | IP 21                  |
| <b>Classification as per Medical Device Regulation (EU) 2017/745</b> | Class I medical device |
| <b>Classification as per IEC/CISPR 11</b>                            | Group 1, Class B       |

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LUMI<sup>nir</sup>

## SCHO/95-3981

## EndoorCam 20 NIR FI\* Native Full HD Camera Controller

## Features:

- Full HD USB image / video capture
- Multi-connectivity
- Videoalgorithms: color shift 1 + 2, selective color enhancement, smoke reduction, grid removal
- Picture out of picture mode at use of video algorithms
- Automatic light control in combination with EndoorLight 300 LED & EndoorLight 300 NIR FI light source
- Compatible with all Endoor HD Camera Heads
- Compatible with NIR FI Camera Head



\* Standard use in white light mode.  
NIR FI function included, to be used only with NIR FI-components (camera head, light source, endoscopes).

## TECHNICAL DATA

|                                 |                                                                         |
|---------------------------------|-------------------------------------------------------------------------|
| Operation control panel         | On-Off, menu, white balance, photo, video                               |
| Video outputs                   | High definition: 2 x DVI (1080p), 2 x 3G-SDI (1080p)                    |
| Remote outputs                  | 2 x 3.5 mm phone jack connectors (to connect recording/printer devices) |
| Remote inputs                   | 2 x 3.5 mm phone jack connectors (to connect a foot control switch)     |
| Interfaces USB Keyboard / Drive | 2 x USB                                                                 |
| Connectivity                    | MIS-Bus interface                                                       |
| Dimensions/Weight               | 295 x 100 x 355 mm (W x H x D) / 5.7 kg                                 |

## SYSTEM

|                                                               |                        |
|---------------------------------------------------------------|------------------------|
| Standard compliance                                           | IEC 60601-1            |
| Electromagnetic compatibility                                 | IEC/EN 60601-1-2       |
| Directive compliance                                          | CE-mark                |
| Supply voltage                                                | 100 - 240 V-, 50/60 Hz |
| Current consumption                                           | 0.8 - 0.4 A            |
| Protection class as per IEC 60601-1                           | Protection class I     |
| Degree of protection                                          | IP 21                  |
| Classification as per Medical Device Regulation (EU) 2017/745 | Class I medical device |
| Classification as per IEC/CISPR 11                            | Group 1, Class A       |

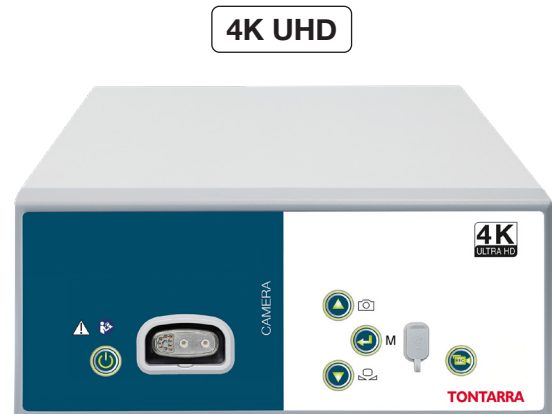
LUMI<sup>nir</sup>

## SCHO/95-3985

## EndoorCam 40 NIR FI\* 4K UHD Camera Controller

## Features:

- Outstanding performance
- 4K UHD imaging (3840 x 2160, 50 / 60p)
- BT2020, large 4K UHD color space
- Image / video capturing via USB (Full HD)
- Multi-connectivity:
  - NIR FI: camera head NIR FI full HD zoom
  - 4K UHD: camera head 4K UHD zoom
  - Full HD: camera head full HD zoom, full HD 90° angled



\* Standard use in white light mode.  
 NIR FI function included, to be used only with NIR FI-components  
 (camera head, light source, endoscopes).

## TECHNICAL DATA

|                                 |                                                                                                          |
|---------------------------------|----------------------------------------------------------------------------------------------------------|
| Operation control panel         | On-Off, menu, white balance, photo, video                                                                |
| Video outputs 4K-UHD   HD       | 4 x 3G-SDI (3840 x 2160p, 50 / 60p)   2 x 3G-SDI, 2 x DVI (1080p)                                        |
| Remote outputs                  | 2 x 3.5 mm (to connect recording / printer devices)                                                      |
| Remote inputs                   | 2 x 3.5 mm (to connect a foot control switch)<br>2 x USB (1 x for image and video capture, 1 x keyboard) |
| Interfaces USB Keyboard / Drive | 2 x USB                                                                                                  |
| Connectivity                    | MIS-Bus interface                                                                                        |
| Dimensions/Weight               | 295 x 130 x 355 mm (W x H x D) / 7 kg                                                                    |

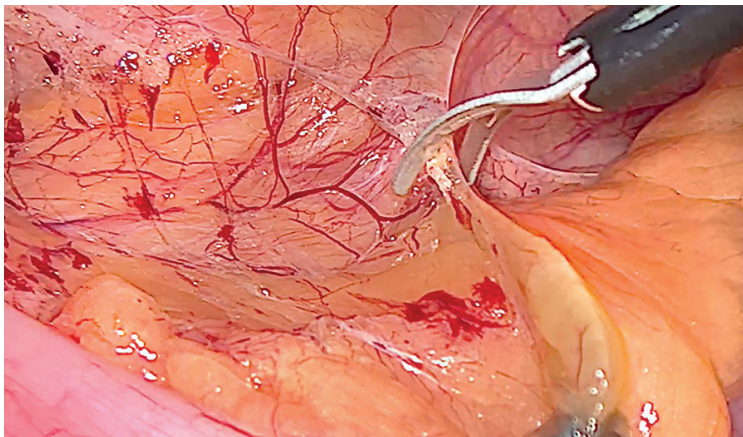
## SYSTEM

|                                                               |                        |
|---------------------------------------------------------------|------------------------|
| Standard compliance                                           | IEC 60601-1            |
| Electromagnetic compatibility                                 | IEC/EN 60601-1-2       |
| Directive compliance                                          | CE-mark                |
| Supply voltage                                                | 100 - 240 V~, 50/60 Hz |
| Current consumption                                           | 1.2 - 0.5 A            |
| Protection class as per IEC 60601-1                           | Protection class I     |
| Degree of protection                                          | IP 21                  |
| Classification as per Medical Device Regulation (EU) 2017/745 | Class I medical device |
| Classification as per IEC/CISPR 11                            | Group 1, Class A       |

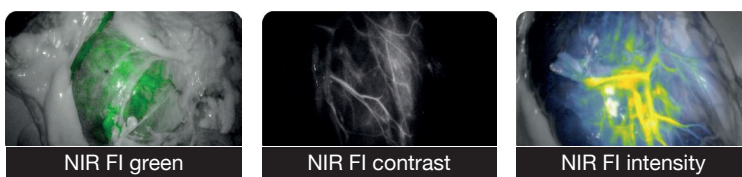
## State-of-the-art Image Quality

Latest CMOS chip technology integrated in the **EndoorCam** native full HD endoscopy camera systems provides a brilliant image quality with highest sensitivity. Edge enhancement, dynamic contrast function and various video algorithms lead to a vivid, crystal clear image.

Vessels and tissue structures can be highlighted, the view during HF or laser applications can be improved or the honeycomb structure of image bundle endoscopes can be reduced. All these details and technologies lead to this best-in-class camera solution.



### NIR FI Modes:



Standard use in white light mode.

**NIR FI** function included, to be used only with NIR FI-components (camera head, light source, endoscopes).

## ► Video Algorithm Color Shift 1 + 2

The range of advanced imaging algorithms is completed with „Color Shift“ modes. Spectral colors are shifted and exchanged. It can be used to enhance vessels and tissue structures.

## ► Picture out of picture mode (POP)

User can display the image improved by video algorithm either in fullscreen or use it side by side, with the original image, both on the same monitor in PoP-mode.

### Automatic Light Control

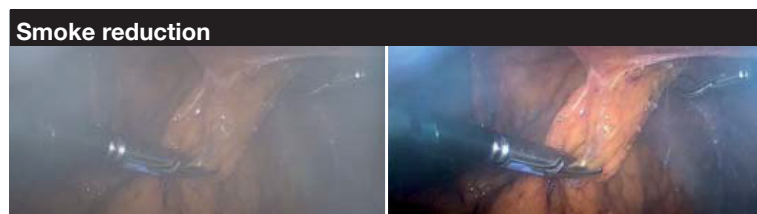
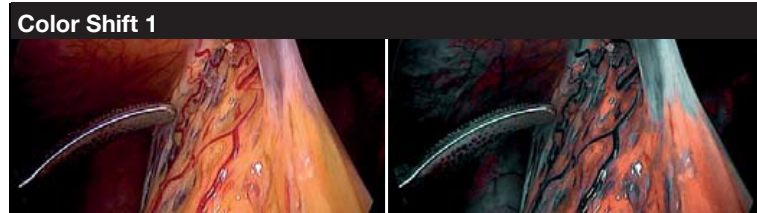
Perfect integration of LED light source and camera through MIS-Bus. The light source can be switched on and off and regulated in brightness through the camera controller and camera head buttons. The camera can even control the luminance of the light source fully automatic.

### OR-Integration Module

As an option the camera can be controlled by your integrated OR system. The whole camera menu can be accessed by your OR control system. Additionally we offer solutions for still image archive and video streaming through Ethernet hospital network to a KIS/PACS system

### NIR FI compatible

To visualize and access blood flow and tissue perfusion as well as specific anatomical structures during multiple MIS procedures



## ► Color Shift 1

Enhances vessels and tissue structures. Spectral colors are shifted and exchanged; with a stronger effect.

## ► Color Shift 2

Enhances vessels and tissue structures. Spectral colors are shifted and exchanged; with a weaker effect.

## ► Selective Color Enhancement

Enhances vessels and tissue structures with higher color contrast. The original color impression remains.

## ► Smoke reduction

For a clear view during dissection technologies that create smoke (e.g. HF).

## ► Grid removal

Reduces the honeycomb structure of image bundle endoscopes.

## ► Clear view

For a clear view during operations in hazy liquids (e.g. Arthroscopy)

| System overview                                                         | EndoorCam 10<br>SCHO/95-3930 | EndoorCam 20 NIR FI<br>SCHO/95-3981 | EndoorCam 40 NIR FI<br>SCHO/95-3985 |
|-------------------------------------------------------------------------|------------------------------|-------------------------------------|-------------------------------------|
| Video algorithms                                                        |                              |                                     |                                     |
| ► Selective color enhancement                                           | ✓                            | ✓                                   | ✓                                   |
| ► Smoke reduction                                                       | ✓                            | ✓                                   | ✓                                   |
| ► Grid removal                                                          | ✓                            | ✓                                   | ✓                                   |
| ► Clear view                                                            | optional                     | optional                            | optional                            |
| ► Color Shift 1 + 2                                                     | -                            | ✓                                   | ✓                                   |
| Picture out of picture mode (PoP)<br>for all above mentioned algorithms | -                            | ✓                                   | ✓                                   |
| Integrated galvanic insulation for use with<br>chip-in-tip endoscopes   | -                            | ✓                                   | ✓                                   |
| Compatibility with future camera heads<br>e.g. autoclavable heads       | ✓                            | ✓                                   | ✓                                   |
| Full HD USB image capture                                               | ✓                            | ✓                                   | ✓                                   |
| Full HD USB video capture                                               | -                            | ✓                                   | ✓                                   |
| Automatic light control with<br>NEW LED light source                    | -                            | ✓                                   | ✓                                   |
| OR integration module                                                   | -                            | optional                            | optional                            |
| Camera Head Full HD Zoom                                                | ✓                            | ✓                                   | ✓                                   |
| Camera Head Full HD Fix 90° Angled                                      | ✓                            | ✓                                   | ✓                                   |
| Camera Head Full HD 3CMOS Zoom                                          | -                            | ✓                                   | -                                   |
| Camera Head NIR FI                                                      | -                            | ✓                                   | ✓                                   |
| Camera Head 4K UHD Zoom                                                 | -                            | -                                   | ✓                                   |



## SCHO/95-3901

### EndoorCam Camera Head **Full HD Zoom**

#### Features:

- Full HD sensor resolution
- Illuminated control buttons
- 2x optical zoom
- 3x digital zoom
- Lockable endoscope connection
- Time saving and useful presets
- Sterilization via Sterrad
- All rigid, flexible or semi-flexible endoscopes with standard ocular can be connected



### TECHNICAL DATA

|                                           |                                             |
|-------------------------------------------|---------------------------------------------|
| <b>Image sensor</b>                       | 1/3" CMOS, progressive scan                 |
| <b>Sensor resolution</b>                  | 1920 x 1080, 50/60p                         |
| <b>Function keys</b>                      | 3 individ. programmable & illuminated keys  |
| <b>Endocoupler</b>                        | For standard ocular, lockable               |
| <b>Parfocal zoom</b>                      | f = 14.25 - 28 mm                           |
| <b>Waterproof connection plug</b>         | Yes                                         |
| <b>Degree of protection</b>               | IPX 7                                       |
| <b>Lockable endoscope connection</b>      | Yes                                         |
| <b>Length camera cable</b>                | 3.5 m                                       |
| <b>Weight camera head (without cable)</b> | 210 g                                       |
| <b>Control unit compatibility</b>         | <b>EndoorCam 10 / 20 NIR FI / 40 NIR FI</b> |

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## SCHO/95-3903

### EndoorCam Camera Head **Full HD Fix 90° Angled**

#### Features:

- Full HD sensor resolution
- Illuminated control buttons
- 3x digital zoom
- Lockable endoscope connection
- Time saving and useful presets
- Sterilization via Sterrad
- Lightweight and slim design
- All rigid, flexible or semi-flexible endoscopes with standard ocular can be connected



## TECHNICAL DATA

|                                           |                                                 |
|-------------------------------------------|-------------------------------------------------|
| <b>Image sensor</b>                       | 1/3" CMOS, progressive scan                     |
| <b>Sensor resolution</b>                  | 1920 x 1080, 50/60p                             |
| <b>Function keys</b>                      | 3 individ. programmable & illuminated keys      |
| <b>Endocoupler</b>                        | For standard ocular, freely rotating & lockable |
| <b>Parfocal zoom</b>                      | f = 14.25 mm                                    |
| <b>Waterproof connection plug</b>         | Yes                                             |
| <b>Degree of protection</b>               | IPX 7                                           |
| <b>Lockable endoscope connection</b>      | Yes                                             |
| <b>Length camera cable</b>                | 3.5 m                                           |
| <b>Weight camera head (without cable)</b> | 190 g                                           |
| <b>Control unit compatibility</b>         | <b>EndoorCam 10 / 20 NIR FI / 40 NIR FI</b>     |

Original Manufacturer Product of SCHÖLLY



## SCHO/95-3906

### EndoorCam Camera Head Full HD 3CMOS Zoom

#### Features:

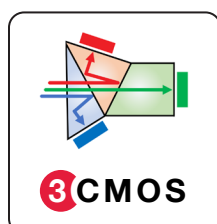
- 3CMOS sensor, native Full HD
- Illuminated control buttons
- 2x optical zoom; 3x digital zoom
- Best color reproduction due to 3CMOS sensor design
- Unique lockable endoscope connection
- Time saving and useful presets
- Sterilization via Sterrad
- All rigid, flexible or semi-flexible endoscopes with standard ocular can be connected



#### TECHNICAL DATA

|                                           |                                            |
|-------------------------------------------|--------------------------------------------|
| <b>Image sensor</b>                       | 3 x 1/3" CMOS, progressive scan            |
| <b>Sensor resolution</b>                  | 3 x 1920 x 1080, 50 / 60p                  |
| <b>Function keys</b>                      | 3 individ. programmable & illuminated keys |
| <b>Endocoupler</b>                        | For standard ocular, lockable              |
| <b>Parfocal zoom</b>                      | f = 14.25 - 28 mm                          |
| <b>Waterproof connection plug</b>         | Yes                                        |
| <b>Degree of protection</b>               | IPX 7                                      |
| <b>Lockable endoscope connection</b>      | Yes                                        |
| <b>Length camera cable</b>                | 3.5 m                                      |
| <b>Weight camera head (without cable)</b> | 300 g                                      |
| <b>Applied part as per IEC 60601-1</b>    | Type CF defibrillation-proof               |
| <b>Control unit compatibility</b>         | <b>EndoorCam 20 NIR FI</b>                 |

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**1x FULL HD  
for each color:**  
RED | GREEN | BLUE

## SCHO/95-3905

### EndoorCam Camera Head 4K UHD Zoom

#### Features:

- 4K UHD imaging (3840 x 2160, 50 / 60p)
- 3CMOS sensor
- BT2020, large UHD color space
- 2 x optical zoom (plus 3 x digital zoom)
- Unique lockable endoscope connection
- Sterilization via Sterrad
- Integrated Endocoupler for less interfaces
- Waterproof connection plug

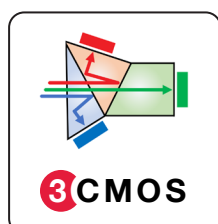


**4K UHD**

#### TECHNICAL DATA

|                                           |                                            |
|-------------------------------------------|--------------------------------------------|
| <b>Image sensor</b>                       | 3 x 1/3" CMOS, progressive                 |
| <b>Sensor resolution</b>                  | 3840 x 2160, 50 / 60p                      |
| <b>Function keys</b>                      | 3 individ. programmable & illuminated keys |
| <b>Endocoupler</b>                        | For standard ocular, lockable              |
| <b>Parfocal zoom</b>                      | f = 14.25 - 28 mm                          |
| <b>Waterproof connection plug</b>         | Yes                                        |
| <b>Degree of protection</b>               | IPX 7                                      |
| <b>Lockable endoscope connection</b>      | Yes                                        |
| <b>Length camera cable</b>                | 3.5 m                                      |
| <b>Weight camera head (without cable)</b> | 330 g                                      |
| <b>Applied part as per IEC 60601-1</b>    | Type CF defibrillation-proof               |
| <b>Control unit compatibility</b>         | <b>EndoorCam 40 NIR FI</b>                 |

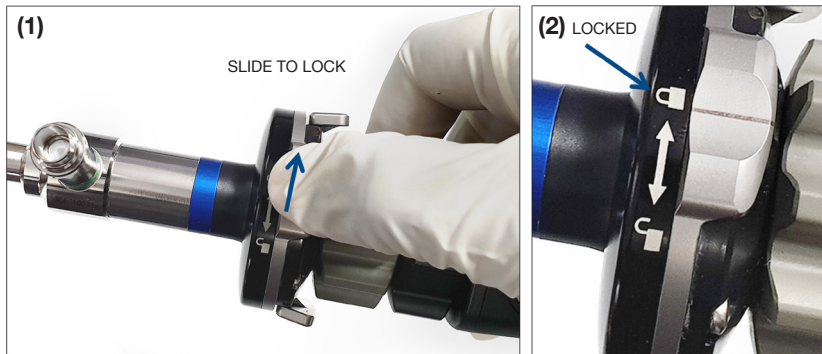
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**1x FULL HD  
for each color:**  
RED | GREEN | BLUE

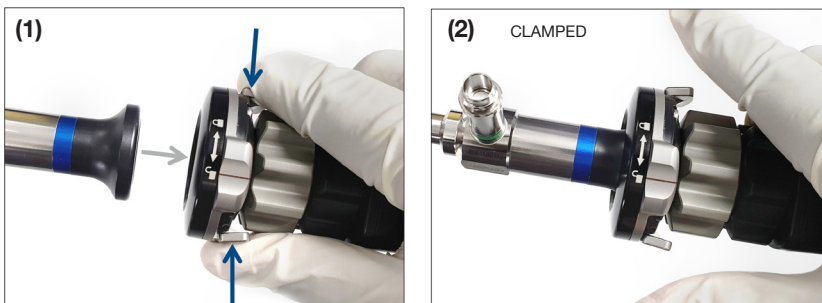


**Large camera  
color space**



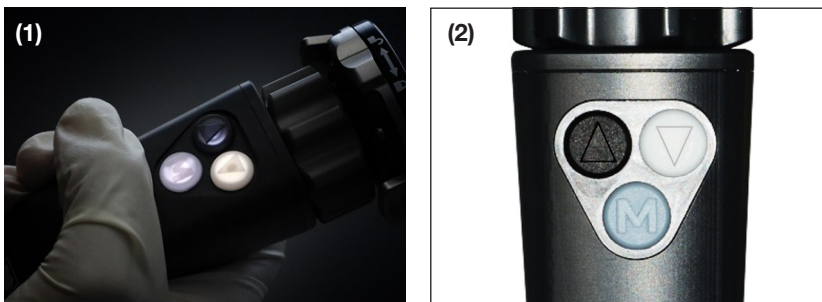
### Lock/unlock endocoupler grip

- Unique locking mechanism
- (1) Slide to lock/unlock
- (2) The endoscope is securely locked (or unlocked).



### Endoscope clamping mechanism

- (1) Press both buttons to insert the endoscope
- (2) Release the buttons. The endoscope is securely clamped.

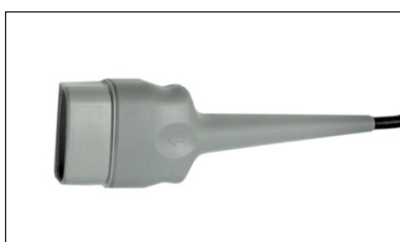


### (1) Illuminated camera head buttons

- Easy to identify in dark OR-room
- Color coded: White = White balance

### (2) Three function buttons

- Fully programmable
- Several functions are preset



### Connection plug

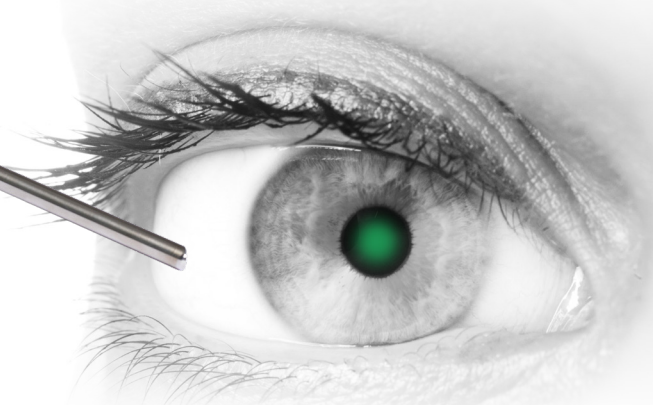
- Waterproof
- No cap required

- Overview LUMI\_nir components (Fluorescence imaging technology)



- ① NIR FI Light Guide Cable
- ② EndoorCam NIR FI Camera Controller
- ③ EndoorLight 300 NIR FI Light Source
- ④ EndoorCam NIR FI Camera Head
- ⑤ Laparoscope UHD/NIR

**LUMI**nir  
near infrared



## VISUALIZATION SYSTEMS



### EndoorCam 20 NIR FI Native Full HD camera:

TONTARRA's versatile and economic EndoorCam 20 NIR FI Native Full HD camera leads the way to integrate the Fluorescence technology as a standard in the medical area.

The Full HD version does not only offer USB photo and video recording but also provides patented automatic light control of the NIR FI Light Source.



### EndoorCam 40 NIR FI ULTRA HD 4K camera:

TONTARRA's EndoorCam 40 NIR FI Ultra HD 4K camera is the solution when looking for an outstanding performance. With a 4K UHD imaging output it offers a greater and more detailed color space compared to the already exceptional EndoorCam 20 NIR FI Native Full HD camera system. Additionally, it provides USB photo and video recording as well as patented automatic light control of the NIR FI Light Source.

