

KeyPort

The reusable Single Port Solution

The cost-effective route
to modern surgery

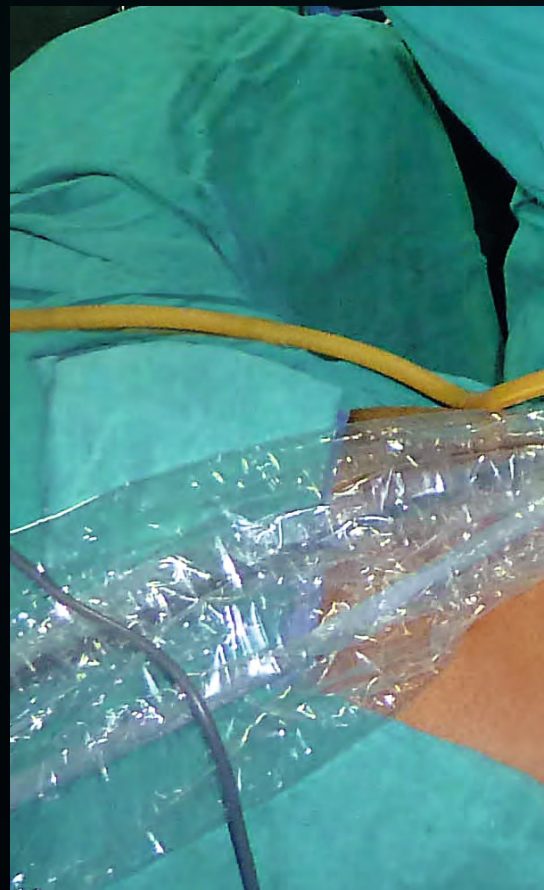
New benchmarks in Single Port surgery

KeyPort makes more from Single Port access.

Richard Wolf sets a new benchmark. The innovative complete system opens up fantastic technical and economic perspectives. It also offers users decisive benefits such as reusability, an exceptional level of surgical freedom, a modular setup and instruments with universal application.

Freedom in your hand

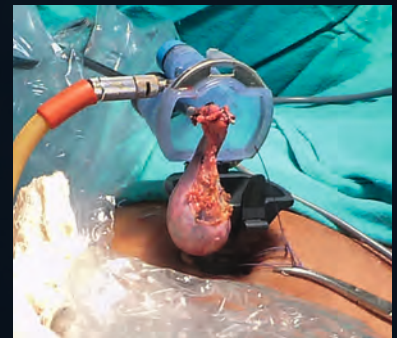
The reusable character of the **KeyPort** System eliminates discussions about on-going costs. The innovative Single Port technology can also be used cost-effectively for standard interventions. Additional degrees of freedom are gained by new, double-rotatable instruments with a specially designed shape. This contributes to much more precise work and eliminates the problem associated with lack of triangulation in the Single Port technique. Refined individual components permit users to put together their individual Single Port setup – easily and transparently within a modular building-block system.



The benchmark for Single Port surgery



New perspectives – boundless freedom – the new DuoRotate and InLine instruments



Very easy organ recovery with the KeyPort

The key to success is in the detail

Single-use is history

The **KeyPort** System opens up scope for financial flexibility. Intelligent design means that **KeyPort** and all its components can be perfectly reprocessed. This means big savings on each intervention compared with single-use products. High-quality materials and precise processing down to the last detail facilitate autoclavability.

Freedom is a matter of shape

The triangular shape of the **KeyPort** trocar sleeve – the epitrochoid shape – was created in close dialog with experienced users. It permits crossing of instruments in a larger angle while also permitting parallel working. The unusual shape creates more space for maneuver and ensures greater freedom of movement in the entire abdominal cavity.

New degrees of freedom are created in combination with the **DuoRotate** and **InLine** instruments while at the same time increasing the level of precision – a new dimension in Single Port surgery. The **KeyPort** can be introduced securely and easily and is firmly anchored in the abdominal wall using the integrated thread.

Flexibility in every dimension

The **KeyPort** seal insert offers greater flexibility with three valve ports and the option of a fourth port. Well-designed and easy to operate seal systems permit efficient use of instruments with a diameter of 5-15 mm. The seal insert is made of a high-tech silicone, is extremely flexible, very resilient and reusable.



KeyPort trocar sleeve – the epitrochoid shape provides freedom. Crossing instruments and parallel working are both facilitated in equal measure. Our **KeyPort** trocar sleeves have a passage of 21 and 24 mm making them perfect for meeting a wide range of surgical requirements.



The threaded anchor of the KeyPort trocar sleeve facilitates introduction and provides a reliable anchor in the abdominal wall.



An optional fourth port is provided in the seal insert. This can be directly penetrated using an instrument as necessary.



Specimens can easily be obtained by means of the snap connector between the trocar sleeve and the silicone seal insert.



The easily operated and reliable two-way stopcock for smoke extraction forms part of the KeyPort System.

Here everything turns on precision

Double-curve, single InLine

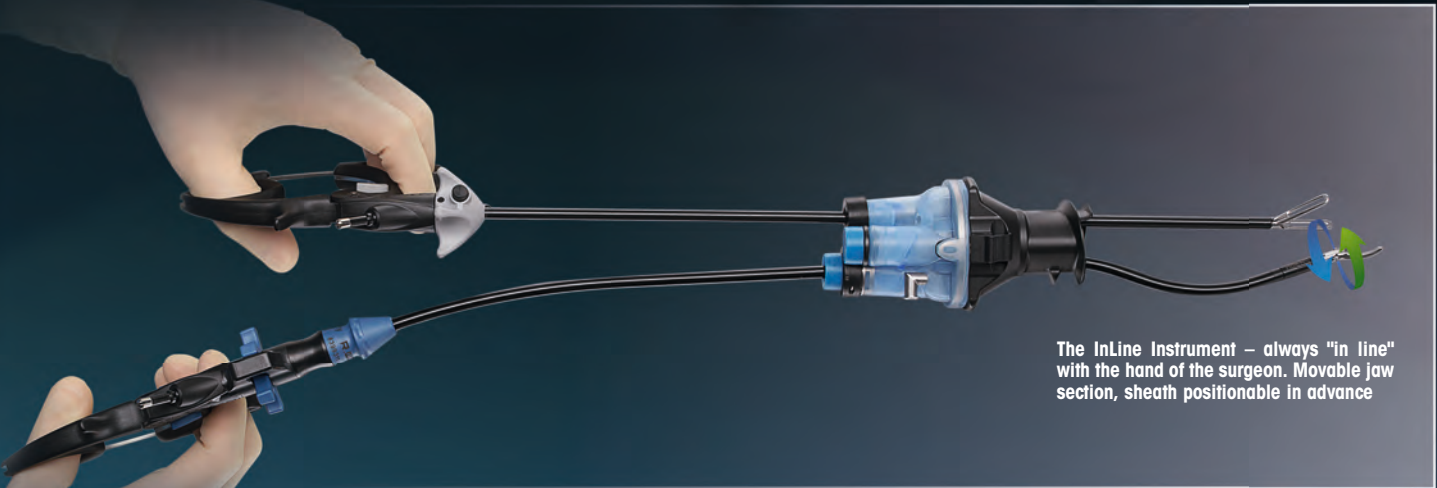
The sheath of the **InLine** instruments has a double-curve. This curve increases the gap between the neighboring instrument – at the same time the jaw section moves to the center of the endoscopic image. The special effect is that your hand and the instrument tip

form an imaginary straight line. The jaw of the **InLine** instrument can be turned by 360° using the adjustment wheel on the handle, the position of the sheath in the handle can be selected before the intervention starts.