For more information  
please see our  
EndoorTower brochure



<https://qrco.de/endoor-tower>

**ACL OR-MD Medical Monitors****TFT-displays | FULL HD**

including: VESA-100 mounting interface  
w/o mounting system incl. power cord

**TECHNICAL DATA**

|                             |                              |                              |                              |
|-----------------------------|------------------------------|------------------------------|------------------------------|
| <b>Screen Diagonal</b>      | 24" (61 cm)                  | 27" (68.6 cm)                | 32" (81.3 cm)                |
| <b>Resolution</b>           | 1920 x 1200 pixels           | 1920 x 1080 pixels           | 1920 x 1080 pixels           |
| <b>Contrast Ratio</b>       | 1000:1                       | 3000:1                       | 3000:1                       |
| <b>Brightness</b>           | 300 cd/m <sup>2</sup>        | 350 cd/m <sup>2</sup>        | 500 cd/m <sup>2</sup>        |
| <b>Video Inputs</b>         | DVI-I   DP                   | DVI-I   DP                   | DVI-I   DP                   |
| <b>Mount</b>                | built-in VESA-100 interfaces | built-in VESA-100 interfaces | built-in VESA-100 interfaces |
| <b>Power Supply</b>         | 100-240 V                    | 100-240 V                    | 100-240 V                    |
| <b>Power Frequency</b>      | 50/60 Hz                     | 50/60 Hz                     | 50/60 Hz                     |
| <b>Dimensions w x h x d</b> | 565 x 402 x 58 mm            | 652 x 424 x 63.5 mm          | 748 x 579 x 64 mm            |
| <b>Weight</b>               | 7.8 kg (without accessory)   | 10.1 kg (without accessory)  | 16.5 kg (without accessory)  |
| <b>Cleaning</b>             | Wipe disinfection            | Wipe disinfection            | Wipe disinfection            |

Original Manufacturer Product of ACL

**ACL OR-MD Medical Monitors****TFT-displays | 4K UHD**

including: VESA-100 mounting interface  
w/o mounting system incl. power cord

**ACLO/OR-MD32-4K-TON****ACLO/OR-MD43-4K-TON****TECHNICAL DATA**

|                             |                                                                                                                                     |                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <b>Screen Diagonal</b>      | 32" (81.3 cm)                                                                                                                       | 43" (109.2 cm)                                                      |
| <b>Resolution</b>           | 3840 x 2160 pixels                                                                                                                  | 3840 x 2160 pixels                                                  |
| <b>Contrast Ratio</b>       | 1700:1                                                                                                                              | 3000:1                                                              |
| <b>Brightness</b>           | 650 cd/m <sup>2</sup>                                                                                                               | 500 cd/m <sup>2</sup>                                               |
| <b>Video Inputs</b>         | 4x SDI IN ( 2x max. 12G-capable,<br>2x max. 3G-capable),<br>1x 12G-SDI Loop-Through;<br>2x HDMI 2.0 IN;<br>1x HDMI 2.0 Loop-Through | 1x 12G-SDI;<br>1x 12G-SDI Loop-Through;<br>2x DP;<br>1x HDMI 2.0 IN |
| <b>Mount</b>                | built-in VESA-100 interfaces                                                                                                        | built-in VESA-100 interfaces                                        |
| <b>Power Supply</b>         | 100-240 V                                                                                                                           | 100-240 V                                                           |
| <b>Power Frequency</b>      | 50/60 Hz                                                                                                                            | 50/60 Hz                                                            |
| <b>Dimensions w x h x d</b> | 748 x 479 x 64 mm                                                                                                                   | 1006 x 625 x 74 mm                                                  |
| <b>Weight</b>               | 13 kg (without accessory)                                                                                                           | 24 kg (without accessory)                                           |
| <b>Cleaning</b>             | Wipe disinfection                                                                                                                   | Wipe disinfection                                                   |

Original Manufacturer Product of ACL

**Please note:**

The 43" 4K UHD TFT-display can only be connected to the EndoorCam 40 4K UHD camera controller in combination with the Video Converter FSNO/IPS100A.

**SCHO/05-0760led****EndoorLight 300 LED** Light Source

Patented fully automatic light control, permitting **reliable and efficient** use in combination with the EndoorCam 20 NIR FI and EndoorCam 40 NIR FI camera system. **Quick adjustment** by the user via camera control unit or camera head button. **Very silent** during use. The multi-light guide adapter allows the use of light guides from Storz, Wolf and Olympus. Bus system for easy connection to camera system.

## Features:

- High color rendering index (CRI): Ra > 90
- Lifetime > 30.000 h
- Low noise level
- Multi-light-guide adapter
- Meets high requirements for CF with defibrillators
- BUS connectivity to Camera Units
- Automatic light control in combination with EndoorCam 20 NIR FI and EndoorCam 40 NIR FI

**TECHNICAL DATA**

|                                                               |                                      |
|---------------------------------------------------------------|--------------------------------------|
| Illumination type                                             | High power white light LED           |
| Color Rendering Index                                         | CRI Ra > 90                          |
| Color temperatue                                              | 5,600 K                              |
| Luminous flux                                                 | 1,420 lm                             |
| Lifetime of the illuminant                                    | > 30,000 h                           |
| Operation control panel                                       | LCD Display with illuminated buttons |
| Standard compliance                                           | IEC 60601-1                          |
| Electromagnetic compatibility                                 | IEC/EN 60601-1-2                     |
| Directive compliance                                          | CE-mark                              |
| Dimensions (W x H x D)                                        | 295 x 130 x 355 mm                   |
| Weight                                                        | 8 kg                                 |
| Supply voltage                                                | 100 - 240 V~, 50/60 Hz               |
| Power consumption                                             | 1.6 - 0.6 A                          |
| Protection class acc. to IEC 60601-1                          | Protection class I                   |
| Degree of protection                                          | IP21                                 |
| Applied part as per IEC 60601-1                               | Type CF defibrillation-proof         |
| Classification as per Medical Device Regulation (EU) 2017/745 | Class I medical device               |
| Classification as per IEC/CISPR 11                            | Group 1 Class B                      |



Original Manufacturer Product of SCHÖLLY



**TONTARRA High Performance Line (HP)** is specially designed for use with **LED light sources**. Latest fiber technology provides an improved transmission rate, resulting in more light output.

TONTARRA light guide cables come as standard in grey coloring. For ordering different colors, please add the corresponding code behind the article number:: LL (Lilac); YW (Yellow); GN (Green)



## Connectors

Projector-Side



**540-890-02**

Storz/Aesculap



**540-890-10**

Olympus/ACMI



**540-890-14**

Olympus new (switch)



**540-890-04**

Wolf



**540-890-01**

ACMI/British/Codman

## Light Guide Cables

optimized for **LED**

**540-822-18** Ø 2.5 mm, 1800 mm

**540-822-23** Ø 2.5 mm, 2300 mm

**540-822-30** Ø 2.5 mm, 3000 mm

**540-822-50** Ø 2.5 mm, 5000 mm

**540-823-18** Ø 3.5 mm, 1800 mm

**540-823-23** Ø 3.5 mm, 2300 mm

**540-823-30** Ø 3.5 mm, 3000 mm

**540-823-50** Ø 3.5 mm, 5000 mm

**540-824-18** Ø 4.9 mm, 1800 mm

**540-824-23** Ø 4.9 mm, 2300 mm

**540-824-30** Ø 4.9 mm, 3000 mm

**540-824-50** Ø 4.9 mm, 5000 mm

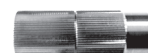
## Connectors

Endoscope-Side



**540-880-02**

TONTARRA/Storz/  
Aesculap/Olympus (old)



**540-880-04**

Olympus new



**540-880-13**

Wolf/HSW/Dyonics snap



**540-880-01**

ACMI/British/Codman

## Recommended Combination: Light Cable with Endoscope

| Light Cable Diameter | Endoscope Diameter |
|----------------------|--------------------|
| 4.8 - 5.0 mm         | 6.5 - 12.0 mm      |
| 3.0 - 3.5 mm         | 3.0 - 6.5 mm       |
| 2.0 - 2.5 mm         | 0.8 - 2.9 mm       |



Fused fibers



**Please note:** The high light concentration at the end of the light cable causes heat to be generated in the focal point. The end of the light cable should never be placed on the patient's drape or skin as long as the cold light fountain is turned on as the light intensity may cause burns to the patient or set the drape on fire. The diameter indicated refers to the diameter of the fiber optics.



**TONTARRA High Temperature Technology Line (HTT)** is specially designed for use with **XENON light sources**. Compared to the Standard Line the HTT-Line has an higher transmission rate of approx. 20% due to the adhesive-free light entry area. These cables are specially assembled using high pressure and heat instead of glue.



## Light Guide Cables (without endoscope-side connectors)

optimized for **XENON**

|                   |                   |
|-------------------|-------------------|
| <b>540-812-18</b> | Ø 2.5 mm, 1800 mm |
| <b>540-812-23</b> | Ø 2.5 mm, 2300 mm |
| <b>540-812-30</b> | Ø 2.5 mm, 3000 mm |
| <b>540-812-50</b> | Ø 2.5 mm, 5000 mm |
| <b>540-813-18</b> | Ø 3.5 mm, 1800 mm |
| <b>540-813-23</b> | Ø 3.5 mm, 2300 mm |
| <b>540-813-30</b> | Ø 3.5 mm, 3000 mm |
| <b>540-813-50</b> | Ø 3.5 mm, 5000 mm |
| <b>540-815-18</b> | Ø 4.9 mm, 1800 mm |
| <b>540-815-23</b> | Ø 4.9 mm, 2300 mm |
| <b>540-815-30</b> | Ø 4.9 mm, 3000 mm |
| <b>540-815-50</b> | Ø 4.9 mm, 5000 mm |



TONTARRA light guide cables come as standard in grey coloring. For ordering different colors, please add the corresponding code behind the article number:: LL (Lilac); YW (Yellow); GN (Green)

**TONTARRA Standard Light Cables** are specially designed for use with **HALOGEN light sources**. This line represents high quality, resistant but economic cables. These light cables may not be used with high energy output.



## **Light Guide Cables** (without endoscope-side connectors)

optimized for **HALOGEN**

|                   |                   |
|-------------------|-------------------|
| <b>540-802-18</b> | Ø 2.5 mm, 1800 mm |
| <b>540-802-23</b> | Ø 2.5 mm, 2300 mm |
| <b>540-802-30</b> | Ø 2.5 mm, 3000 mm |
| <b>540-802-50</b> | Ø 2.5 mm, 5000 mm |
| <b>540-803-18</b> | Ø 3.5 mm, 1800 mm |
| <b>540-803-23</b> | Ø 3.5 mm, 2300 mm |
| <b>540-803-30</b> | Ø 3.5 mm, 3000 mm |
| <b>540-803-50</b> | Ø 3.5 mm, 5000 mm |
| <b>540-805-18</b> | Ø 4.9 mm, 1800 mm |
| <b>540-805-23</b> | Ø 4.9 mm, 2300 mm |
| <b>540-805-30</b> | Ø 4.9 mm, 3000 mm |
| <b>540-805-50</b> | Ø 4.9 mm, 5000 mm |

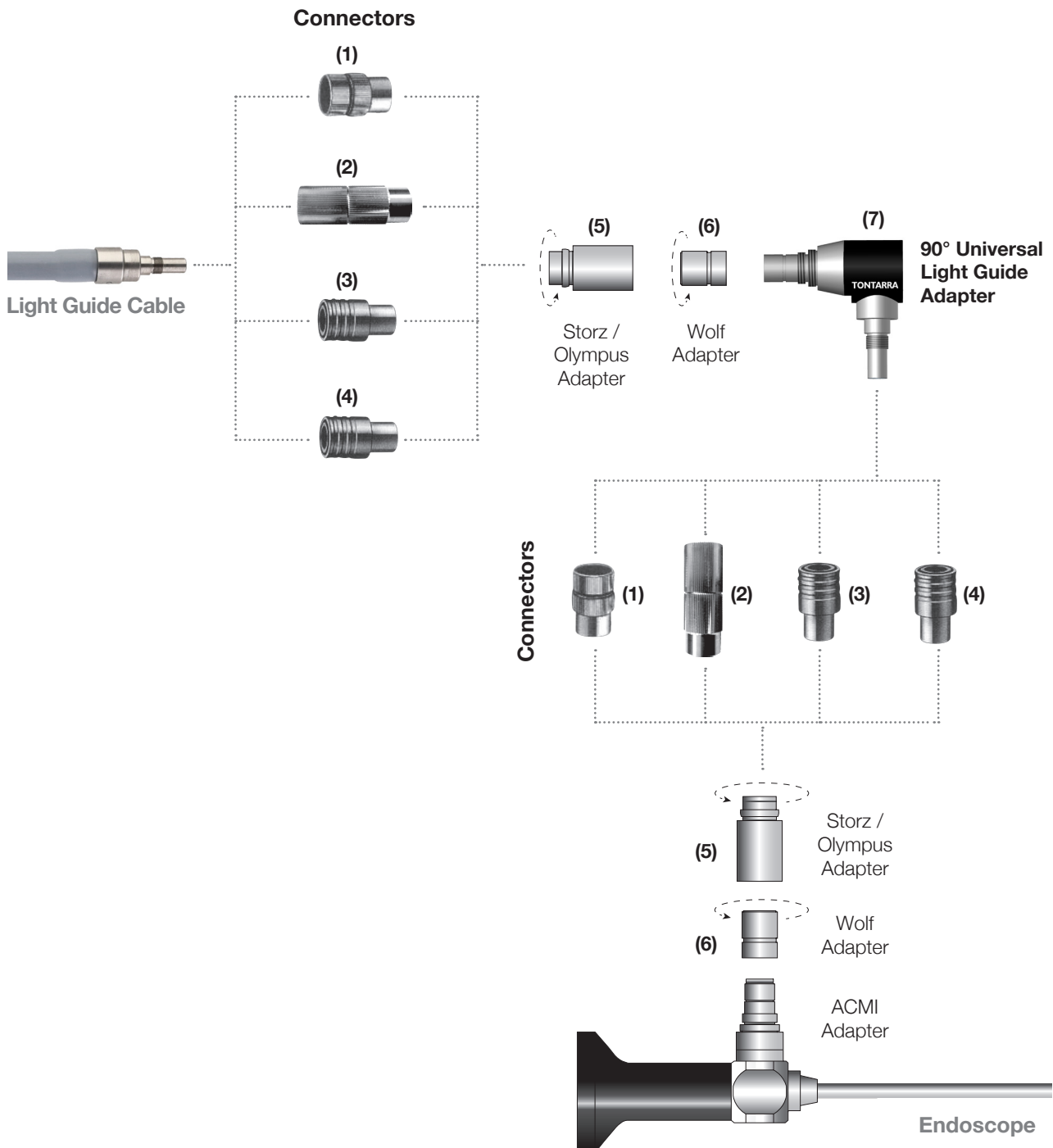


TONTARRA light guide cables come as standard in grey coloring. For ordering different colors, please add the corresponding code behind the article number:: LL (Lilac); YW (Yellow); GN (Green)

The **90° Universal Light Adapter** is the needed accessory in nearly every surgery. The adapter helps to keep the light cable out of the working field as well as prevents too intense bending of the light cable during the intervention.

Since it is freely rotatable the light cable will not accidentally be disconnected from the telescope while rotating the light cable or entire scope for new positioning.

This universal light adapter can be used with all kinds of endoscopes. Also, the connection to the light guide is versatile and fits most common light cable connectors.



## LIGHT GUIDE CONNECTORS

|     |                   |                                                       |
|-----|-------------------|-------------------------------------------------------|
| (1) | <b>540-880-02</b> | Connector TONTARRA / Storz / Aesculap / Olympus (old) |
| (2) | <b>540-880-04</b> | Connector Olympus new                                 |
| (3) | <b>540-880-13</b> | Connector Wolf/HSW/Dyonics snap                       |
| (4) | <b>540-880-01</b> | Connector ACMI / British / Codman                     |

## LIGHT GUIDE ADAPTERS

|     |                   |                         |
|-----|-------------------|-------------------------|
| (5) | <b>601-900-00</b> | Adapter Storz / Olympus |
| (6) | <b>601-900-10</b> | Adapter Wolf            |

## UNIVERSAL ADAPTER

|     |                   |                               |
|-----|-------------------|-------------------------------|
| (7) | <b>601-900-15</b> | Universal Adapter, 90° angled |
|-----|-------------------|-------------------------------|

## FSNO/IPS740DG (compatible connection with TONTARRA EndoorCam40)

### Documentation Unit **4K UHD 3G/12G-SDI**

#### Features:

- 5" Touchscreen
- Record mp4 videos in 4K UHD quality
- Capture still images in crystal clear 4K UHD quality
- Can record and playback video content in 3D
- Integrated VACS ® Software for video archiving and collaboration
- Connection to PACS system possible
- Possible to attach external devices via USB, e.g. external storage device etc.
- Record files simultaneously to internal hard disc and external storage device
- Huge internal storage capacity of 4TB
- Possibility to attach external monitor

**4K UHD**



## TECHNICAL DATA

|                              |                                                                                                 |
|------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Video Inputs</b>          | 1x HDMI 2.0   1x DisplayPort 1.4   <b>4x 3G-SDI or 2x 12G- SDI</b>                              |
| <b>Video Outputs</b>         | 1x HDMI 2.0   <b>4x 3G-SDI or 2x 12G-SDI</b>                                                    |
| <b>Other Connections</b>     | 4x USB 3.0 (2x front / 2x back)   3.5 mm Stereo x 2ea MIC in, line in<br>3.5 mm Stereo line out |
| <b>Capture and Record</b>    | 4096x2160p60   3840x2160p60   1920x1080p60                                                      |
| <b>Encoding formats</b>      | H.264, H.265                                                                                    |
| <b>Recording file format</b> | MP4                                                                                             |
| <b>Capture image format</b>  | BMP, JPEG, DICOM                                                                                |
| <b>Audio encoding format</b> | AAC                                                                                             |
| <b>3D video formats</b>      | 4K line alternative (SBSH conversion)   4K side-by-side half                                    |
| <b>DICOM, HL7</b>            | DICOM Store (Image)   Modality Worklist   MPPS   Appointment Booking (HL7)                      |
| <b>DICOM store</b>           | Direct access to PACS                                                                           |
| <b>Internal Storage</b>      | 4 TB                                                                                            |

## SYSTEM

|                             |                               |
|-----------------------------|-------------------------------|
| <b>Standard Compliance</b>  | IEC60601-1   EN 60601-1-2     |
| <b>Directive Compliance</b> | CE-mark                       |
| <b>Power requirements</b>   | AC 100-240V                   |
| <b>Dimensions</b>           | 260 x 95 x 330 mm (W x H x D) |
| <b>Weight</b>               | 4.1 kg                        |

Original Manufacturer Product of FSN

**FSNO/IPS740DS**Documentation Unit **4K UHD 3G-SDI**

-  Return to **HOME** screen icon.
-  **FILE** icon manages tasks, including: search, modify, copy, delete, DICOM store, and print.
-  **WORKLIST** icon retrieves patient information that is stored on the worklist server.
-  **SETUP** icon opens settings for input sources, file types, DICOM, server, network, local time, foot pedal, printing layout, and system options.
-  Select the **MONITOR** icon to switch to the connected external monitor. When in this mode, touchscreen can also be used as a touchpad.
-  Create a new **TASK** when plus (+) symbol is shown, or close an active task when minus (-) symbol is shown.

**4K UHD****TECHNICAL DATA**

|                              |                                                                                                 |
|------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Video Inputs</b>          | 1x HDMI 2.0   1x DisplayPort 1.4   <b>1x 3G-SDI</b>                                             |
| <b>Video Outputs</b>         | 1x HDMI 2.0   <b>1x 3G-SDI</b>                                                                  |
| <b>Other Connections</b>     | 4x USB 3.0 (2x front / 2x back)   3.5 mm Stereo x 2ea MIC in, line in<br>3.5 mm Stereo line out |
| <b>Capture and Record</b>    | 4096x2160p60   3840x2160p60   1920x1080p60                                                      |
| <b>Encoding formats</b>      | H.264, H.265                                                                                    |
| <b>Recording file format</b> | MP4                                                                                             |
| <b>Capture image format</b>  | BMP, JPEG, DICOM                                                                                |
| <b>Audio encoding format</b> | AAC                                                                                             |
| <b>3D video formats</b>      | 4K line alternative (SBSH conversion)   4K side-by-side half                                    |
| <b>DICOM, HL7</b>            | DICOM Store (Image)   Modality Worklist   MPPS   Appointment Booking (HL7)                      |
| <b>DICOM store</b>           | Direct access to PACS                                                                           |
| <b>Internal Storage</b>      | 4 TB                                                                                            |

**SYSTEM**

|                             |                               |
|-----------------------------|-------------------------------|
| <b>Standard Compliance</b>  | IEC60601-1   EN 60601-1-2     |
| <b>Directive Compliance</b> | CE-mark                       |
| <b>Power requirements</b>   | AC 100-240V                   |
| <b>Dimensions</b>           | 260 x 95 x 330 mm (W x H x D) |
| <b>Weight</b>               | 4.0 kg                        |

Original Manufacturer Product of FSN

## FSNO/IPS720

### Documentation Unit **FULL HD**

#### Features:

- 5" Touchscreen
- Record mp4 videos in FULL HD quality
- Capture still images in 1920 x 1080 FULL HD quality
- Integrated VACS ® Software for video archiving and collaboration
- Connection to PACS system possible
- Possible to attach external devices via USB, e.g. external storage device etc.
- Record files simultaneously to internal hard disc and external storage device
- Can record 2 sources at once
- Play back 1 or 2 sources from the same video file
- Huge internal storage capacity of 2TB
- Possibility to attach external monitor



**FULL HD**

## TECHNICAL DATA

|                              |                                                                                                 |
|------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Video Inputs</b>          | 2x HDMI 2.0   1x DisplayPort 1.4   2x 3G-SDI                                                    |
| <b>Video Outputs</b>         | 1x HDMI 2.0                                                                                     |
| <b>Other Connections</b>     | 4x USB 3.0 (2x front / 2x back)   3.5 mm Stereo x 2ea MIC in, line in<br>3.5 mm Stereo line out |
| <b>Capture and Record</b>    | 1920x1080p60                                                                                    |
| <b>Encoding formats</b>      | H.264, H.265                                                                                    |
| <b>Recording file format</b> | MP4                                                                                             |
| <b>Capture image format</b>  | BMP, JPEG, DICOM                                                                                |
| <b>Audio encoding format</b> | AAC                                                                                             |
| <b>3D video formats</b>      | Side-by-Side   Top-Bottom   Line-by-Line (SbS conversion, TB conversion)                        |
| <b>DICOM, HL7</b>            | DICOM Store (Image)   Modality Worklist   MPPS   Appointment Booking (HL7)                      |
| <b>DICOM store</b>           | Direct access to PACS                                                                           |
| <b>Internal Storage</b>      | 2 TB                                                                                            |

## SYSTEM

|                             |                               |
|-----------------------------|-------------------------------|
| <b>Standard Compliance</b>  | IEC60601-1   EN 60601-1-2     |
| <b>Directive Compliance</b> | CE-mark                       |
| <b>Power requirements</b>   | AC 100-240V                   |
| <b>Dimensions</b>           | 260 x 95 x 330 mm (W x H x D) |
| <b>Weight</b>               | 4.0 kg                        |

Original Manufacturer Product of FSN

**FSNO/IPS100A** (For use with EndoorCam 40 NIR FI and 43" 4K Monitor)

Video Signal Converter **Quad SDI to 12 SDI /DHDMI 4K**

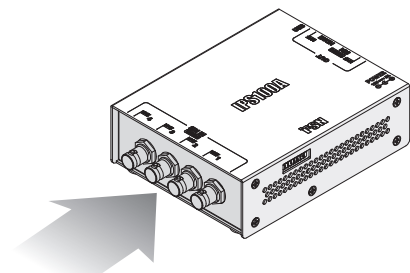
Features:

- Accepts quad SDI (3G or 12G) input up to 4K
- Delivers single SDI (3G or 12G) or HDMI 2.0 output up to 4K.
- Mode select switch configuration allows for quick setup
- Meets medical certification requirements
- Controls and settings are accessed through a USB interface
- Firmware updates are fast and easy

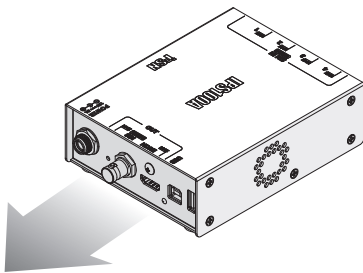


| TECHNICAL DATA    |                                                                                                                                                              |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input Signal      | 4 x SDI (SD/HD/3G/12G)                                                                                                                                       |
| Output Signal     | 1 x HDMI (2.0 )<br>1 x SDI (HD/3G/12G)                                                                                                                       |
| External Control  | USB (2.0)                                                                                                                                                    |
| Power Supply      | 12Vdc                                                                                                                                                        |
| Power Consumption | 20W max                                                                                                                                                      |
| Mode Select       | Manual control: switch 8 is off, switches 1-7 are active.<br>Software/service control: switch 8 is on, switches 1-7 are inactive,<br>USB A and B are active. |
| Unit Dimension    | 130.5(W) x 103(H) x 40(D) mm<br>5.13(W) x 4.05(H) x 1.57(D) inch                                                                                             |
| Package Dimension | 242(W) x 187(H) x 72(D) mm<br>9.53(W) x 7.36(H) x 2.83(D) inch                                                                                               |
| Weight            | 0.48Kg, 1.06 lbs. (IPS100A)<br>1.01Kg, 2.23 lbs. (shipping package)                                                                                          |

Original Manufacturer Product of FSN



Quad SDI  
(3G or 12G)  
input up to 4K



Single SDI (3G or 12G)  
or HDMI 2.0  
output up to 4K





### Medical keyboard; disinfectable

with replaceable sterilizable cover

### Replacement cover

for medical keyboards

| Language layout      | Art. no.         |
|----------------------|------------------|
| Arabian              | MAMO/VCF/AR/W5   |
| Belgian              | MAMO/VCF/BE/W5   |
| Swiss/Luxembourg     | MAMO/VCF/CH/W5   |
| German               | MAMO/VCF/DE/W5   |
| Nordic               | MAMO/VCF/DNS/W5  |
| Spanish              | MAMO/VCF/ES/W5   |
| French               | MAMO/VCF/FR/W5   |
| Italian              | MAMO/VCF/IT/W5   |
| Portuguese           | MAMO/VCF/PT/W5   |
| Turkish              | MAMO/VCF/TR/W5   |
| UK                   | MAMO/VCF/UK/W5   |
| US International     | MAMO/VCF/US/W5   |
| UK with printed keys | MAMO/VCFUK/UK/W5 |

| Language layout  | Art. no.           |
|------------------|--------------------|
| Arabian          | MAMO/DRAPE/VC/AR   |
| Belgian          | MAMO/DRAPE/VC/BE   |
| Swiss/Luxembourg | MAMO/DRAPE/VC/CH   |
| German           | MAMO/DRAPE/VC/DE   |
| Nordic           | MAMO/DRAPE/VC/DNS  |
| Spanish          | MAMO/DRAPE/VC/ES   |
| French           | MAMO/DRAPE/VC/FR   |
| Italian          | MAMO/DRAPE/VC/IT   |
| Portuguese       | MAMO/DRAPE/VC/PT   |
| Turkish          | MAMO/DRAPE/VC/TR   |
| UK               | MAMO/DRAPE/VC/UK   |
| US International | MAMO/DRAPE/VC/USV2 |

Original Manufacturer Product of Man & Machine



### Medical keyboard; desinfectable

completely silicone sealed

| Language layout  | Art. no.         |
|------------------|------------------|
| Belgian          | MAMO/RCLP/BE/W5  |
| Swiss/Luxembourg | MAMO/RCLP/CH/W5  |
| German           | MAMO/RCLP/DE/W5  |
| Nordic           | MAMO/RCLP/DNS/W5 |
| Spanish          | MAMO/RCLP/ES/W5  |
| French           | MAMO/RCLP/FR/W5  |
| Italian          | MAMO/RCLP/IT/W5  |
| Portuguese       | MAMO/RCLP/PT/W5  |
| UK               | MAMO/RCLP/UK/W5  |
| US International | MAMO/RCLP/US/W5  |

Original Manufacturer Product of Man & Machine

## WOMO/PM304-M01

### Multi-Indication Pump; without Indication-Transponder

The multiple use of this pump facilitates routine hospital activities. It combines streamlined design, **easy operation** and maximum safety. Key parameters are seen at a glance, allowing for **quick and correct adjustment**.

Multi Indication:

- Laparoscopy
- Arthroscopy
- Hysteroscopy
- Urology



## TECHNICAL DATA

|                        |                                                                                                                           |
|------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Pressure range         | Laparoscopy: not adjustable<br>Arthroscopy: 5 - 150 mmHG<br>Hysteroscopy: 15 - 150 mmHG<br>Urology: 15 - 150 mmHG         |
| Flow range             | Laparoscopy: 1.0 - 1.8 l/min<br>Arthroscopy: 0.1 - 1.8 l/min<br>Hysteroscopy: 50 - 500 ml/min<br>Urology: 50 - 500 ml/min |
| Suction capacity       | Max. 2 l/min (depending on outflow cannula)                                                                               |
| Power supply           | 100 - 240 V~                                                                                                              |
| Frequency              | 50 - 60 Hz                                                                                                                |
| Power consumption      | 80 VA                                                                                                                     |
| Current consumption    | 100 V: 0.8 A<br>240 V: 0.3 A                                                                                              |
| Classifications        | Protection Class I, Type BF, IP 21                                                                                        |
| Dimensions (W x H x D) | 381 x 149 x 379 mm                                                                                                        |
| Weight                 | 6.3 kg                                                                                                                    |

Original Manufacturer Product of WOM



## **WOMO/2205333**

Transponder, Indication HYS



## **WOMO/Z0540-01**

Foot pedal



## **BEMO/533910**

Four canister hi-low stand; max. height: 91cm (36")



## **BEMO/3002055**

BEMIS Container, 3 L, disposable



## **BEMO/532810**

BEMIS Container, wire ring



## **BEMO/537010**

Connecting tube for BEMIS container; non sterile; length: 46cm

Original Manufacturer Products of WOM and BEMIS

**WOMO/Z0223-01**

Differential volume scale only for WOMO/PM304-M01, for use in HYST and URO mode

**WOMO/T0505-01**

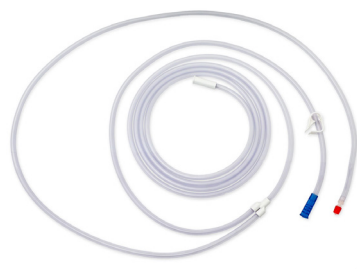
Tube set for Irrigation, single-use, 10 pcs./pack, all indications

**WOMO/T0506-01**

Tube set for Irrigation, reusable, 20 uses, 1 pc./pack, all indications

**WOMO/T0502-01**

Tube set for suction, single-use, 10 pcs./pack, all indications

**WOMO/T0503-01**

Tube set for suction, 2 connectors, single-use, 10 pcs./pack, all indications

**WOMO/T0504-01**

Tube set for Vacuum, incl. Filter, 30-day use, 10 pcs./pack, all indications

Original Manufacturer Product of WOM



**WOMO/Z0101-01**

Power supply cord EU



**WOMO/Z0176-00**

Power supply cord UK



**WOMO/Z0102-01**

Power supply cord US



**WOMO/Z0103-01**

Power supply cord CN



**WOMO/Z0560-01**

Power supply cord BR

Original Manufacturer Product of WOM

## 540-280-50(PWT-400)

### High-Frequency Generator PWT-400

Features:

- 14 mono- and bipolar cutting modes
- 10 coagulation modes
- 99 storage positions for application-specific programs/profiles
- simultaneous use of two monopolar handles
- Pre-set-up programs for TONTARRA resectoscopes
- Convenient use via touch screen
- Automatic self-test and permanent auto-check during use



## 540-284-50

### Twin foot-switch



## INDICATIONS



► Gynecology



► Urology



► Laparoscopy

| MONOPOLAR CUTTING |                                                           |             |             |                 |                  |                     |                                                           |                       |                       |              |
|-------------------|-----------------------------------------------------------|-------------|-------------|-----------------|------------------|---------------------|-----------------------------------------------------------|-----------------------|-----------------------|--------------|
|                   | Pure cut                                                  | Blend cut 1 | Blend cut 2 | Pure cut pulsed | Blend cut pulsed | Auto pure cut micro | Auto blend cut micro                                      | Auto papillo pure cut | Auto polipo blend cut | Auto endocut |
| Max. output power | 400 W                                                     | 300 W       | 250 W       | 200 W           | 125 W            | 300 W               | 300 W                                                     | 300 W                 | 300 W                 | 300 W        |
| Rated load        | 400 Ω                                                     | 400 Ω       | 400 Ω       | 400 Ω           | 400 Ω            | 300 Ω               | 300 Ω                                                     | 300 Ω                 | 300 Ω                 | 300 Ω        |
| Vpp               | 2550                                                      | 3390        | 3330        | 2640            | 3330             | 1137                | 1500                                                      | 1140                  | 1490                  | 1670         |
| Crest factor      | 1.46                                                      | 1.94        | 2.29        | 2.00            | 3.20             | 1.50                | 1.98                                                      | 1.50                  | 1.98                  | –            |
| Modulation        | 0                                                         | 17 kHz      | 17 kHz      | 3 Hz            | 50 Hz            | 0                   | 17 kHz                                                    | 0 kHz                 | 17 kHz                | –            |
| Duty Cycle        | 100%                                                      | 95%         | 65%         | 50%             | 50%              | 100%                | 90%                                                       | 100%                  | 95%                   | –            |
| Power setting     | Progressive with steps from 1 to 10 W                     |             |             |                 |                  |                     | 10 effects                                                |                       |                       |              |
| Power control     | ADC System – dynamic self-adjusting with constant voltage |             |             |                 |                  |                     | APC System – totally self-adjusting with constant voltage |                       |                       |              |

| MONOPOLAR COAGULATION |                                                           |            |                        |                   |                                                           |
|-----------------------|-----------------------------------------------------------|------------|------------------------|-------------------|-----------------------------------------------------------|
|                       | Fulg forced coag                                          | Spray coag | Pin point contact coag | pulsed spray coag | Soft micro coag                                           |
| Max. output power     | 150 W                                                     | 200 W      | 300 W                  | 100 W             | 280 W                                                     |
| Rated load            | 300 Ω                                                     | 700 Ω      | 400 Ω                  | 700 Ω             | 300 Ω                                                     |
| Vpp                   | 4500                                                      | 7750       | 3700                   | 7750              | 3300                                                      |
| Crest factor          | 6.4                                                       | 7.75       | 2.2                    | 11.5              | 2.1                                                       |
| Modulation            | 60 kHz                                                    | 30 kHz     | 17 kHz                 | 3 Hz              | 17 kHz                                                    |
| Duty Cycle            | 18%                                                       | 7%         | 85%                    | 50%               | 75%                                                       |
| Power setting         | Progressive with steps from 1 to 10 W                     |            |                        |                   | 10 effects                                                |
| Power control         | ADC System – dynamic self-adjusting with constant voltage |            |                        |                   | APC System – totally self-adjusting with constant voltage |

| BIPOLAR CUTTING   |                    |                   |                |             |
|-------------------|--------------------|-------------------|----------------|-------------|
|                   | Saline Uro-Gyn cut | Saline Arthro cut | Standard bicut | Blend bicut |
| Max. output power | 320 W              |                   |                |             |

| BIPOLAR COAGULATION AND VESSEL SEALING |                                                           |                        |            |              |                                                           |
|----------------------------------------|-----------------------------------------------------------|------------------------|------------|--------------|-----------------------------------------------------------|
|                                        | Soft micro bicoag                                         | Auto soft micro bicoag | Sealing    | Auto sealing | Forced macro bicoag                                       |
| Max. output power                      | 140 W                                                     | 140 W                  | 320 W      | 320 W        | 200 W                                                     |
| Rated load                             | 100/150 Ω                                                 | 100/150 Ω              | 50/100 Ω   | 50/100 Ω     | 100/150 Ω                                                 |
| Vpp                                    | 460                                                       | 460                    | 320        | 320          | 550                                                       |
| Crest factor                           | 1.6                                                       | 1.6                    | 1.46       | 1.46         | 1.6                                                       |
| Modulation                             | 0                                                         | 0                      | 0          | 0            | 0                                                         |
| Duty Cycle                             | 100%                                                      | 100%                   | 100%       | 100%         | 100%                                                      |
| Power setting                          | Progressive with steps from 0.1 to 5 W                    |                        | 10 effects |              | Progressive with steps from 0.1 to 5 W                    |
| Power control                          | APC System – totally self-adjusting with constant voltage |                        |            |              | ADC System – dynamic self-adjusting with constant voltage |

| TECHNICAL DATA                                                |                                                                                                                                                                                                             |
|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mains supply and consumption, Mains switch, Fuses and Standby | 100 / 230V ± 10% ~ 50/60Hz (Consumption: Max. 3.6 A = 828 VA, Standby 0.4 A = 92 VA). Bipolar switch (green), Two fuses 8 A, Standby mode selectable on the touch-screen.                                   |
| Equipotential connection                                      | Standard DIN 42801 plug.                                                                                                                                                                                    |
| Enclosure, Cooling                                            | Metal painted case, protected against the spilling of liquids according to IEC 60601-2-2. Cooling by convection (No fan).                                                                                   |
| Software updating and calibration                             | Updating by a serial port connected to a PC, calibration on-site.                                                                                                                                           |
| Dimensions and weight                                         | 38 x 35 x 19 cm (10 kg)                                                                                                                                                                                     |
| HF generator                                                  | Meets IEC 60601-1 and IEC 60601-2-2                                                                                                                                                                         |
| EMC compatibility                                             | Meets IEC 60601-1-2                                                                                                                                                                                         |
| EC Classification and approval                                | Class IIB according to 93/42/CEE                                                                                                                                                                            |
| Classification according to IEC 60601-1                       | Class I, CF type with the following typical low frequency leakage currents (all cables tied together): on the patient: 4 µA = 0,004 mA/into the enclosure: 1 µA = 0,001 mA /to earth: 30 µA = 0,03 mA       |
| Output circuit according to IEC 60601-2-2                     | FLOATING (Isolated at high and low frequencies) and protected against the use of the defibrillator. Typical HF leakage currents measured at the unit: monopolar currents = 90 mA, bipolar currents = 60 mA. |
| Working frequency                                             | Monopolar and bipolar currents: 440kHz ± 5 w%.                                                                                                                                                              |



**HF Connection Cables****monopolar****Available for following units:**

|                                                                                   |                                                                                   |                                                                          |                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------|
|  |  | Erbe / ICC / ACC / Storz;<br>Ø 5.0 mm; 3.0 m                             | <b>582-531-02</b> |
|                                                                                   |  | Valleylab; Conmed; Bowa<br>Ø 8.0 mm; 3.0 m                               | <b>582-532-03</b> |
|                                                                                   |  | TONTARRA mod. PWT-400;<br>Equipment with<br>banana plug; Ø 4.0 mm; 3.0 m | <b>582-533-04</b> |

**HF Connection Cables****bipolar; for Electrodes****Available for following units:**

(length)

|                                                                                                  |                                                                                     |                                                                                |                        |
|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------|
| <br>flat plug |  | Erbe; Storz/unit side round plug                                               | <b>287-200-30</b> (3m) |
|                                                                                                  |                                                                                     |                                                                                | <b>287-200-50</b> (5m) |
|                                                                                                  |  | Berchthold/Martin/unit side<br>round plug                                      | <b>287-205-30</b> (3m) |
|                                                                                                  |                                                                                     |                                                                                | <b>287-205-50</b> (5m) |
|                                                                                                  |  | US-Models; 2-pins/unit side<br>banana plugs; Ø 4.0 mm                          | <b>287-210-30</b> (3m) |
|                                                                                                  |                                                                                     |                                                                                | <b>287-210-50</b> (5m) |
|                                                                                                  |  | TONTARRA mod. PWT-400;<br>Valleylab; International Models;<br>2 pins; Ø 4.0 mm | <b>287-215-30</b> (3m) |
|                                                                                                  |                                                                                     |                                                                                | <b>287-215-50</b> (5m) |

**HF Connection Cables****bipolar: for TONTARRA Resectoscopes****Available for following units:**

|                                                                                     |                                                                                     |                                                                                              |                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------|
|    |    | Erbe mod. ICC/ACC; Storz<br>3.0 m                                                            | <b>287-200-30BR</b> |
|    |    | Berchthold/Martin mod. Maxium<br>3.0 m                                                       | <b>287-205-30BR</b> |
|    |    | TONTARRA mod. PWT-400;<br>International Models; 2-pins<br>3.0 m                              | <b>287-215-30BR</b> |
|    |    | Erbe mod. VIO300D with multi-<br>contact connector; Karl Storz mod.<br>Autocon II 400; 3.0 m | <b>287-220-30BR</b> |
|   |   | Erbe mod. VIO 3 with MF-U socket<br>4.5 m                                                    | <b>287-235-30BR</b> |
|  |  | Bowa mod. ARC 350 & 400;<br>4.5 m                                                            | <b>287-230-30BR</b> |



## 289-010-10

**Single-use** neutral electrode; for adults and children;  
split; Acond\*= 110 cm²; 1 PU= 100 pieces



## 289-010-05

**Single-use** neutral electrode; for adults and children;  
non-split; Acond\*= 110 cm²; 1 PU= 100 pieces

## HF Connection Cables

for Neutral Electrodes

Available for following units:

|  |                 |                                                        |                   |
|--|-----------------|--------------------------------------------------------|-------------------|
|  | Ø 6.3 mm        | TONTARRA mod. PWT-400;<br>Erbe ACC/ICC/VIO; Martin; 5m | <b>289-025-45</b> |
|  | 10 mm<br>2.5 mm | BOWA; Conmed; Valleylab<br>5m                          | <b>289-030-45</b> |



## ► Equipment Cart "Pro"

**TONTARRA's „Pro“ mobile equipment cart** comes in an elegant and modern single-column design with shelf width 450 mm and a maximum load capacity of up to 80 kg / 176 lbs. The support of the “Pro” cart offers many advantages such as a separate routing of the power cables. The integrated rubber clip and cover cap ensure a quick access to the cables. Furthermore, the four twin castors and push handle provide a high level of mobility and easy maneuverability. The “Pro” cart comes with an VESA 100/100 adaptation.

The integrated power columns also allow separate cable routing of data and power cables and the installation of socket strips. Excess cable lengths can also be stowed away safely. For an easy use there is an on/off switch integrated into the top of the column

### ITDO/KN.0891.800

#### Equipment Cart "Pro" with isolating transformer and on/off switch

Color: ruby red

Consisting of:

- Basic frame "Pro" with support column
- Push handle
- Roller conversion kit Ø 125 mm; conductive
- Monitor mount; VESA 100/100; max. load capacity 18 kg
- Shelf without handle; 450 x 360 mm (W x D); max. load 20 kg
- Camera holder
- Isolating transformer 1,200 VA
- 6-way SCHUKO socket strip
- Power cord 5m

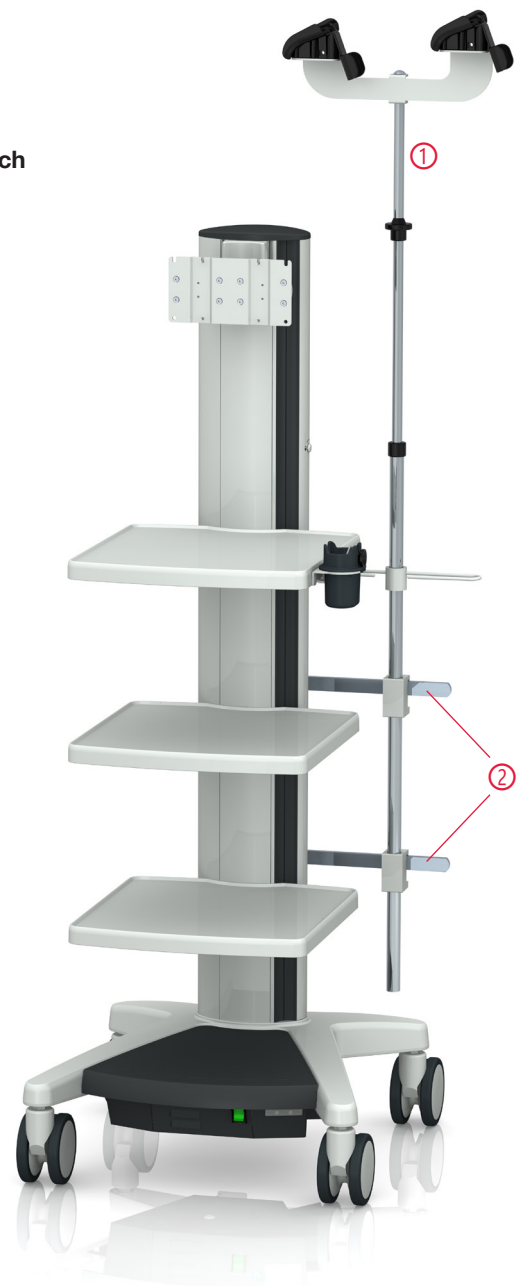
#### Optional equipment:

##### ① ITDO/GW.0870.991

**Endoscope holder double; mounting on standard rail**  
in combination with ITDO/GW.9801.991

##### ② ITDO/GW.9801.991

**2x Standard rail 10 x 25 mm; L = 390 mm**  
in combination with ITDO/GW.0870.991



Original Manufacturer Product of ITD

## ITDO/KN.0904.800

### Monitor Cart "Pro" with push handle

Color: ruby red

Consisting of:

- Basic frame "Pro" with support column
- Cable winder for monitor cart "Pro"
- Roller conversion kit Ø 125 mm; conductive
- Monitor mount; VESA adjustable; max. load capacity 65 kg
- Counterweight set 15 kg
- 6-way SCHUKO socket strip
- Power cord 5m
- External earthing cable



Original Manufacturer Product of ITD

## ► Equipment Cart "Classic"

**TONTARRA's "Classic" equipment cart** is a two-column cart with shelf width 500 mm and a maximum load capacity of up to 150 kg / 330 lbs. It is characterized by its excellent stability and sturdiness as well as the spacious storage areas of its shelves with a distributed load rating of up to 50 kg / 110 lbs. The four twin castors provide a high level of mobility and easy maneuverability. The "Classic" cart comes with an VESA 75/100 adaptation.

For a better choice there are two options available one with isolating transformer and one without isolating transformer. The integrated power columns allow separate cable routing of data and power cables and the installation of socket strips. Excess cable lengths can also be stowed away safely. For an easy use there is an on/off switch integrated into the top of the column (cart with insulating transformer only).

### ITDO/KN.0814.800

#### Equipment Cart "Classic" with isolating transformer and on/off switch

Color: ruby red

Consisting of:

- Basic frame "Classic" max. load 150 kg
- Energy column
- Roller conversion kit Ø 125 mm; conductive
- Crossbar with universal monitor mount VESA 75/100; +/- 90° rotatable; +/-15° tiltable; max. load 14 kg
- Shelf with handle 500 x 491 mm (W x D); max. load 50 kg
- Keyboard drawer with mousepad; 500 x 491 x 64 mm (W x D x H); Mousepad 200 x 200 mm; max. load 5 kg
- 3x Shelf without handle; 500 x 491 mm (W x D); max. load 50 kg
- Isolating transformer 1,600 VA; power cord 5m
- Camera holder
- 8-way SCHUKO socket strip; plugged into transformer



Original Manufacturer Product of ITD

#### Optional equipment:

### ITDO/TH.2101.991

#### Pivot Arm, 1-fold with VESA 75/100 adaptation

- Arm length: 325 mm
- Monitor weight: max. 14 kg
- Convenient operation thanks to preset torques
- Large action radii cover a wide working range ( $\pm 20^\circ$  tilt,  $\pm 90^\circ$  swivel and  $\pm 5^\circ$  rotation)
- Large-volume cable ducts with strain relief accommodate various cables



## ITDO/KN.0890.800

### Equipment Cart "Classic" without isolating transformer

Color: ruby red

Consisting of:

- Basic frame "Classic" max. load 150 kg
- Energy column
- Roller conversion kit Ø 125 mm; conductive
- Crossbar with universal monitor mount VESA 75/100; +/- 90° rotatable; +/-15° tilt max. load 14 kg
- Shelf with handle 500 x 491 mm (W x D); max. load 50 kg
- Keyboard drawer with mousepad; 500 x 491 x 64 mm (W x D x H); Mousepad 200 x 200 mm; max. load 5 kg
- 3x Shelf without handle; 500 x 491 mm (W x D); max. load 50 kg
- Camera holder
- 8-way SCHUKO socket strip; central on/off switch; power cord 5 m



Original Manufacturer Product of ITD

### Optional equipment:

## ITDO/HA.2236.903

### Variable height support arm with VESA 75/100 adaptation

- Arm length: 300 mm x 350 mm
- Monitor weight: 8-14 kg
- Adjustable swivel joints and a brake function ensure precise positioning; ± 20° tilt, ± 90° swivel and ± 5° rotation
- Monitor can be tilted with little effort due to spring-loaded support
- Folds up to save space for transportation
- Cable support available



## ITDO/HA.5011.991

### Monitor crossbar for ITDO/HA.2236.903

(when purchased separately)

## ITDO/HA.2094.991

### Counterweight for ITDO/HA.2236.903

(when purchased separately)





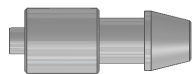
**087-912-06**

LUER-Lock Tube connector Ø 6 mm



**087-912-08**

LUER-Lock Tube connector Ø 9 mm



**087-940-01**

LUER-Lock male with hose coupling



**087-939-00**

LUER-Lock male one way stopcock with spring screw cap and LUER Lock female



**087-940-02**

LUER-Lock male with stopcock and LUER-Lock female



**087-940-03**

Stopcock-Set **MIDDLE**: stopcock handle and nut



**087-940-04**

Stopcock-Set **BIG**: stopcock handle and nut



**087-940-05**

Stopcock-Set GUBBINI Examination Sheaths: stopcock handle and nut



**087-940-06**

Stopcock-Set GUBBINI systems: stopcock handle and nut



**087-955-01**

LUER-Lock Silicone Closing Cap; Box of 10 pcs.



**601-900-10**

Richard Wolf Light Guide Adapter for Endoscopes



**499-199-00**

Instrument Channel Sealing Cap; Box of 10 pcs.



**601-900-00**

TONTARRA / Karl Storz / Olympus Light Guide Adapter for Endoscopes



**499-198-00**

Instrument channel sealing cap with water stop valve for 3-10 Fr.; sterile; single-use; Box of 10 pcs.



**601-900-20**

Endoscope Polishing Paste; Box of 5 pcs.



**582-095-00**

Tap & Stopcock Lubricant; 5g tube



**DRSO/00-108-005**

Medical Instrument Oil Spray; 500 ml



**087-960-01**

LUER-Lock Caps; **red**; for PIRUETTO; 10 pcs.



**087-965-01**

LUER-Lock Caps; **yellow**; for PIRUETTO; 10 pcs.



**087-970-01**

LUER-Lock Caps; **black**; for PIRUETTO; 10 pcs.



**087-975-01**

LUER-Lock Caps; **green**; for PIRUETTO; 10 pcs.



## 590-000-01

Endoscope Protection Tube; for endoscopes up to Ø 5.5 mm; Box of 10 pcs.



## 590-000-03

Protection Tube; for electrodes; for sterilization and storing; stainless steel; 25 mm x 295 mm



## HSWO/8167900010

Anti-fogging agent; Ultrastop; **non-sterile**  
Dropper bottle **25 ml**



## HSWO/8167900030

Anti-fogging agent; Ultrastop; **non-sterile**  
Dropper bottle **15 ml**



## HSWO/8167900020

Anti-fogging agent; Ultrastop pro med; **sterile**  
Puncture bottle 30 ml



**180-410-18**

BARRETT uterine tenaculum forceps; 18 cm



**180-404-25**

BRAUN uterine tenaculum forceps; 25 cm



**180-402-26**

POZZI uterine tenaculum forceps; 26 cm



**180-494-23**

SCHACKE uterus manipulator forceps; 23 cm



**180-510-32**

SIMS uterus probe; **rigid; curved up**; 32 cm

**180-510-32**

SIMS uterus probe; **malleable; curved up**; 32 cm



**180-510-32**

SIMS uterus probe; **rigid; curved down**; 32 cm

**180-510-32**

SIMS uterus probe; **malleable; curved down**; 32 cm



### HEGAR Uterine Dilators

available in sets, or single dilators

#### Extra small dilator (not included in a set)

|            |              |
|------------|--------------|
| 180-354-01 | Ø 1.0/2.0 mm |
|------------|--------------|

#### Set with 8 Dilators Ø 3.0/4.0 – Ø 17.0/18.0 mm

|            |                       |
|------------|-----------------------|
| 180-354-98 | <b>SET 8 dilators</b> |
| 180-354-03 | Ø 3.0/4.0 mm          |
| 180-354-05 | Ø 5.0/6.0 mm          |
| 180-354-07 | Ø 7.0/8.0 mm          |
| 180-354-09 | Ø 9.0/10.0 mm         |
| 180-354-11 | Ø 11.0/12.0 mm        |
| 180-354-13 | Ø 13.0/14.0 mm        |
| 180-354-15 | Ø 15.0/16.0 mm        |
| 180-354-17 | Ø 17.0/18.0 mm        |

#### Set with 12 Dilators Ø 3.0/4.0 – Ø 25.0/26.0 mm

Content: same as set with 8 DILATORS,  
plus Ø 19.0/20.0 mm to Ø 25.0/26.0 mm

|            |                        |
|------------|------------------------|
| 180-354-99 | <b>SET 12 dilators</b> |
| 180-354-19 | Ø 19.0/20.0 mm         |
| 180-354-21 | Ø 21.0/22.0 mm         |
| 180-354-23 | Ø 23.0/24.0 mm         |
| 180-354-25 | Ø 25.0/26.0 mm         |





## **180-090-03**

KOGAN Endospeculum, **Ø 3.0 mm; without ratchet**; FL 28.0 mm / 11"

## **180-090-04**

KOGAN Endospeculum, **Ø 4.0 mm; without ratchet**; FL 28.0 mm / 11"

## **180-090-05**

KOGAN Endospeculum, **Ø 5.0 mm; without ratchet**; FL 28.0 mm / 11"



## **180-092-03**

KOGAN Endospeculum, **Ø 3.0 mm; with ratchet**; FL 28.0 mm / 11"

## **180-092-04**

KOGAN Endospeculum, **Ø 4.0 mm; with ratchet**; FL 28.0 mm / 11"

## **180-092-05**

KOGAN Endospeculum, **Ø 5.0 mm; with ratchet**; FL 28.0 mm / 11"



## **180-093-03**

KOGAN Endospeculum, **Ø 3.0 mm; with ratchet; insulated**; FL 28.0 mm / 11"

## **180-093-04**

KOGAN Endospeculum, **Ø 4.0 mm; with ratchet; insulated**; FL 28.0 mm / 11"

## **180-093-05**

KOGAN Endospeculum, **Ø 5.0 mm; with ratchet; insulated**; FL 28.0 mm / 11"



## 180-550-01

NOVAK Endometrium suction biopsy curette, **Ø 1.0 mm**; FL 23.0 mm / 9.2"

## 180-550-02

NOVAK Endometrium suction biopsy curette, **Ø 2.0 mm**; FL 23.0 mm / 9.2"

## 180-550-03

NOVAK Endometrium suction biopsy curette, **Ø 3.0 mm**; FL 23.0 mm / 9.2"

## 180-550-04

NOVAK Endometrium suction biopsy curette, **Ø 4.0 mm**; FL 23.0 mm / 9.2"



## 180-140-01

CUSCO Vagital Spectula, **without ratchet**; 75 x 32 mm

## 180-140-02

CUSCO Vagital Spectula, **without ratchet**; 85 x 36 mm

## 180-140-03

CUSCO Vagital Spectula, **without ratchet**; 95 x 37 mm



## 180-144-01

CUSCO Vagital Spectula, **with ratchet**; 75 x 32 mm

## 180-144-02

CUSCO Vagital Spectula, **with ratchet**; 85 x 36 mm

## 180-144-03

CUSCO Vagital Spectula, **with ratchet**; 95 x 37 mm

### 260-600-04Y

Optic wire basket with fixation **for 1 optic**  
**460 x 80 mm h: 52 mm**

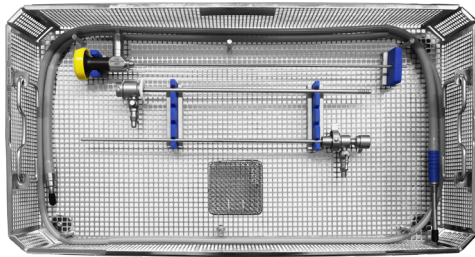


- 260-602-01Y    ● GREY
- 260-602-02Y    ● YELLOW
- 260-602-03Y    ● RED
- 260-602-04Y    ● BLUE
- 260-602-05Y    ● GREEN
- 260-602-06Y    ● BLACK

Optic container; complete; lid and bottom perforated;  
**470 x 82 mm h: 74 mm**

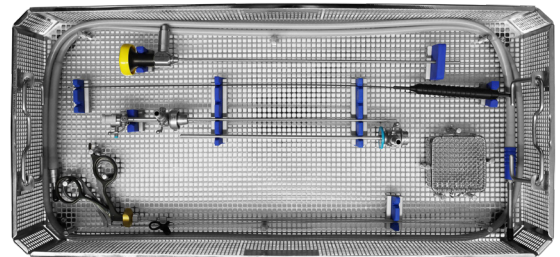






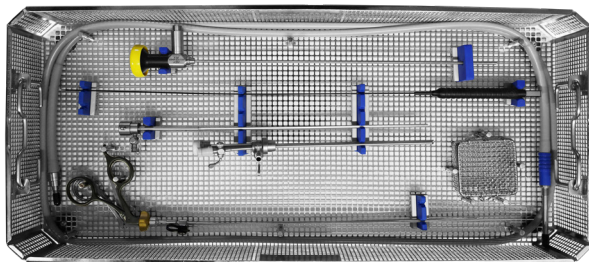
## 260-605-00Y

Pre-configured wire basket; 405 x 253 x 80 mm  
**for Diagnostic Hysteroscopy**  
for 3/4 Container



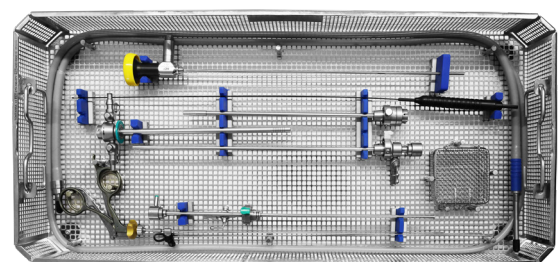
## 260-605-01Y

Pre-configured wire basket; 485 x 253 x 80 mm  
**for Operative Hysteroscopy**  
for 1/1 Container



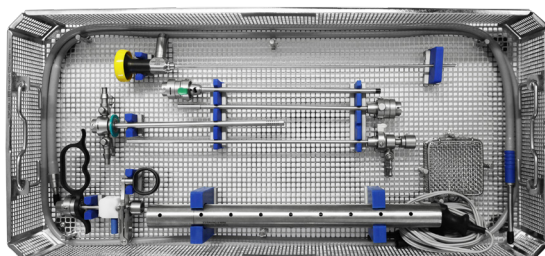
## 260-605-02Y

Pre-configured wire basket; 540 x 253 x 80 mm  
**for RAIS (Ricciardi All-in Scope)**  
for 1/1 Container



## 260-605-03Y

Pre-configured wire basket; 485 x 253 x 80 mm  
**for Mechanical KMS-System**  
for 1/1 Container



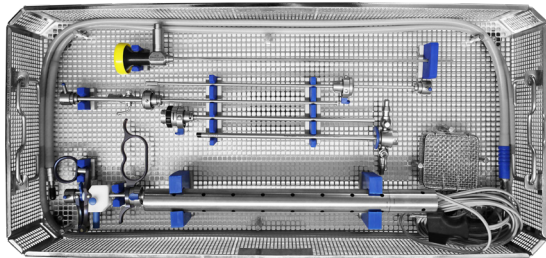
## 260-605-04Y

Pre-configured wire basket; 485 x 253 x 80 mm  
**for HF-Operative KMS-System**  
for 1/1 Container

For more information  
please see our  
Container catalog

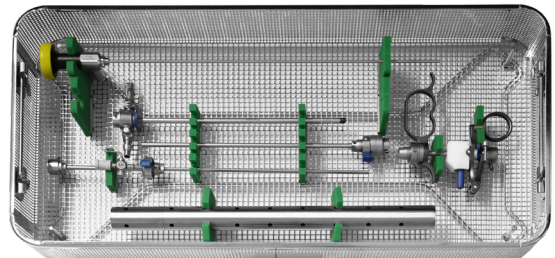


<https://qrco.de/container-cat>



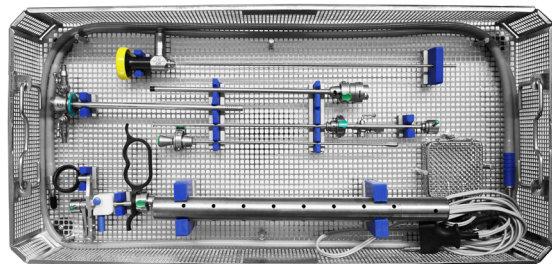
## 260-605-05Y

Pre-configured wire basket; 485 x 253 x 80 mm  
for **GUBBINIoriginal / GUBBINIellipse**  
for 1/1 Container



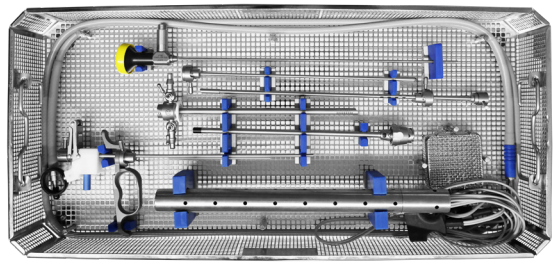
## 582-150-60GU

Pre-configured wire basket; 480 x 240 x 70 mm  
for **GUBBINI-Mini-Hystero-Resectoscope**  
for 1/1 Container



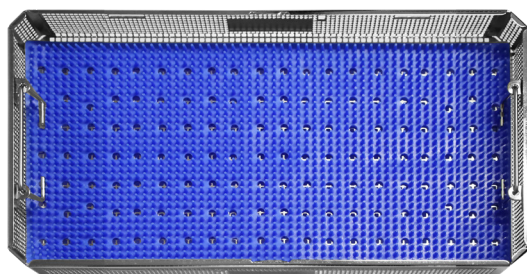
## 260-605-06Y

Pre-configured wire basket; 485 x 253 x 80 mm  
for **GUBBINImidi**  
for 1/1 Container



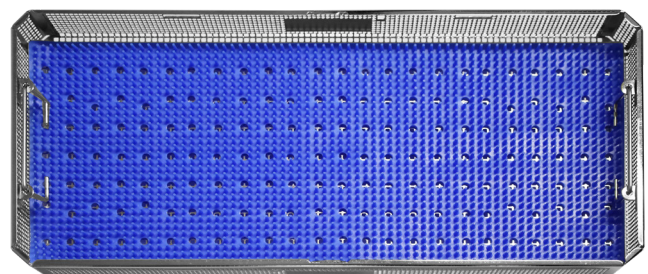
## 260-605-07Y

Pre-configured wire basket; 485 x 253 x 80 mm  
for **19/22 Fr. and 24/26 Fr. Resectoscopes**  
for 1/1 Container



## 260-605-31Y

Pre-configured wire basket; 485 x 253 x 40 mm  
for **instruments**  
for 1/1 Container



## 260-605-32Y

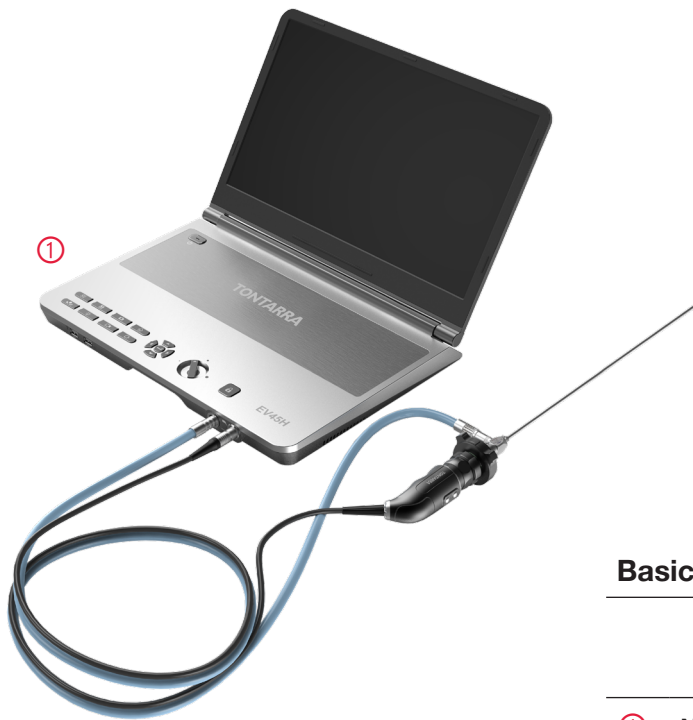
Pre-configured wire basket; 540 x 253 x 40 mm  
for **instruments**  
for 1/1 Container



## Recommended Sets

### ► Office and Ambulatory Endoscopy Units

**TONTARRA**



①



②



③



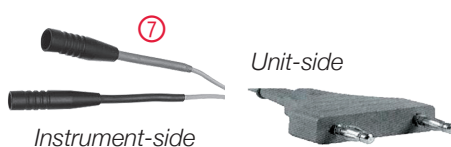
④



⑤



⑥



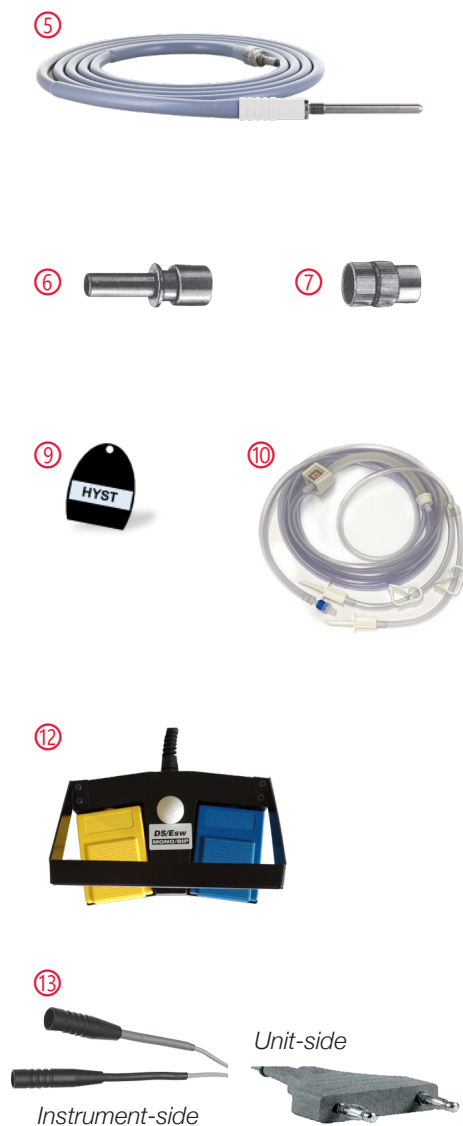
⑦

### Basic Office Configuration

|   |                            |                                                                   |
|---|----------------------------|-------------------------------------------------------------------|
| ① | <b>NSEO/EV45H</b>          | ENDOOR-COMPACT All-in-one Endoscope Camera System                 |
| ② | <b>WOMO/PM304-M01</b>      | Multi-Indication Pump                                             |
| ③ | <b>WOMO/2205333</b>        | Transponder for Hysteroscopy                                      |
| ④ | <b>WOMO/T0505-01</b>       | Tube set for Irrigation, single-use, all indications 10 pcs./pack |
| ⑤ | <b>540-280-50 (PWT400)</b> | PWT 400 PlasmaWave HF-Generator                                   |
| ⑥ | <b>540-284-50</b>          | Three-Pedal Footswitch                                            |
| ⑦ | <b>287-215-30BR</b>        | TONTARRA mod. PWT-400; International Models; 2-pins 3.0 m         |



## Basic Operating Room Configuration



### Basic Operating Room Configuration

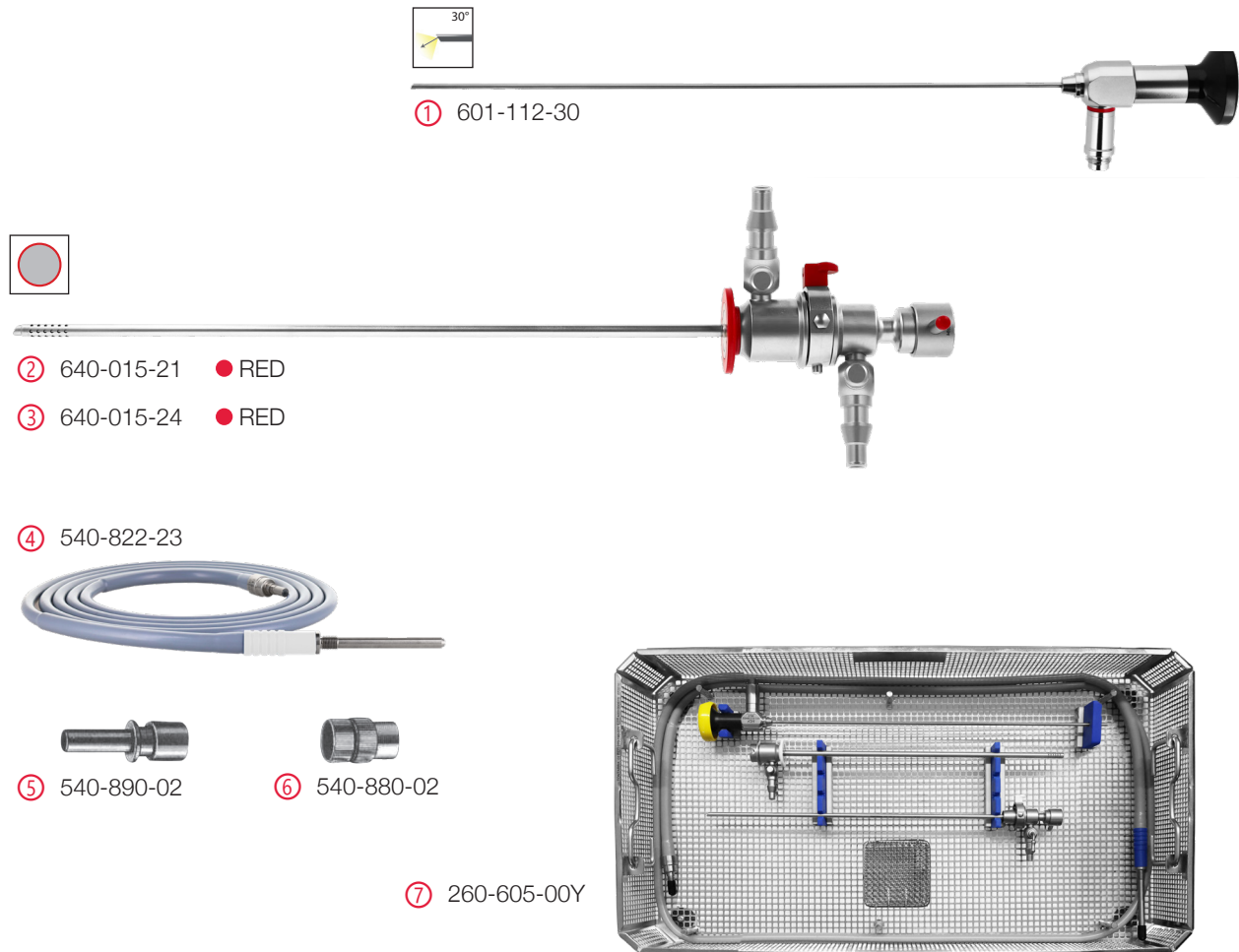
|   |                            |                                                                    |
|---|----------------------------|--------------------------------------------------------------------|
| ① | <b>ACLO/OR-MD27-TON</b>    | 27" FULL HD Monitor                                                |
| ② | <b>SCHO/95-3981</b>        | EndoorCam 20 NIR FI Camera                                         |
| ③ | <b>SCHO/95-3901</b>        | EndoorCam Camera Head FULL HD Zoom                                 |
| ④ | <b>SCHO/05-0760led</b>     | EndoorLight 300 LED Light Source                                   |
| ⑤ | <b>540-822-30</b>          | High Performance light guide cable                                 |
| ⑥ | <b>540-890-02</b>          | Light cable connector, unit side (light input)                     |
| ⑦ | <b>540-880-02</b>          | Light cable connector, optic side (light output)                   |
| ⑧ | <b>WOMO/PM304-M01</b>      | Multi-Indication Pump                                              |
| ⑨ | <b>WOMO/2205333</b>        | Transponder for Hysteroscopy                                       |
| ⑩ | <b>WOMO/T0505-01</b>       | Tube set for Irrigation, single-use, all indications, 10 pcs./pack |
| ⑪ | <b>540-280-50 (PWT400)</b> | PWT 400 PlasmaWave HF-Generator                                    |
| ⑫ | <b>540-284-50</b>          | Three-Pedal Footswitch                                             |
| ⑬ | <b>287-215-30BR</b>        | TONTARRA mod. PWT-400; International Models; 2-pins; 3.0 m         |
| ⑭ | <b>ITDO/KN.0891.800</b>    | Equipment Cart "Pro" with isolating transformer and on/off switch  |

For more information  
please see our  
EndoorTower brochure



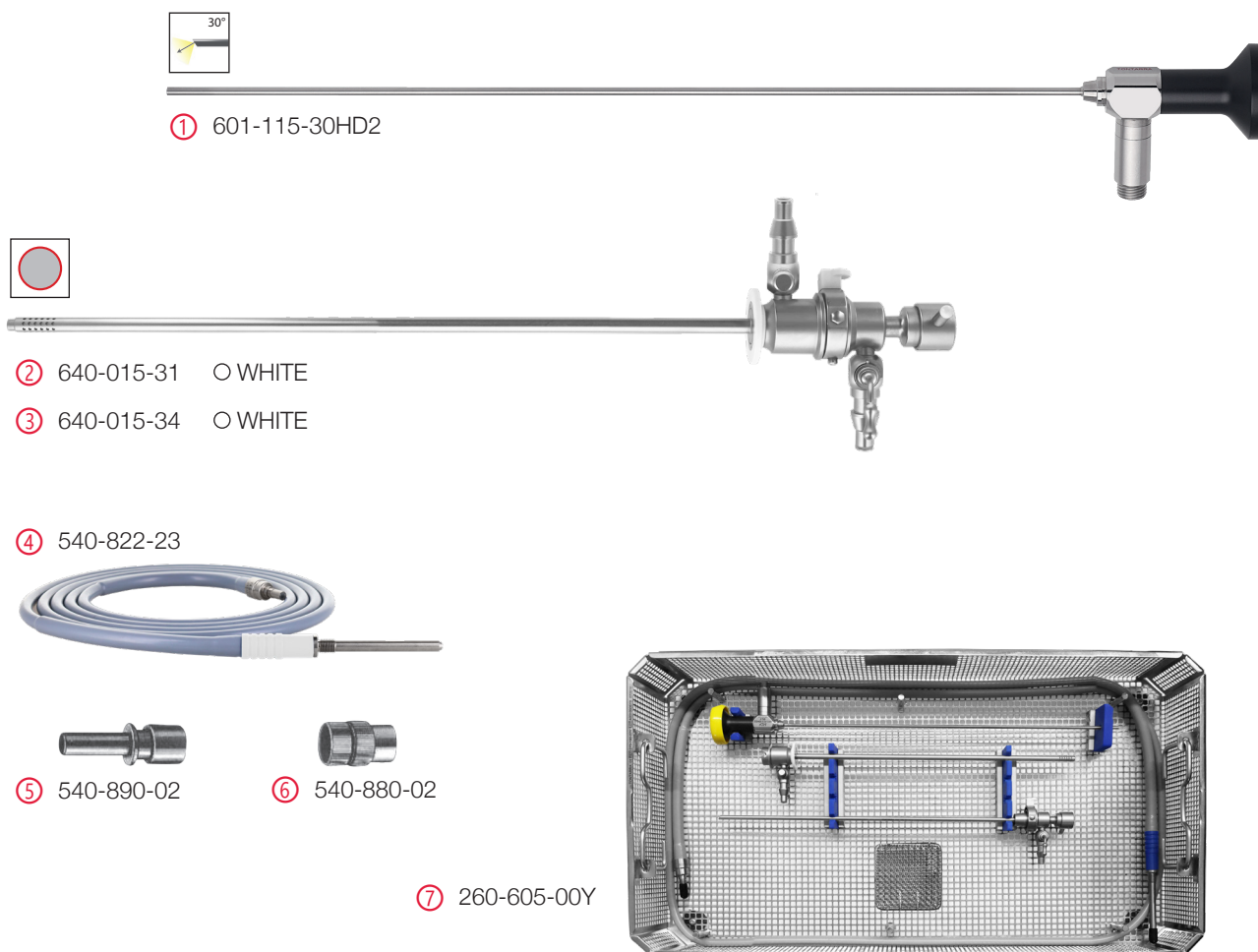
<https://qrco.de/endoor-tower>

## Basic Set Diagnostic Hysteroscopy | For Ø 2.0 mm Endoscope



|   |                    |                                                                                               |
|---|--------------------|-----------------------------------------------------------------------------------------------|
| ① | <b>601-112-30</b>  | Hysteroscope HD; Ø 2.0 mm; 30°; 260 mm; autoclavable                                          |
| ② | <b>640-015-21</b>  | Continuous-Flow Outer Sheath; Quick-Lock; Ø 3.7 mm; 200 mm                                    |
| ③ | <b>640-015-24</b>  | Diagnostic Inner Sheath; Quick-Lock; Ø 2.9mm; 30°; 218mm                                      |
| ④ | <b>540-822-23</b>  | High Performance light guide cable                                                            |
| ⑤ | <b>540-890-02</b>  | Light cable connector, unit side (light input)                                                |
| ⑥ | <b>540-880-02</b>  | Light cable connector, optic side (light output)                                              |
| ⑦ | <b>260-605-00Y</b> | Pre-configured wire basket; 405 x 253 x 80 mm; for Diagnostic Hysteroscopy; for 3/4 Container |

## Basic Set Diagnostic Hysteroscopy | For Ø 2.9 mm Endoscope



|   |                      |                                                                                               |
|---|----------------------|-----------------------------------------------------------------------------------------------|
| ① | <b>601-115-30HD2</b> | Hysteroscope HD+2; Ø 2.9 mm; 30°; 300 mm; autoclavable                                        |
| ② | <b>640-015-31</b>    | Continuous-Flow Outer Sheath; Quick-Lock; Ø 5.0 mm; 244 mm                                    |
| ③ | <b>640-015-34</b>    | Diagnostic Inner Sheath; Quick-Lock; Ø 4.0 mm; 30°; 260 mm                                    |
| ④ | <b>540-822-23</b>    | High Performance light guide cable                                                            |
| ⑤ | <b>540-890-02</b>    | Light cable connector, unit side (light input)                                                |
| ⑥ | <b>540-880-02</b>    | Light cable connector, optic side (light output)                                              |
| ⑦ | <b>260-605-00Y</b>   | Pre-configured wire basket; 405 x 253 x 80 mm; for Diagnostic Hysteroscopy; for 3/4 Container |



## Basic Set Diagnostic Hysteroscopy | For Ø 4.0 mm Endoscope



① 601-114-30HD2



② 640-015-41 ● BLUE

③ 640-015-44 ● BLUE



④ 540-822-23



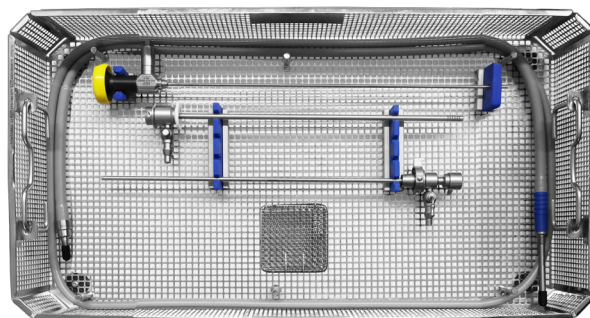
⑤ 540-890-02



⑥ 540-880-02



⑦ 260-605-00Y



### Basic Set Diagnostic Hysteroscopy | For Ø 4.0 mm Endoscope

|   |                      |                                                                                               |
|---|----------------------|-----------------------------------------------------------------------------------------------|
| ① | <b>601-114-30HD2</b> | Hysteroscope HD+2; Ø 4.0mm; 30°; 300mm; autoclavable                                          |
| ② | <b>640-015-41</b>    | Continuous-Flow Outer Sheath; Quick-Lock; Ø 6.5 mm; 240 mm                                    |
| ③ | <b>640-015-44</b>    | Diagnostic Inner Sheath; Quick-Lock; Ø 5.4 mm; 30°; 260 mm                                    |
| ④ | <b>540-822-23</b>    | High Performance light guide cable                                                            |
| ⑤ | <b>540-890-02</b>    | Light cable connector, unit side (light input)                                                |
| ⑥ | <b>540-880-02</b>    | Light cable connector, optic side (light output)                                              |
| ⑦ | <b>260-605-00Y</b>   | Pre-configured wire basket; 405 x 253 x 80 mm; for Diagnostic Hysteroscopy; for 3/4 Container |

## Basic Set Operative Hysteroscopy | For Ø 2.0 mm Endoscope



① 601-112-30



② 640-025-21 ● RED

③ 640-025-22 ● RED



④ 584-250-16LL



⑤ 584-256-16LL



⑥ 584-223-16LL

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⑦ 540-822-23

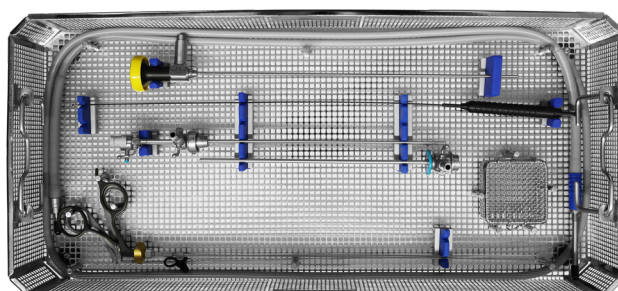


⑧ 540-890-02



⑨ 540-880-02

⑩ 260-605-01Y



## Basic Set Operative Hysteroscopy | For Ø 2.0 mm Endoscope

|   |                     |                                                                                                                  |
|---|---------------------|------------------------------------------------------------------------------------------------------------------|
| ① | <b>601-112-30</b>   | Hysteroscope HD; Ø 2.0 mm; 30°; 260 mm; autoclavable                                                             |
| ② | <b>640-025-21</b>   | Continuous-Flow Operating Outer Sheath; Quick-Lock; teardrop-shaped; Ø 4.3 mm; 192 mm                            |
| ③ | <b>640-025-22</b>   | Operating Inner Sheath; Quick-Lock; teardrop-shaped; 5 Fr. working channel                                       |
| ④ | <b>584-250-16LL</b> | Biopsy forceps; oval; spike; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm                       |
| ⑤ | <b>584-256-16LL</b> | Biopsy grasping forceps; toothed; oval; 1x2 teeth; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm |
| ⑥ | <b>584-223-16LL</b> | Scissors; pointed; semi-rigid, single action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm                                 |
| ⑦ | <b>540-822-23</b>   | High Performance light guide cable                                                                               |
| ⑧ | <b>540-890-02</b>   | Light cable connector, unit side (light input)                                                                   |
| ⑨ | <b>540-880-02</b>   | Light cable connector, optic side (light output)                                                                 |
| ⑩ | <b>260-605-01Y</b>  | Pre-configured wire basket; 482 x 253 x 80 mm; for Operative Hysteroscopy; for 1/1 Container                     |

## Basic Set Operative Hysteroscopy | For Ø 2.9 mm Endoscope

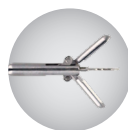
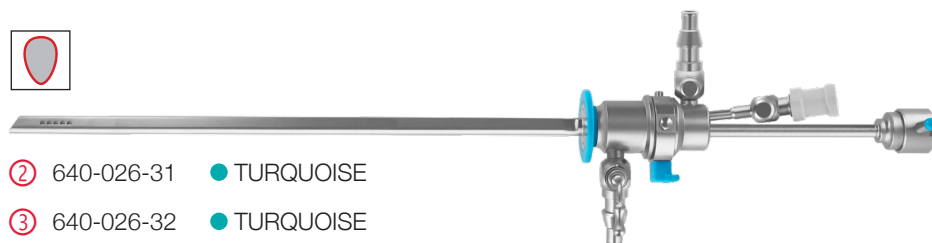


① 601-115-30HD2



② 640-026-31 ● TURQUOISE

③ 640-026-32 ● TURQUOISE



④ 584-050-16LL



⑤ 584-056-16LL



⑥ 584-023-16LL

**PiRUETTO**  
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⑦ 540-822-23



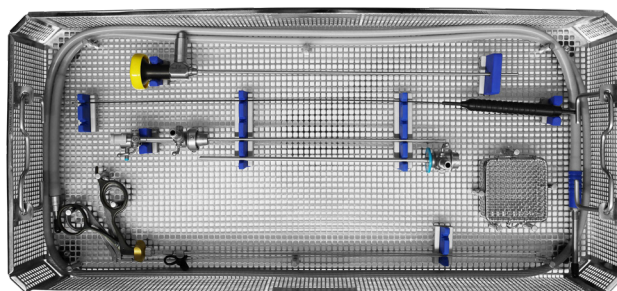
⑧ 540-890-02



⑨ 540-880-02



⑩ 260-605-01Y



## Basic Set Operative Hysteroscopy | For Ø 2.9 mm Endoscope

|   |                      |                                                                                                                  |
|---|----------------------|------------------------------------------------------------------------------------------------------------------|
| ① | <b>601-115-30HD2</b> | Hysteroscope HD+2; Ø 2.9 mm; 30°; 300 mm; autoclavable                                                           |
| ② | <b>640-026-31</b>    | Continuous-Flow Operating Outer Sheath; Quick-Lock; teardrop-shaped; Ø 5.0 mm; 216 mm                            |
| ③ | <b>640-026-32</b>    | Operating Inner Sheath; Quick-Lock; teardrop-shaped; 5 Fr. working channel; 30°; extended working length         |
| ④ | <b>584-050-16LL</b>  | Biopsy forceps; oval; spike; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 400 mm                       |
| ⑤ | <b>584-056-16LL</b>  | Biopsy grasping forceps; toothed; oval; 1x2 teeth; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 400 mm |
| ⑥ | <b>584-023-16LL</b>  | Scissors; pointed; semi-rigid, single action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 400 mm                                 |
| ⑦ | <b>540-822-23</b>    | High Performance light guide cable                                                                               |
| ⑧ | <b>540-890-02</b>    | Light cable connector, unit side (light input)                                                                   |
| ⑨ | <b>540-880-02</b>    | Light cable connector, optic side (light output)                                                                 |
| ⑩ | <b>260-605-01Y</b>   | Pre-configured wire basket; 482 x 253 x 80 mm; for Operative Hysteroscopy; for 1/1 Container                     |

## Basic Set Operative Hysteroscopy | For Ø 2.9 mm Endoscope



① 601-115-30HD2

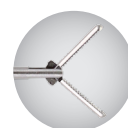


② 640-026-51 ● GREY

③ 640-026-52 ● GREY



④ 584-012-23LL



⑤ 584-062-23LL



⑥ 584-023-23LL

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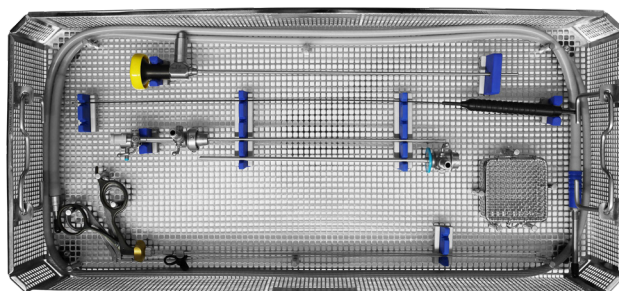
⑦ 540-822-23



⑧ 540-890-02

⑨ 540-880-02

⑩ 260-605-01Y



## Basic Set Operative Hysteroscopy | For Ø 2.9 mm Endoscope

|   |                      |                                                                                                |
|---|----------------------|------------------------------------------------------------------------------------------------|
| ① | <b>601-115-30HD2</b> | Hysteroscope HD+2; Ø 2.9 mm; 30°; 300 mm; autoclavable                                         |
| ② | <b>640-026-51</b>    | Continuous-Flow Operating Outer Sheath; Quick-Lock; teardrop-shaped; Ø 5.5 mm; 216 mm          |
| ③ | <b>640-026-52</b>    | Operating Inner Sheath; Quick-Lock; teardrop-shaped; 7 Fr. working channel; 30°                |
| ④ | <b>584-012-23LL</b>  | Biopsy forceps; oval; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 7 Fr.; 400 mm            |
| ⑤ | <b>584-062-23LL</b>  | Grasping forceps; Alligator jaw; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 7 Fr.; 400 mm |
| ⑥ | <b>584-023-23LL</b>  | Scissors; pointed; semi-rigid, single action; LUER-Lock; Ø 1.6 mm; 7 Fr.; 400 mm               |
| ⑦ | <b>540-822-23</b>    | High Performance light guide cable                                                             |
| ⑧ | <b>540-890-02</b>    | Light cable connector, unit side (light input)                                                 |
| ⑨ | <b>540-880-02</b>    | Light cable connector, optic side (light output)                                               |
| ⑩ | <b>260-605-01Y</b>   | Pre-configured wire basket; 482 x 253 x 80 mm; for Operative Hysteroscopy; for 1/1 Container   |



## Basic Set RAIS | For Ø 2.9 mm Endoscope



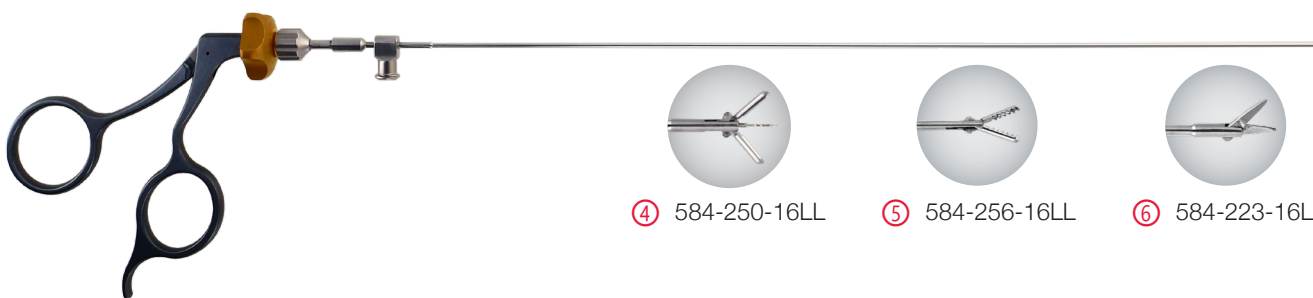
① 601-115-30HD2



② 640-027-32



③ 640-027-31



④ 584-250-16LL



⑤ 584-256-16LL



⑥ 584-223-16LL

**PiRUETTO**  
Fully Rotatable Micro Instruments

⑦ 540-822-23



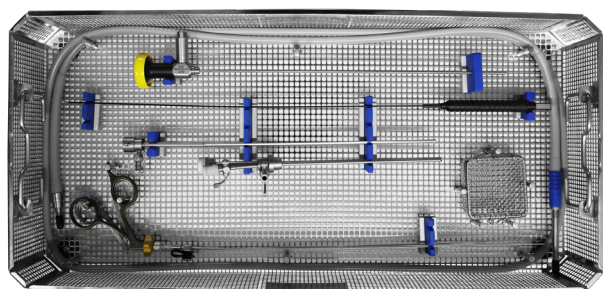
⑧ 540-890-02



⑨ 540-880-02

## Basic Set RAIS | For Ø 2.9 mm Endoscope

|   |                      |                                                                                                                  |
|---|----------------------|------------------------------------------------------------------------------------------------------------------|
| ① | <b>601-115-30HD2</b> | Hysteroscope HD+2; Ø 2.9 mm; 30°; 300 mm; autoclavable                                                           |
| ② | <b>640-027-32</b>    | RAIS inner sheath; oval; with stopcock; Ø 3.5mm; 292mm                                                           |
| ③ | <b>640-027-31</b>    | RAIS outer sheath; oval; 5 Fr. working channel; Ø 5mm; 162mm                                                     |
| ④ | <b>584-250-16LL</b>  | Biopsy forceps; oval; spike; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm                       |
| ⑤ | <b>584-256-16LL</b>  | Biopsy grasping forceps; toothed; oval; 1x2 teeth; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm |
| ⑥ | <b>584-223-16LL</b>  | Scissors; pointed; semi-rigid, single action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm                                 |
| ⑦ | <b>540-822-23</b>    | High Performance light guide cable                                                                               |
| ⑧ | <b>540-890-02</b>    | Light cable connector, unit side (light input)                                                                   |
| ⑨ | <b>540-880-02</b>    | Light cable connector, optic side (light output)                                                                 |
| ⑩ | <b>260-605-02Y</b>   | Pre-configured wire basket; 482 x 253 x 80 mm; for RAIS (Ricciardi All-in Scope); for 1/1 Container              |

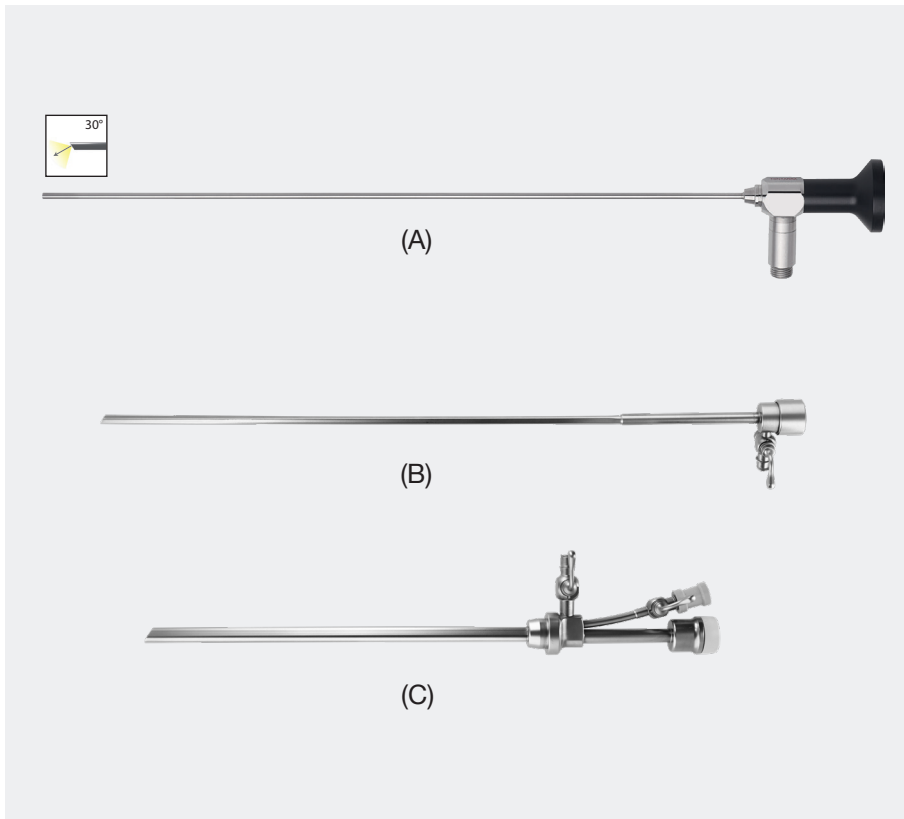


⑩ 260-605-02Y

## Recommended Sets

► Hysteroscopy | Assembly of the RAIS

**TONTARRA**



①

RAIS-Components:

(A) 2.9 mm 30° Endoscope

(B) Inner Sheath

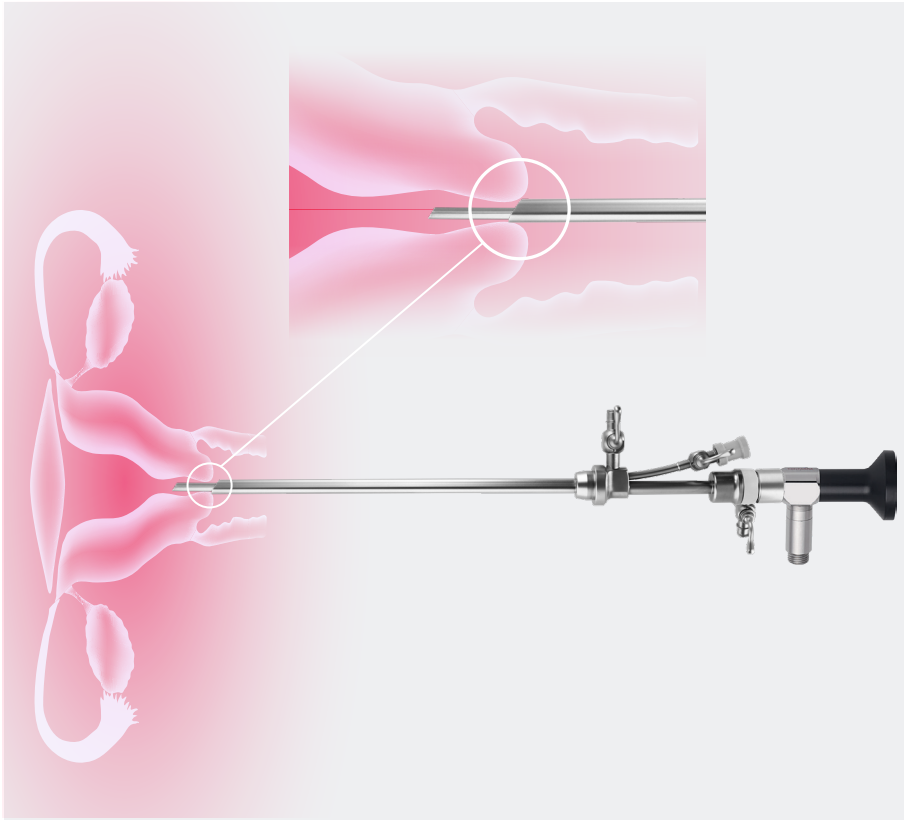
(C) Outer Sheath



②

Assembly of the RAIS:

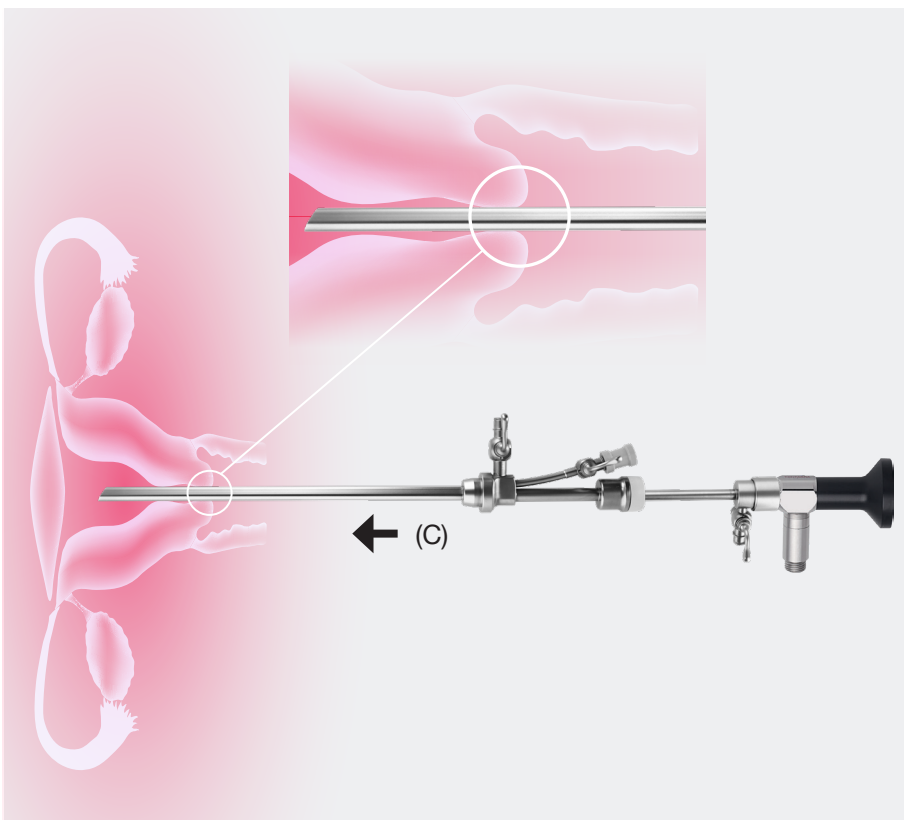
Sequence from (A) - (C)



③

First introduction into the cervical canal with only **Ø 3.5 mm** inner sheath (B).

Outer sheath (C) with **Ø 5 mm** sits on top of D-shaped inner sheath.



④

Sliding outer sheath (C) forward to the distal tip and into the uterine cavity is an atraumatic and smooth process.

Inner sheath (B) integrates inflow channel.

Space between the two sheaths provides outflow and working channel for 5 Fr. Instrument.

Flow of liquids is still efficient after introduction of instrument.

Provides unobstructed view and good visualization for biopsies and small uterine procedures.

## Basic Set Operative Hysteroscopy | For Ø 4.0 mm Endoscope

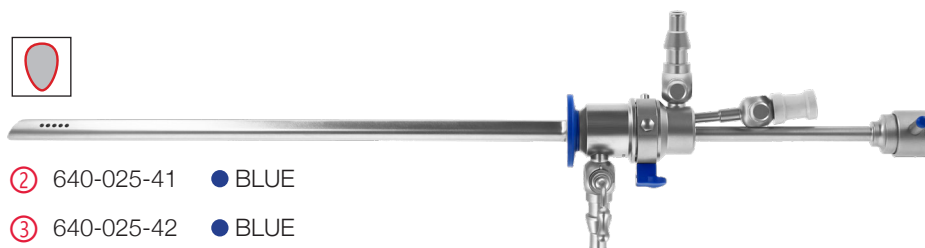


① 601-114-30HD2

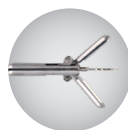


② 640-025-41 ● BLUE

③ 640-025-42 ● BLUE



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④ 584-250-16LL



⑤ 584-256-16LL



⑥ 584-223-16LL

⑦ 540-822-23



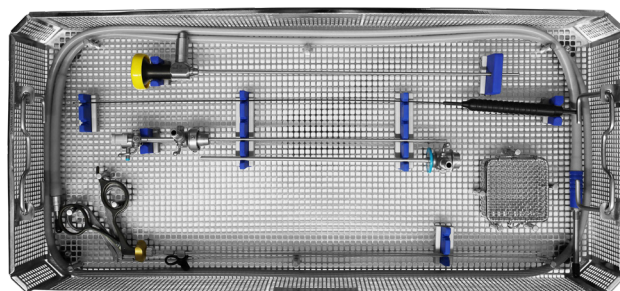
⑧ 540-890-02



⑨ 540-880-02



⑩ 260-605-01Y



## Basic Set Operative Hysteroscopy | For Ø 4.0 mm Endoscope

|   |                      |                                                                                                                  |
|---|----------------------|------------------------------------------------------------------------------------------------------------------|
| ① | <b>601-114-30HD2</b> | Hysteroscope HD+2; Ø 4.0 mm; 30°; 300 mm; autoclavable                                                           |
| ② | <b>640-025-41</b>    | Continuous-Flow Operating Outer Sheath; Quick-Lock; teardrop-shaped; Ø 6.5 mm; 192 mm                            |
| ③ | <b>640-025-42</b>    | Operating Inner Sheath; Quick-Lock; teardrop-shaped; 5 Fr. working channel;                                      |
| ④ | <b>584-250-16LL</b>  | Biopsy forceps; oval; spike; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm                       |
| ⑤ | <b>584-256-16LL</b>  | Biopsy grasping forceps; toothed; oval; 1x2 teeth; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm |
| ⑥ | <b>584-223-16LL</b>  | Scissors; pointed; semi-rigid, single action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm                                 |
| ⑦ | <b>540-822-23</b>    | High Performance light guide cable                                                                               |
| ⑧ | <b>540-890-02</b>    | Light cable connector, unit side (light input)                                                                   |
| ⑨ | <b>540-880-02</b>    | Light cable connector, optic side (light output)                                                                 |
| ⑩ | <b>260-605-01Y</b>   | Pre-configured wire basket; 482 x 253 x 80 mm; for Operative Hysteroscopy; for 1/1 Container                     |

## Basic Set GUBBINIellipse | 14.9 Fr. Resectoscope

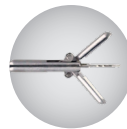
### GUBBINIellipse



① 601-115-30HD2



② 582-150-39GUE



③ 584-250-16LL



④ 584-256-16LL



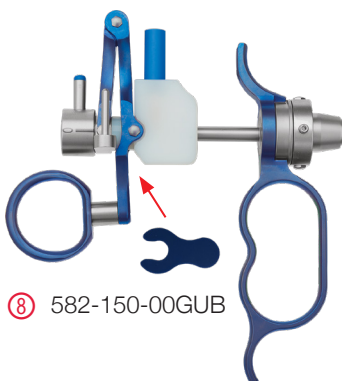
⑤ 584-223-16LL



⑥a 601-115-12HD2



⑥b 601-115-00HD2



⑧ 582-150-00GUB

⑦ 582-150-00GUB ● BLUE

■ blue



⑪ 582-150-40GUBE-S

■ black



⑫ 582-150-42GUB-S

■ black



⑬ 582-150-43GUB-S



⑨ 582-150-21GUE ● GREY

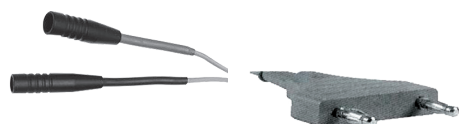


⑩ 582-150-24GUE ● GREY

## Basic Set GUBBINIellipse | 14.9 Fr. Resectoscope

### GUBBINIellipse

|     |                         |                                                                                                                  |
|-----|-------------------------|------------------------------------------------------------------------------------------------------------------|
| ①   | <b>601-115-30HD2</b>    | Hysteroscope HD+2; Ø 2.9 mm; 30°; 300 mm; autoclavable                                                           |
| ②   | <b>582-150-39GUE</b>    | GUBBINIellipse Working Insert; 13.4 Fr.; Quick-Lock; 5 Fr. working channel                                       |
| ③   | <b>584-250-16LL</b>     | Biopsy forceps; oval; spike; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm                       |
| ④   | <b>584-256-16LL</b>     | Biopsy grasping forceps; toothed; oval; 1x2 teeth; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm |
| ⑤   | <b>584-223-16LL</b>     | Scissors; pointed; semi-rigid, single action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm                                 |
| ⑥ a | <b>601-115-12HD2</b>    | Hysteroscope HD+2; Ø 2.9 mm; 12°; 300 mm; autoclavable                                                           |
| ⑥ b | <b>601-115-00HD2</b>    | Hysteroscope HD+2; Ø 2.9 mm; 0°; 300 mm; autoclavable                                                            |
| ⑦   | <b>582-150-00GUB</b>    | GUBBINIoriginal/ellipse Working Element; passive; hybrid; Quick-Lock; titan                                      |
| ⑧   | <b>582-150-02GUB</b>    | Safety Distance Holder; width: 2 mm                                                                              |
| ⑨   | <b>582-150-21GUE</b>    | GUBBINIellipse Inner Sheath; 13.4 Fr.; non-rotatable; Quick-Lock                                                 |
| ⑩   | <b>582-150-24GUE</b>    | GUBBINIellipse Outer Sheath; 14.9 Fr.; non-rotatable; Quick-Lock; ceramic tip                                    |
| ⑪   | <b>582-150-40GUBE-S</b> | GUBBINIellipse Loop Electrode; 90° angled; teardrop; bipolar; sterile; Box of 5 pcs.                             |
| ⑫   | <b>582-150-42GUB-S</b>  | GUBBINIoriginal Ball Electrode; angled; bipolar; sterile; Box of 5 pcs.                                          |
| ⑬   | <b>582-150-43GUB-S</b>  | GUBBINIoriginal Knife Electrode; angled; bipolar; sterile; Box of 5 pcs.                                         |
| ⑭   | <b>287-215-30BR</b>     | TONTARRA mod. PWT-400 bipolar cable; International models; 2-pins                                                |
| ⑮   | <b>540-822-23</b>       | High Performance light guide cable                                                                               |
| ⑯   | <b>540-890-02</b>       | Light cable connector, unit side (light input)                                                                   |
| ⑰   | <b>540-880-02</b>       | Light cable connector, optic side (light output)                                                                 |
| ⑱   | <b>260-605-05Y</b>      | Pre-configured wire basket; 482 x 253 x 80 mm; for GUBBINIoriginal / GUBBINIellipse                              |



⑭ 287-215-30BR

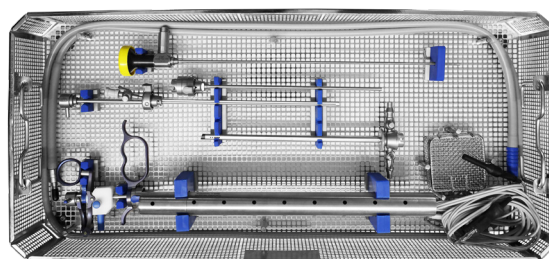
⑮ 540-822-23



⑯ 540-890-02



⑰ 540-880-02



⑱ 260-605-05Y



## Basic Set GUBBINIoriginal | 16 Fr. Resectoscope

### GUBBINIoriginal



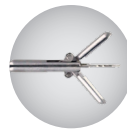
① 601-115-30HD2



② 582-150-39GU



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③ 584-250-16LL



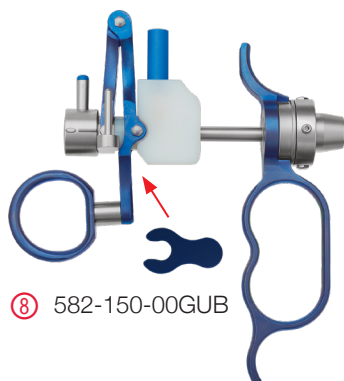
④ 584-256-16LL



⑤ 584-223-16LL



⑥ 601-115-00HD2



⑧ 582-150-00GUB

⑦ 582-150-00GUB ● BLUE

■ black



⑪ 582-150-44GUB-S



⑫ 582-150-41GUB-S



⑬ 582-150-42GUB-S



⑨ 582-150-26GU ● BLUE



⑩ 582-150-24GU ● BLUE



⑭ 582-150-43GUB-S



⑮ 582-150-50GU

## Basic Set GUBBINoriginal | 16 Fr. Resectoscope

### GUBBINoriginal

|   |                        |                                                                                                                  |
|---|------------------------|------------------------------------------------------------------------------------------------------------------|
| ① | <b>601-115-30HD2</b>   | Hysteroscope HD+2; Ø 2.9 mm; 30°; 300 mm; autoclavable                                                           |
| ② | <b>582-150-39GU</b>    | GUBBINoriginal Working Insert; 14.4 Fr.; Quick-Lock; 5 Fr. working channel                                       |
| ③ | <b>584-250-16LL</b>    | Biopsy forceps; oval; spike; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm                       |
| ④ | <b>584-256-16LL</b>    | Biopsy grasping forceps; toothed; oval; 1x2 teeth; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm |
| ⑤ | <b>584-223-16LL</b>    | Scissors; pointed; semi-rigid, single action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm                                 |
| ⑥ | <b>601-115-00HD2</b>   | Hysteroscope HD+2; Ø 2.9 mm; 0°; 300 mm; autoclavable                                                            |
| ⑦ | <b>582-150-00GUB</b>   | GUBBINoriginal/ellipse Working Element; passive; hybrid; Quick-Lock; titan                                       |
| ⑧ | <b>582-150-02GUB</b>   | Safety Distance Holder; width: 2 mm                                                                              |
| ⑨ | <b>582-150-26GU</b>    | GUBBINoriginal Inner Sheath; 14.4 Fr.; rotatable; Quick-Lock                                                     |
| ⑩ | <b>582-150-24GU</b>    | GUBBINoriginal Outer Sheath; 16 Fr.; non-rotatable; Quick-Lock; ceramic tip                                      |
| ⑪ | <b>582-150-44GUB-S</b> | GUBBINoriginal Loop Electrode; small; size 1; 90° angled; bipolar; sterile; Box of 5 pcs.                        |
| ⑫ | <b>582-150-41GUB-S</b> | GUBBINoriginal Loop Electrode; large; size 2; 90° angled; bipolar; sterile; Box of 5 pcs.                        |
| ⑬ | <b>582-150-42GUB-S</b> | GUBBINoriginal Ball Electrode; angled; bipolar; sterile; Box of 5 pcs.                                           |
| ⑭ | <b>582-150-43GUB-S</b> | GUBBINoriginal Knife Electrode; angled; bipolar; sterile; Box of 5 pcs.                                          |
| ⑮ | <b>582-150-50GU</b>    | Preparation Electrode SCOUT; spear-shaped; blunt; currentless; 40° angled                                        |
| ⑯ | <b>287-215-30BR</b>    | TONTARRA mod. PWT-400 bipolar cable; International models; 2-pins                                                |
| ⑰ | <b>540-822-23</b>      | High Performance light guide cable                                                                               |
| ⑱ | <b>540-890-02</b>      | Light cable connector, unit side (light input)                                                                   |
| ⑲ | <b>540-880-02</b>      | Light cable connector, optic side (light output)                                                                 |
| ⑳ | <b>260-605-05Y</b>     | Pre-configured wire basket; 482 x 253 x 80 mm; for GUBBINoriginal / GUBBINellipse                                |



⑯ 287-215-30BR

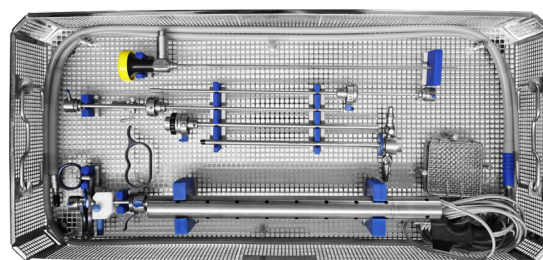
⑰ 540-822-23



⑱ 540-890-02



⑲ 540-880-02



⑳ 260-605-05Y

## Basic Set GUBBINImidi | 18.5 Fr. Resectoscope

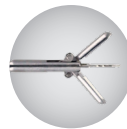
### GUBBINImidi



① 601-115-30HD2



② 582-180-39



③ 584-250-16LL



④ 584-256-16LL



⑤ 584-223-16LL



⑥a 601-115-12SHD2



⑥b 601-115-00HD2



⑦ 582-180-00B ● GREEN

⑧ 582-150-02GUB



⑨ 582-180-26 ● GREEN



⑩ 582-180-24 ● GREEN

■ green



⑪ 582-180-40B-S



⑫ 582-180-43B-S

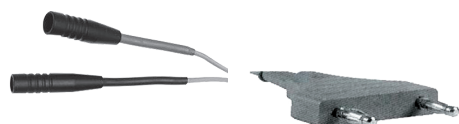


⑬ 582-180-42B-S

## Basic Set GUBBINImidi | 18.5 Fr. Resectoscope

### GUBBINImidi

|     |                       |                                                                                                                  |
|-----|-----------------------|------------------------------------------------------------------------------------------------------------------|
| ①   | <b>601-115-30HD2</b>  | Hysteroscope HD+2; Ø 2.9 mm; 30°; 300 mm; autoclavable                                                           |
| ②   | <b>582-180-39</b>     | GUBBINImidi Working Insert; 17.5 Fr.; rotatable; Quick-Lock; 5 Fr. working channel                               |
| ③   | <b>584-250-16LL</b>   | Biopsy forceps; oval; spike; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm                       |
| ④   | <b>584-256-16LL</b>   | Biopsy grasping forceps; toothed; oval; 1x2 teeth; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm |
| ⑤   | <b>584-223-16LL</b>   | Scissors; pointed; semi-rigid, single action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm                                 |
| ⑥ a | <b>601-115-12SHD2</b> | Hysteroscope HD+2; Ø 2.9 mm; 12°; 300 mm; autoclavable                                                           |
| ⑥ b | <b>601-115-00HD2</b>  | Hysteroscope HD+2; Ø 2.9 mm; 0°; 300 mm; autoclavable                                                            |
| ⑦   | <b>582-180-00B</b>    | GUBBINImidi Working Element; passive; hybrid; Quick-Lock                                                         |
| ⑧   | <b>582-150-02GUB</b>  | Safety Distance Holder; width: 2 mm                                                                              |
| ⑨   | <b>582-180-26</b>     | GUBBINImidi Inner Sheath; 17.5 Fr.; rotatable; Quick-Lock; ceramic tip                                           |
| ⑩   | <b>582-180-24</b>     | GUBBINImidi Outer Sheath; 18.5 Fr.; rotatable; Quick-Lock                                                        |
| ⑪   | <b>582-180-40B-S</b>  | GUBBINImidi loop electrode; 30° angled; hybrid; sterile                                                          |
| ⑫   | <b>582-180-43B-S</b>  | GUBBINImidi ball electrode; hybrid; sterile                                                                      |
| ⑬   | <b>582-180-42B-S</b>  | GUBBINImidi knife electrode; hybrid; sterile                                                                     |
| ⑭   | <b>287-215-30BR</b>   | TONTARRA mod. PWT-400 bipolar cable; International models; 2-pins                                                |
| ⑮   | <b>540-822-23</b>     | High Performance light guide cable                                                                               |
| ⑯   | <b>540-890-02</b>     | Light cable connector, unit side (light input)                                                                   |
| ⑰   | <b>540-880-02</b>     | Light cable connector, optic side (light output)                                                                 |
| ⑱   | <b>260-605-06Y</b>    | Pre-configured wire basket; 482 x 253 x 80 mm; for GUBBINImidi                                                   |



⑭ 287-215-30BR

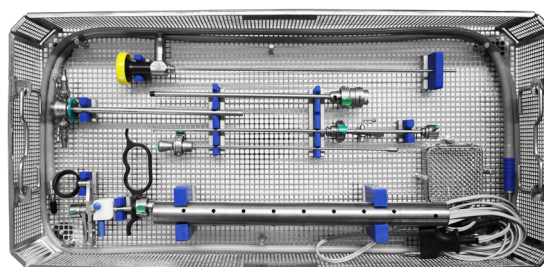
⑮ 540-822-23



⑯ 540-890-02



⑰ 540-880-02

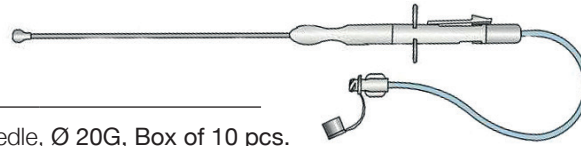


⑱ 260-605-06Y

- Pain reduction made easy, safe and reliable.

### BELO/2-PB02N

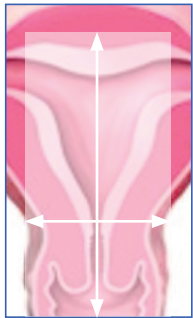
HYSTERO-BLOCK Needle, Ø 20G, Box of 10 pcs.



### PARACERVICAL LOCAL BLOCKADE IN HYSTEROSCOPY

(hysteroscopes up to approx. Ø 5.0 mm) & MINI-RESECTOSCOPY

**With more than 60,000 diagnostic and operative hysteroscopic procedures Dr. Raffaele Ricciardi is one of the top experts in the field.** He also published and co-authored several studies and articles. Dr. Ricciardi annually performs 1.300 surgeries, of these over 700 with paracervical local blockades.



Anesthetized area

"Criteria to apply local anesthesia on the patient's side are anatomic circumstances (for example patients who never gave birth may experience more pain), or the anticipated anxiety and stress level during an intervention; **applying local anesthesia is reassuring for patient and gynecologist alike.**

Another criteria is of course the intervention itself; its duration is a determining factor for pain sensation. In any case: Anesthesia assistance should be within reach in case of an emergency."

## Recommended Sets

► Mini-Hystero-Resectoscopy | Assembly of the GUBBINI System

**TONTARRA**



①

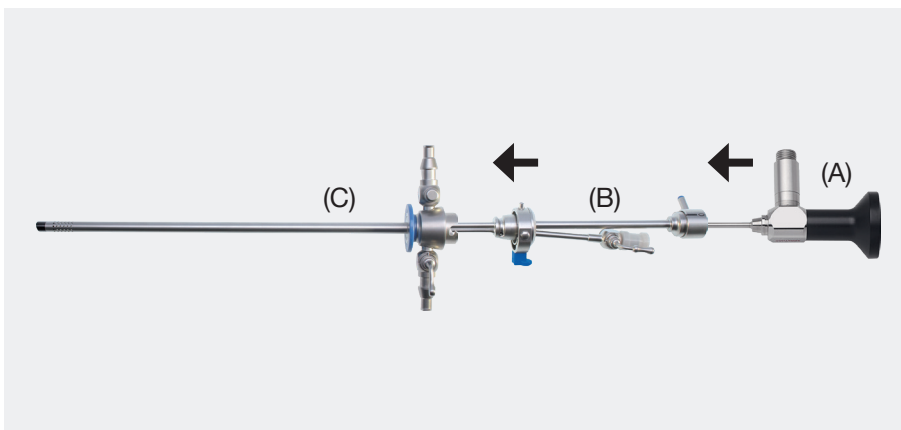
### - DIAGNOSIS -

GUBBINI-Components:

(A) 2.9 mm 30° Endoscope

(B) Operating Sheath

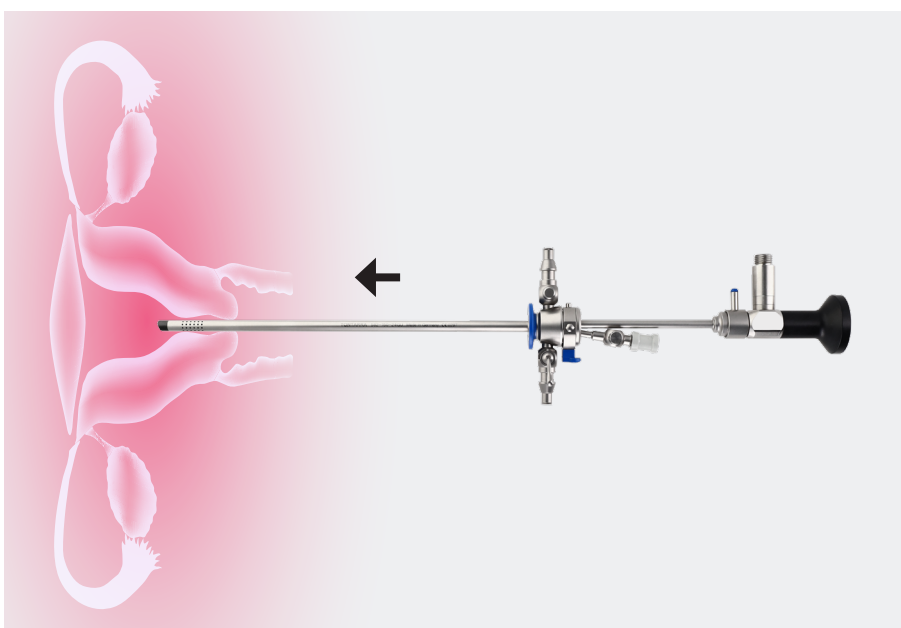
(C) Outer Sheath



②

Assembly of the  
GUBBINI-System for  
Office Hysteroscopy:

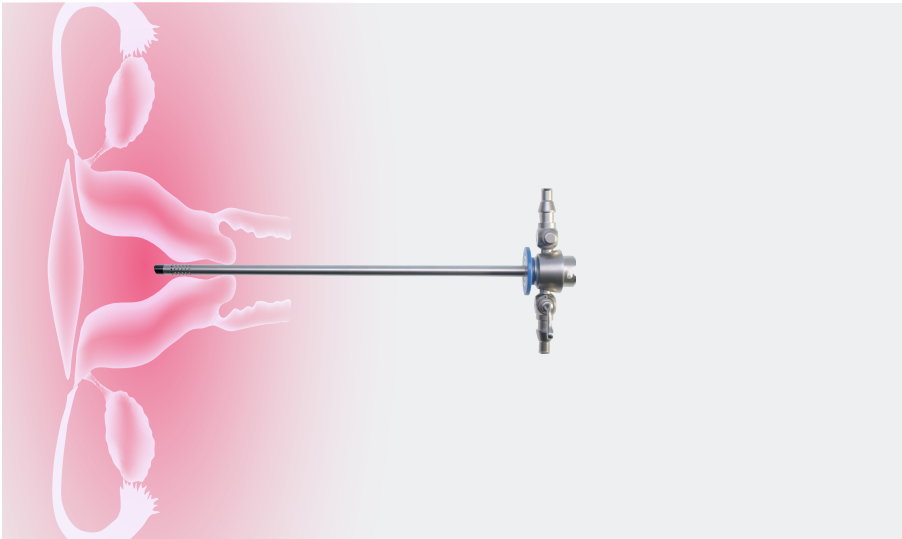
Sequence from (A) - (C)



③

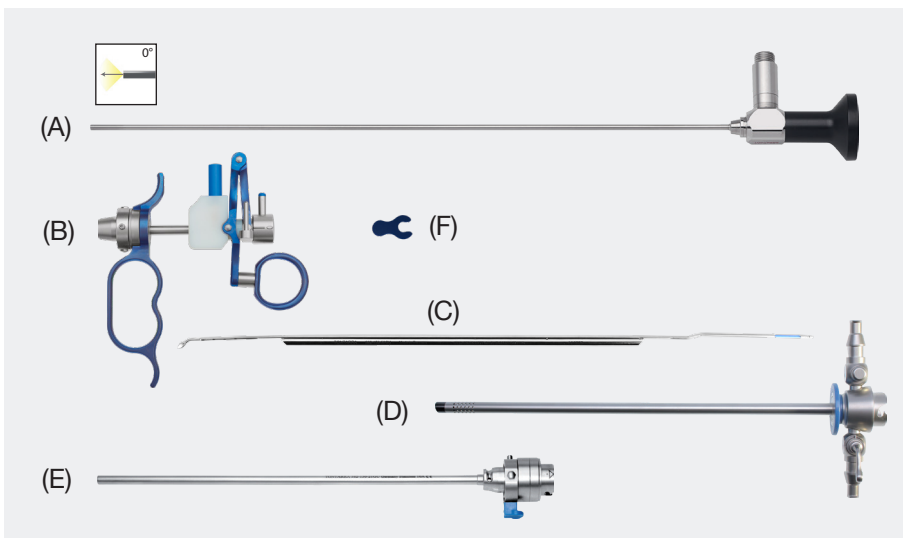
Introduction of the  
GUBBINI Office Hystero-  
scope System into the  
uterus without dilation.

Performing diagnosis with  
the possibility to use  
5 Fr. instruments for  
retrieval of small speci-  
mens, e. g. small polyps.



①

In case the specimen cannot be removed with 5 Fr. instruments it is possible to switch to the resectoscope while leaving the outer sheath in the uterus.

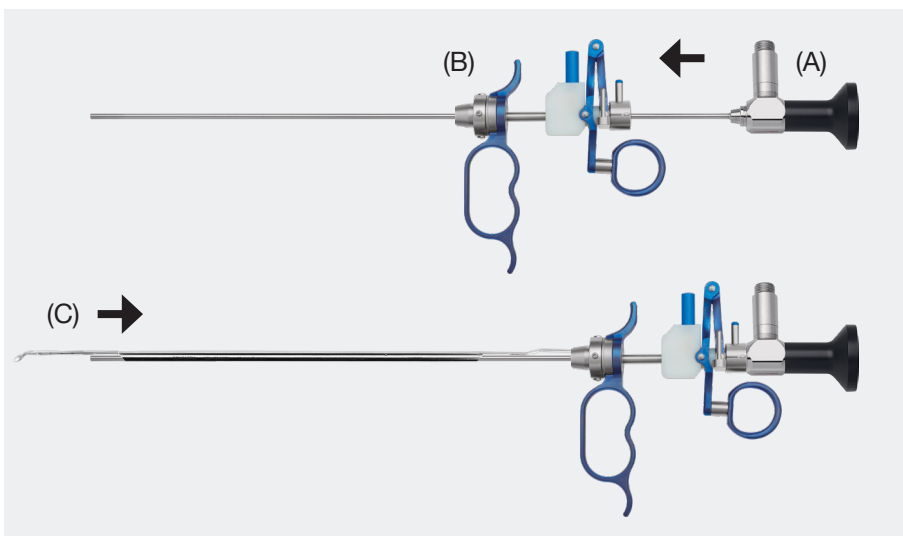


②

### - OPERATIVE -

GUBBINI-Components:

- (A) 2.9 mm 0° Endoscope
- (B) Working Element
- (C) Electrode
- (D) Inner Sheath
- (E) Outer Sheath
- (F) Distance Holder

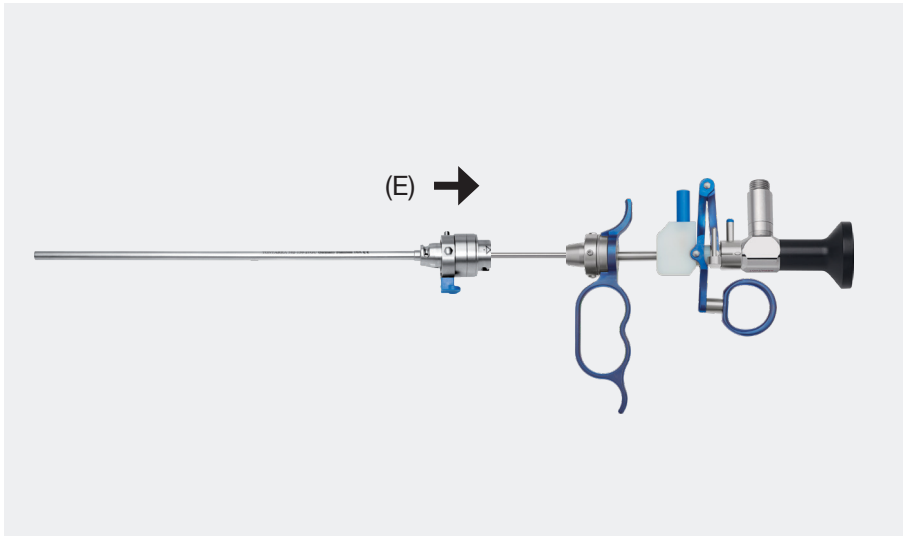


③

Attach the endoscope (A) to the working element (B)

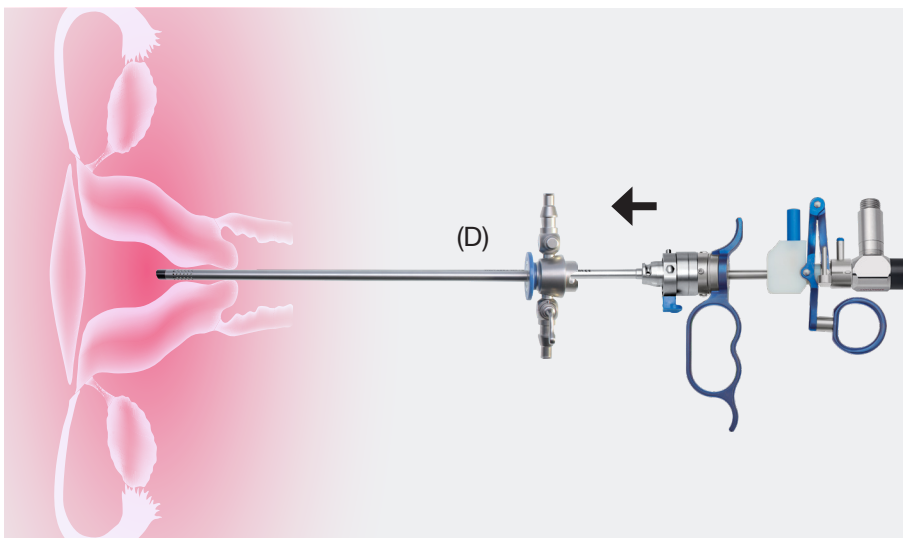
Introduce the loop of the electrode (C) into the working element (B). Take care that the guiding rod is carefully introduced to the endoscope (A). Slide the electrode completely over the endoscope and through the working element. When it is connected to the working element you hear a “click” sound.





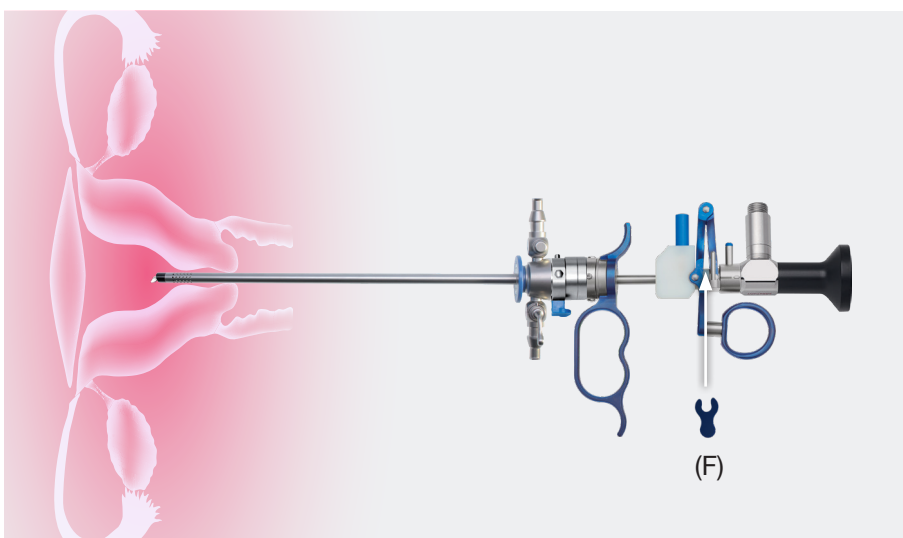
④

Attach the inner sheath (E) to the working element (B).



⑤

The assembled resectoscope can now be introduced into the outer sheath (D) which remained in the uterus after the hysteroscopic procedure.



⑥

It is recommended to place the distance holder (F) to the working element after introducing the resectoscope in the cervical canal.

The correct position is shown on the picture with the arrow.

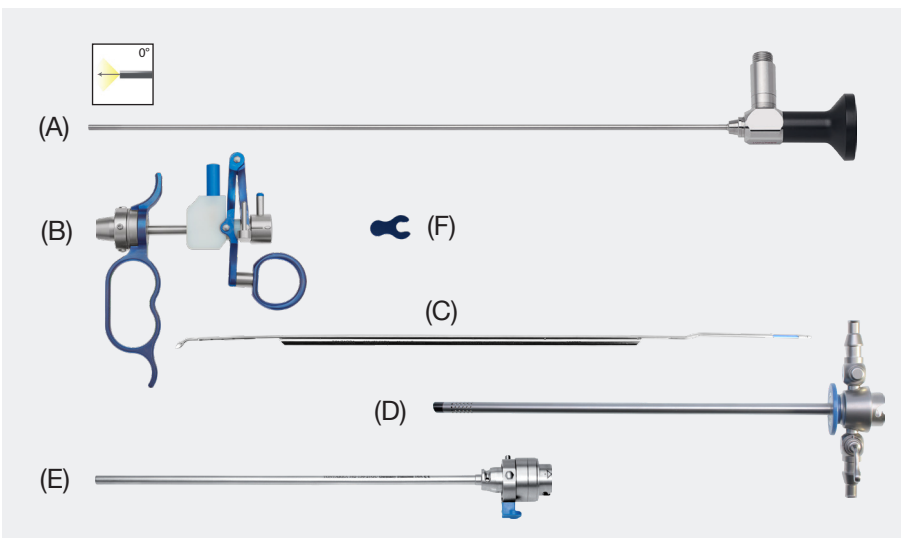




①

The GUBBINI-System can be used directly as an resectoscope to perform the electrosurgical operative procedure.

If the surgeon deems possible he can skip performance of the diagnosis.

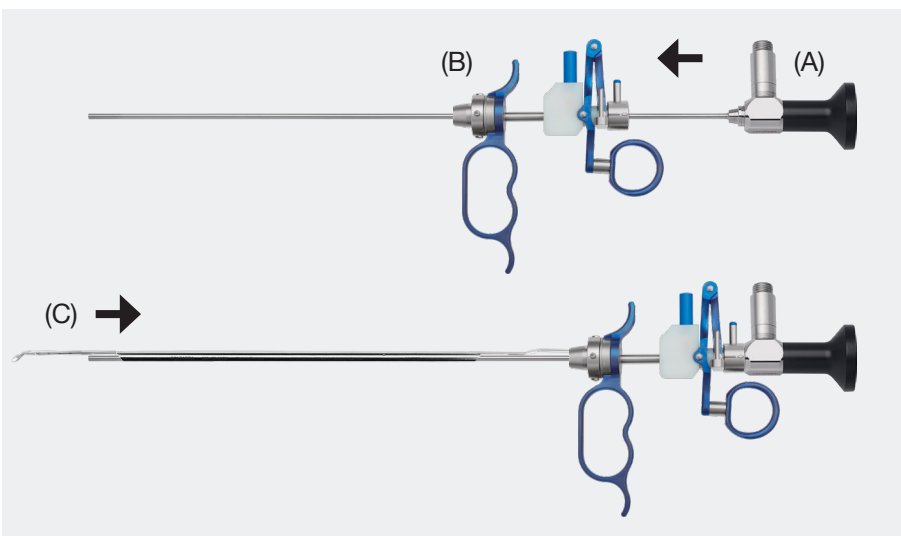


②

### - OPERATIVE -

GUBBINI-Components:

- (A) 2.9 mm 0° Endoscope
- (B) Working Element
- (C) Electrode
- (D) Inner Sheath
- (E) Outer Sheath
- (F) Distance Holder



③

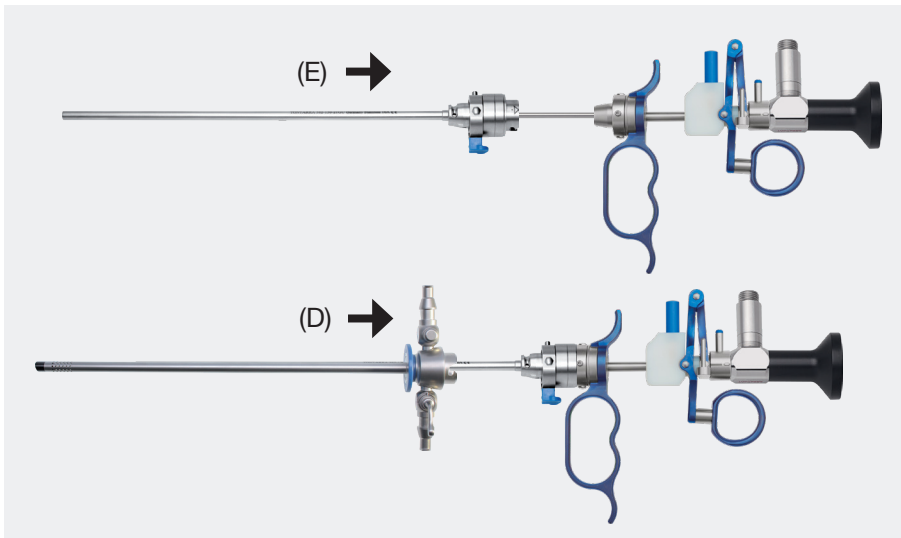
Attach the endoscope (A) to the working element (B)

Introduce the loop of the electrode (C) into the working element (B). Take care that the guiding rod is carefully introduced to the endoscope (A). Slide the electrode completely over the endoscope and through the working element. When it is connected to the working element you hear a “click” sound.

## Recommended Sets

► Mini-Hystero-Resectoscopy | Assembly of the GUBBINI System

**TONTARRA**

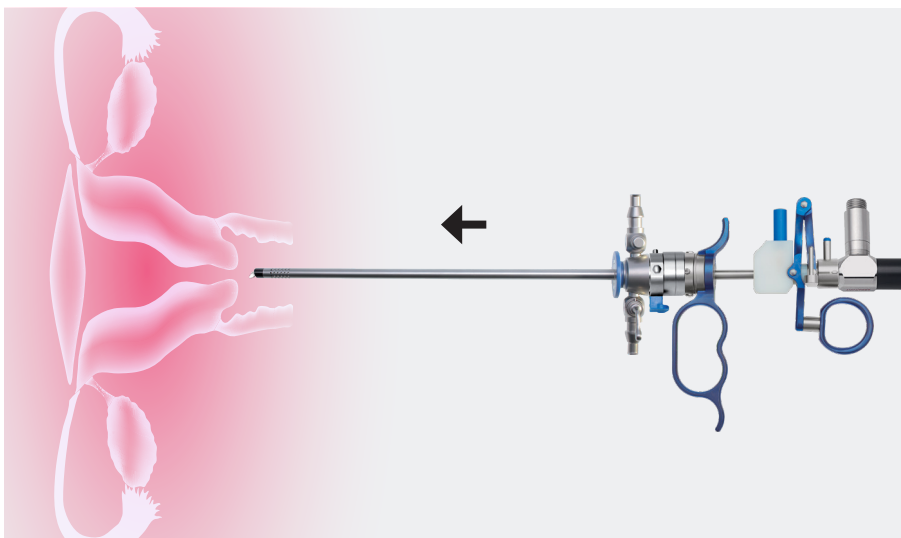


④

Attach the inner sheath (E) to the working element (B).

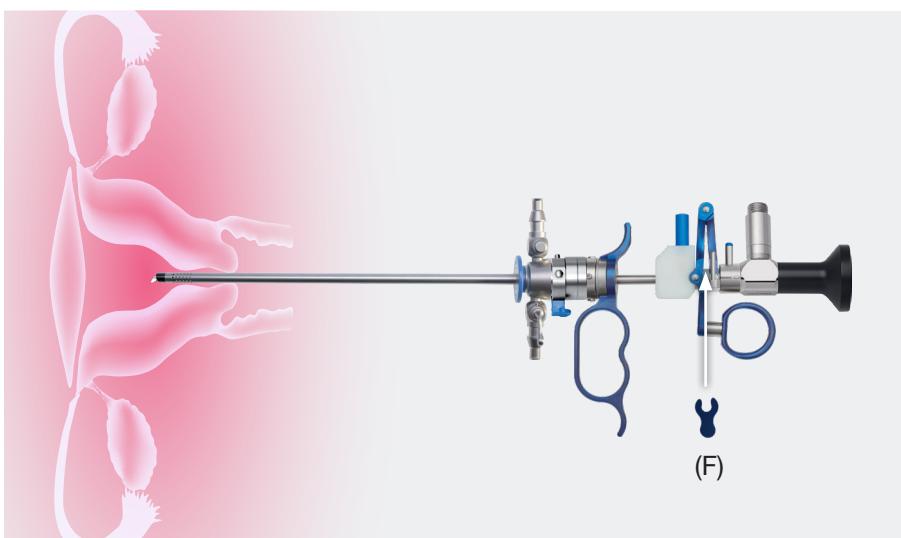
⑤

Attach the outer sheath (D) to the working element (B).



⑥

Introduce the system into the uterus.

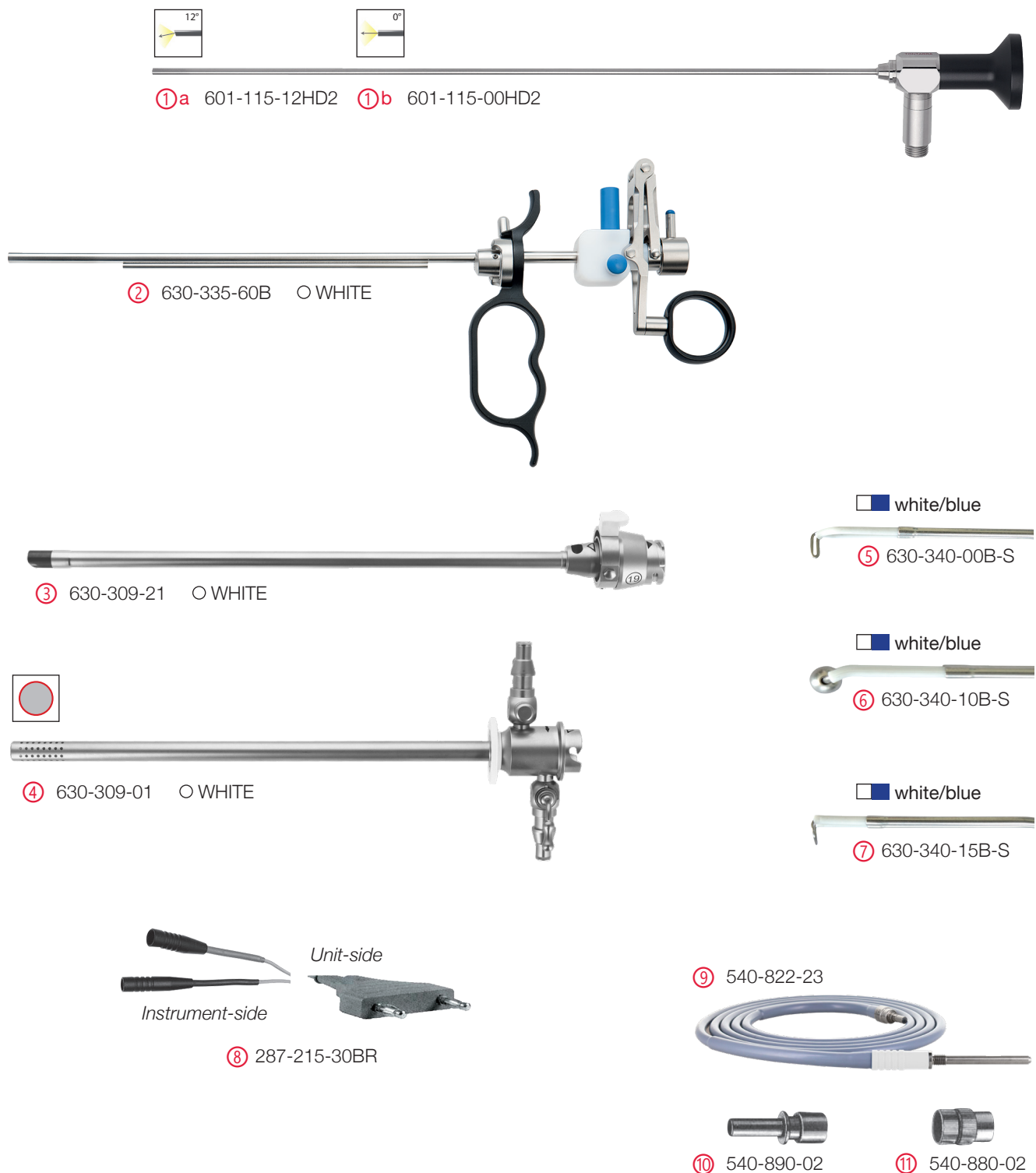


⑦

It is recommended to place the distance holder (F) to the working element after introducing the resectoscope in the outer sheath.

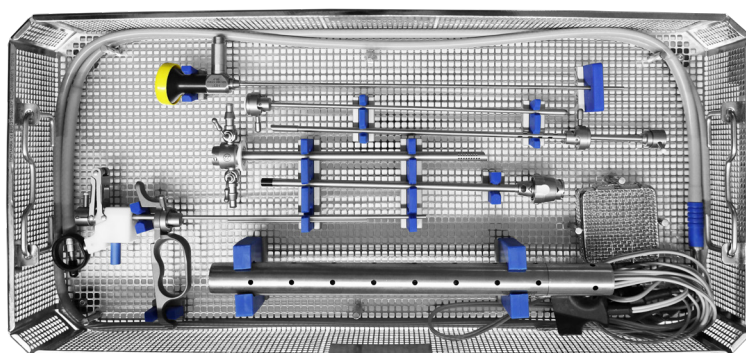
The correct position is shown on the picture with the arrow.

## Gynecology Basic Set | 19/22 Fr. Resectoscope



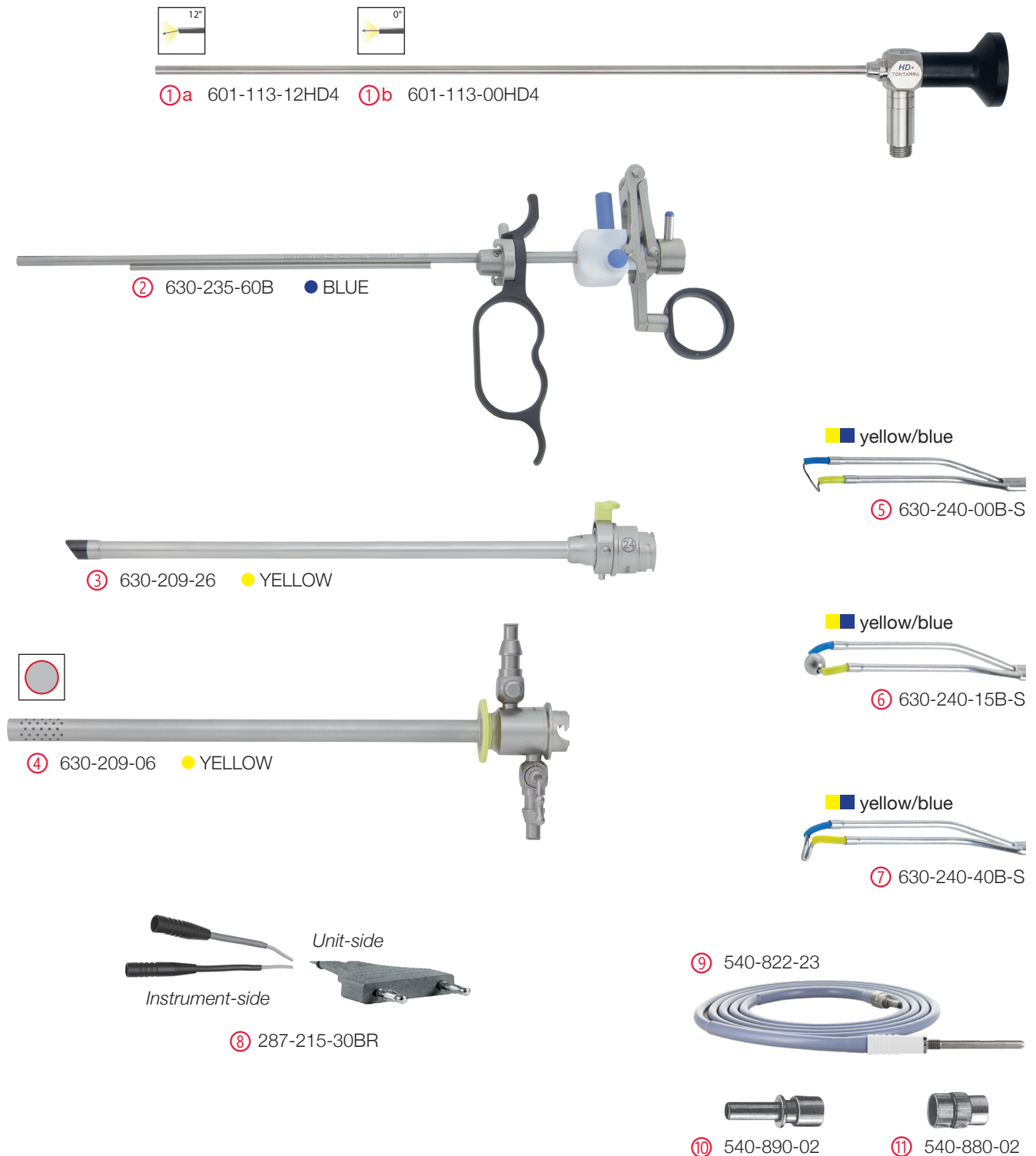
## Gynecology Basic Set | 19/22 Fr. Resectoscope

|     |                      |                                                                                  |
|-----|----------------------|----------------------------------------------------------------------------------|
| ① a | <b>601-115-12HD2</b> | Hysteroscope HD+2; Ø 2.9 mm; 12°; 300 mm; autoclavable                           |
| ① b | <b>601-115-00HD2</b> | Hysteroscope HD+2; Ø 2.9 mm; 0°; 300 mm; autoclavable                            |
| ②   | <b>630-335-60B</b>   | Working Element; passive; 19 Fr.; hybrid; HF-connector upwards; closed handle    |
| ③   | <b>630-309-21</b>    | Inner Sheath; 19 Fr.; rotatable; Quick-Lock; ceramic tip                         |
| ④   | <b>630-309-01</b>    | Outer Sheath; 22 Fr.; rotatable; Quick-Lock; all round perforation               |
| ⑤   | <b>630-340-00B-S</b> | Loop Electrode; 19 Fr.; angled, bipolar; sterile                                 |
| ⑥   | <b>630-340-10B-S</b> | Ball Electrode; 19 Fr.; Ø 3mm, bipolar; sterile                                  |
| ⑦   | <b>630-340-15B-S</b> | Knife Electrode; 19 Fr.; bipolar; sterile                                        |
| ⑧   | <b>287-215-30BR</b>  | TONTARRA mod. PWT-400 bipolar cable; International models; 2-pins                |
| ⑨   | <b>540-822-23</b>    | High Performance light guide cable                                               |
| ⑩   | <b>540-890-02</b>    | Light cable connector, unit side (light input)                                   |
| ⑪   | <b>540-880-02</b>    | Light cable connector, optic side (light output)                                 |
| ⑫   | <b>260-605-07Y</b>   | Pre-configured wire basket; 482 x 253 x 80 mm; for 19/22 and 24/26 Resectoscopes |



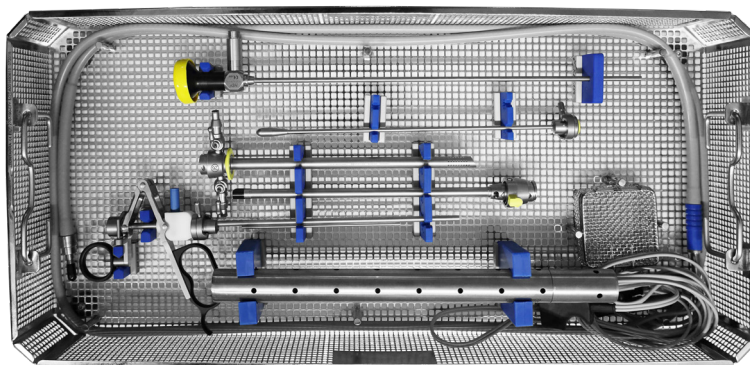
⑫ 260-605-07Y

## Gynecology Basic Set | 24/26 Fr. Resectoscope



## Gynecology Basic Set | 24/26 Fr. Resectoscope

|     |                      |                                                                                  |
|-----|----------------------|----------------------------------------------------------------------------------|
| ① a | <b>601-113-12HD4</b> | Hysteroscope HD+4; Ø 4.0 mm; 12°; 300 mm; autoclavable                           |
| ① b | <b>601-113-00HD4</b> | Hysteroscope HD+4; Ø 4.0 mm; 0°; 300 mm; autoclavable                            |
| ②   | <b>630-235-60B</b>   | Working Element; passive; 24 Fr.; hybrid; HF-connector upwards; closed handle    |
| ③   | <b>630-209-26</b>    | Inner Sheath; 24 Fr.; rotatable; Quick-Lock; ceramic tip                         |
| ④   | <b>630-209-06</b>    | Outer Sheath; 26 Fr.; rotatable; Quick-Lock; all round perforation               |
| ⑤   | <b>630-240-00B-S</b> | Loop Electrode; 24 Fr.; angled, bipolar; sterile                                 |
| ⑥   | <b>630-240-15B-S</b> | Ball Electrode; 24 Fr.; Ø 3 mm; bipolar; sterile                                 |
| ⑦   | <b>630-240-40B-S</b> | Knife Electrode; 24 Fr.; angled, bipolar; sterile                                |
| ⑧   | <b>287-215-30BR</b>  | TONTARRA mod. PWT-400 bipolar cable; International models; 2-pins                |
| ⑨   | <b>540-822-23</b>    | High Performance light guide cable                                               |
| ⑩   | <b>540-890-02</b>    | Light cable connector, unit side (light input)                                   |
| ⑪   | <b>540-880-02</b>    | Light cable connector, optic side (light output)                                 |
| ⑫   | <b>260-605-07Y</b>   | Pre-configured wire basket; 482 x 253 x 80 mm; for 19/22 and 24/26 Resectoscopes |



⑫ 260-605-07Y



## Basic Set KRUSCHINSKI MODULAR SCOPE (KMS) | Non HF-Version

### KMS



① 601-115-12HD2



② 640-016-35



③ 640-016-32



**GUBBINImidi**

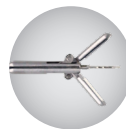
④ 582-180-24 ● GREEN



⑤ 582-180-39 ● GREEN



**PIRUETTO**  
Fully Rotatable Micro Instruments



⑥ 584-250-16LL



⑦ 584-256-16LL



⑧ 584-223-16LL

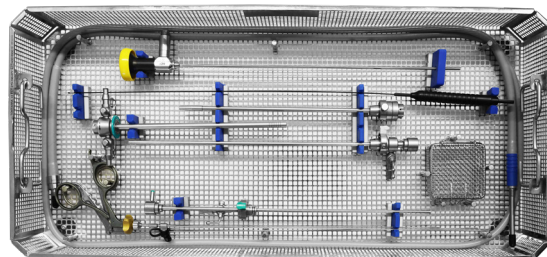
⑨ 540-822-23



⑩ 540-890-02



⑪ 540-880-02



⑫ 260-605-03Y

## Basic Set KRUSCHINSKI MODULAR SCOPE (KMS) | Non HF-Version

### KMS

|   |                      |                                                                                                                  |
|---|----------------------|------------------------------------------------------------------------------------------------------------------|
| ① | <b>601-115-12HD2</b> | Hysteroscope HD+2; Ø 2.9 mm; 12°; 300 mm; autoclavable                                                           |
| ② | <b>640-016-35</b>    | Kruschinski Visual Dilator; for use with Diagnostic Inner Sheath                                                 |
| ③ | <b>640-016-32</b>    | Diagnostic Inner Sheath; Quick-Lock; Ø 4.0 mm; 0°; 260 mm                                                        |
| ④ | <b>582-180-24</b>    | GUBBINImidi Outer Sheath; 18.5 Fr.; rotatable; Quick-Lock                                                        |
| ⑤ | <b>582-180-39</b>    | GUBBINImidi Working Insert; 17.5 Fr. Quick-Lock; 5 Fr. working channel                                           |
| ⑥ | <b>584-250-16LL</b>  | Biopsy forceps; oval; spike; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm                       |
| ⑦ | <b>584-256-16LL</b>  | Biopsy grasping forceps; toothed; oval; 1x2 teeth; semi-rigid; double action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm |
| ⑧ | <b>584-223-16LL</b>  | Scissors; pointed; semi-rigid, single action; LUER-Lock; Ø 1.6 mm; 5 Fr.; 340 mm                                 |
| ⑨ | <b>540-822-23</b>    | High Performance light guide cable                                                                               |
| ⑩ | <b>540-890-02</b>    | Light cable connector, unit side (light input)                                                                   |
| ⑪ | <b>540-880-02</b>    | Light cable connector, optic side (light output)                                                                 |
| ⑫ | <b>260-605-03Y</b>   | Pre-configured wire basket; 482 x 253 x 80 mm; for Mechanical KMS-System; for 1/1 Container                      |



## Basic Set KRUSCHINSKI MODULAR SCOPE (KMS) | HF-Version

### KMS



① 601-115-12HD2



② 640-016-35



③ 640-016-32



**GUBBINImidi**

④ 582-180-24 ● GREEN

■ green

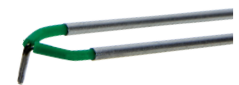


⑧ 582-180-40B-S

**GUBBINImidi**



⑤ 582-180-26 ● GREEN



⑨ 582-180-42B-S



⑩ 582-180-43B-S



⑦ 582-150-02GUB

⑥ 582-180-00B ● GREEN



Instrument-side

Unit-side

⑪ 287-215-30BR

**GUBBINImidi**

⑫ 540-822-23



⑬ 540-890-02

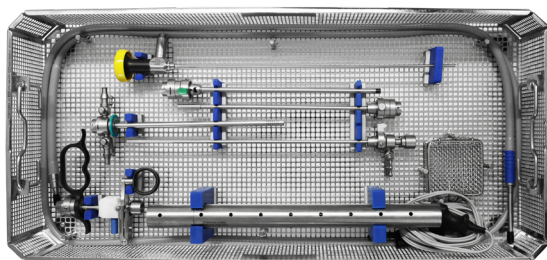


⑭ 540-880-02

## Basic Set KRUSCHINSKI MODULAR SCOPE (KMS) | HF-Version

### KMS

|   |                      |                                                                                              |
|---|----------------------|----------------------------------------------------------------------------------------------|
| ① | <b>601-115-12HD2</b> | Hysteroscope HD+2; Ø 2.9 mm; 12°; 300 mm; autoclavable                                       |
| ② | <b>640-016-35</b>    | Kruschinski Visual Dilator; for use with Diagnostic Inner Sheath                             |
| ③ | <b>640-016-32</b>    | Diagnostic Inner Sheath; Quick-Lock; Ø 4.0 mm; 0°; 260 mm                                    |
| ④ | <b>582-180-24</b>    | GUBBINImidi Outer Sheath; 18.5 Fr.; rotatable; Quick-Lock                                    |
| ⑤ | <b>582-180-26</b>    | GUBBINImidi Inner Sheath; 17.5 Fr.; rotatable; Quick-Lock; ceramic tip                       |
| ⑥ | <b>582-180-00B</b>   | GUBBINImidi Working Element; passive; hybrid; Quick-Lock                                     |
| ⑦ | <b>582-150-02GUB</b> | Safety Distance Holder; width: 2 mm                                                          |
| ⑧ | <b>582-180-40B-S</b> | GUBBINImidi loop electrode; 30° angled; bipolar; sterile                                     |
| ⑨ | <b>582-180-42B-S</b> | GUBBINImidi knife electrode; bipolar; sterile                                                |
| ⑩ | <b>582-180-43B-S</b> | GUBBINImidi ball electrode; bipolar; sterile                                                 |
| ⑪ | <b>287-215-30BR</b>  | TONTARRA mod. PWT-400 bipolar cable; International models; 2-pins                            |
| ⑫ | <b>540-822-23</b>    | High Performance light guide cable                                                           |
| ⑬ | <b>540-890-02</b>    | Light cable connector, unit side (light input)                                               |
| ⑭ | <b>540-880-02</b>    | Light cable connector, optic side (light output)                                             |
| ⑮ | <b>260-605-04Y</b>   | Pre-configured wire basket; 482 x 253 x 80 mm; for HF-Operative KMS-System for 1/1 Container |



⑮ 260-605-04Y

For more information  
please see our KMS brochure

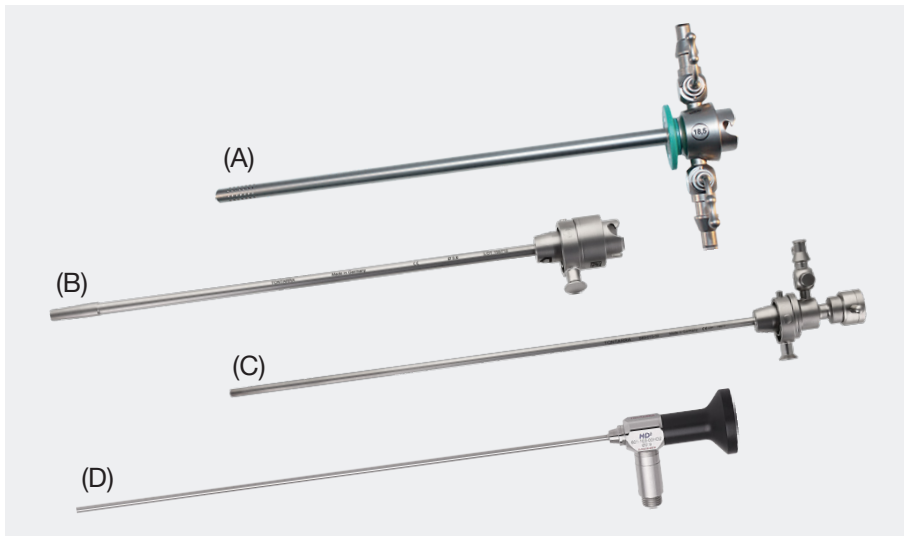


<https://qrco.de/kms-brochure>

## Recommended Sets

► Resectoscopy | The KMS method

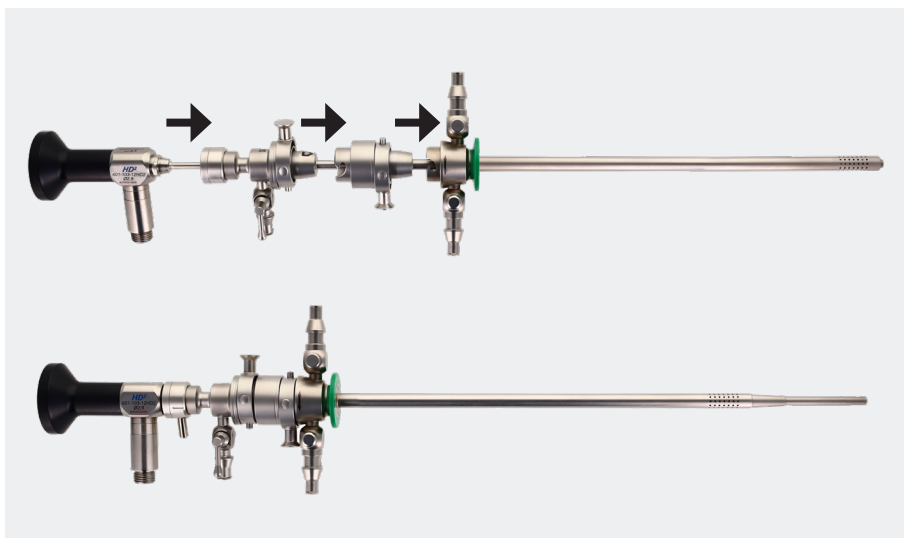
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①

KMS-Components:

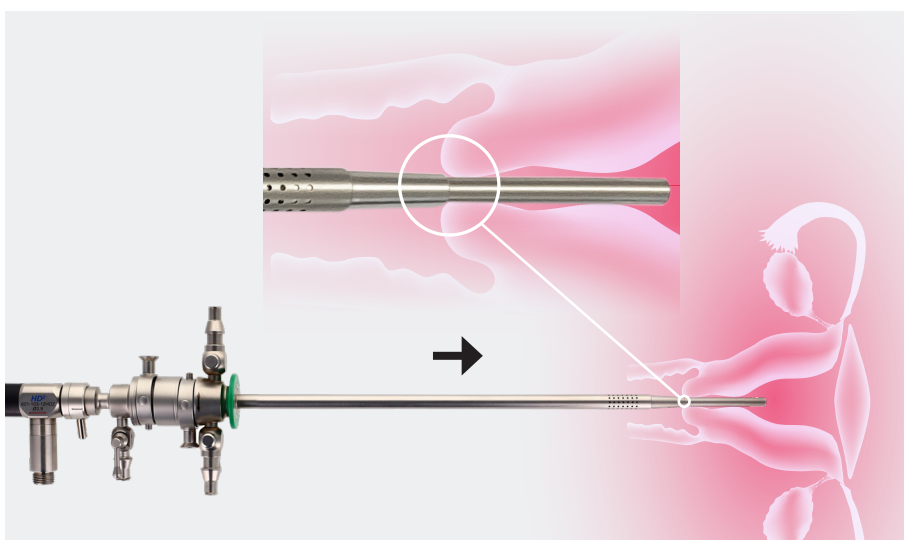
- (A) Operative Outer Sheath
- (B) Visual Dilatator
- (C) Diagnostic Sheath
- (D) Endoscope



②

Assembly of the KMS:

Sequence from (A) - (D)



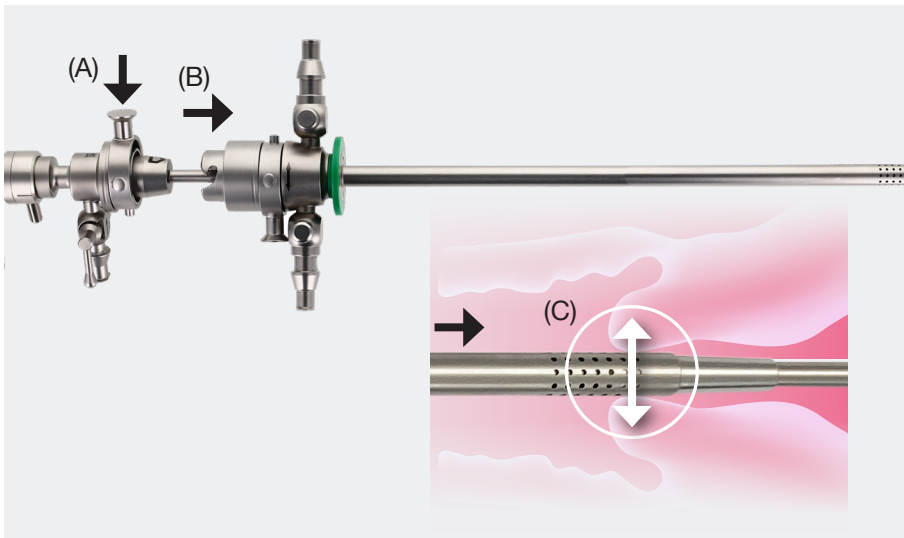
③

Introduction of the KMS into the uterus. Performing the diagnosis without the Visual Dilatator and outer sheath dilating the cervical canal.

## Recommended Sets

► Resectoscopy | The KMS method

**TONTARRA**



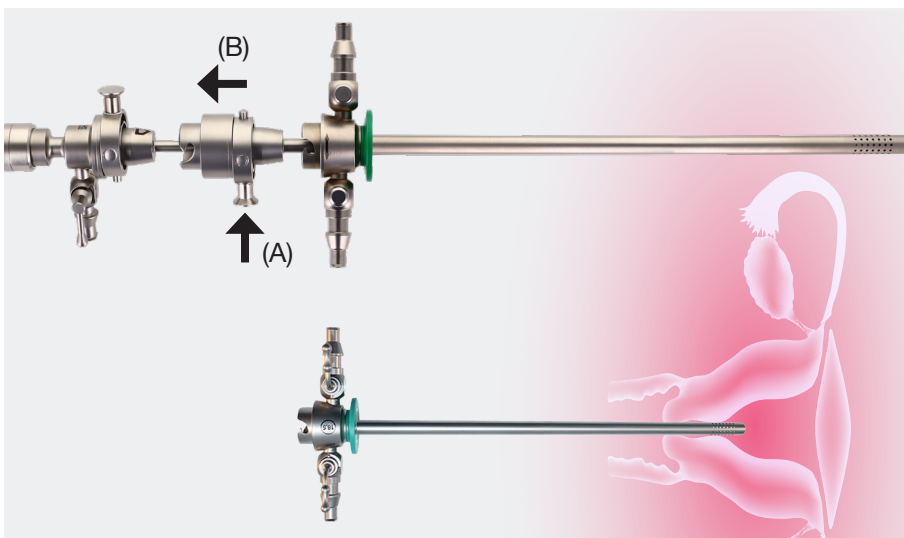
④

Change from diagnosis to therapy Part I:

(A) Press the button of the diagnostic sheath

(B) Carefully advance the visual dilatator and the operating outer sheath.

(C) A gentle and painless dilatation of the cervical canal is performed.



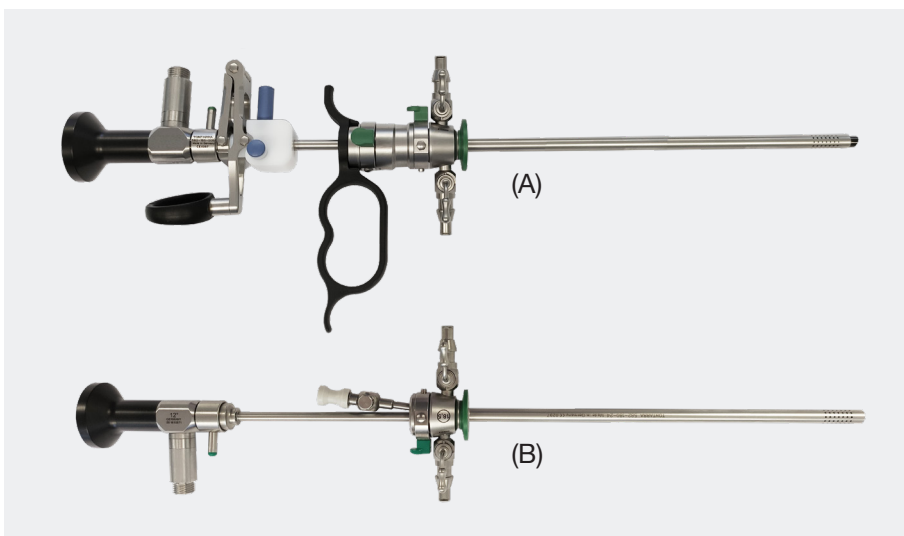
⑤

Change from diagnosis to therapy Part II:

(A) Press the button of the visual dilatator

(B) Now, all components can be removed.

Only the operating outer sheath remains in der cervical canal/uterus.



⑥

To perform the therapy, the system offers the user 2 options:

(A) Electrosurgical

(B) Mechanical

TONTARRA Medizintechnik GmbH is certified in accordance with the European Medical Device Regulation (EU) 2017/745 and complies with the requirements of the Medical Device Single Audit Program (MDSAP).

This certification affirms our commitment to quality and safety standards in the design, manufacturing and distribution of our medical devices. As a result, we are authorized to affix the CE mark to our products within the scope outlined in our certificates, which can be accessed on our official website. This achievement reflects our dedication to delivering high-quality, compliant medical devices to our customers and underscores our adherence to the rigorous standards set forth by regulatory authorities.

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Original Manufacturers' reference numbers correspond to the references indicated in this catalog, eliminating the prefix letters (e.g. SCHO/95-3930 = original reference: 95-3930).

The products listed in this catalog may only be used by trained healthcare professionals, evaluating the proper application in each patient case.

This content does not replace the instruction for use of the product.

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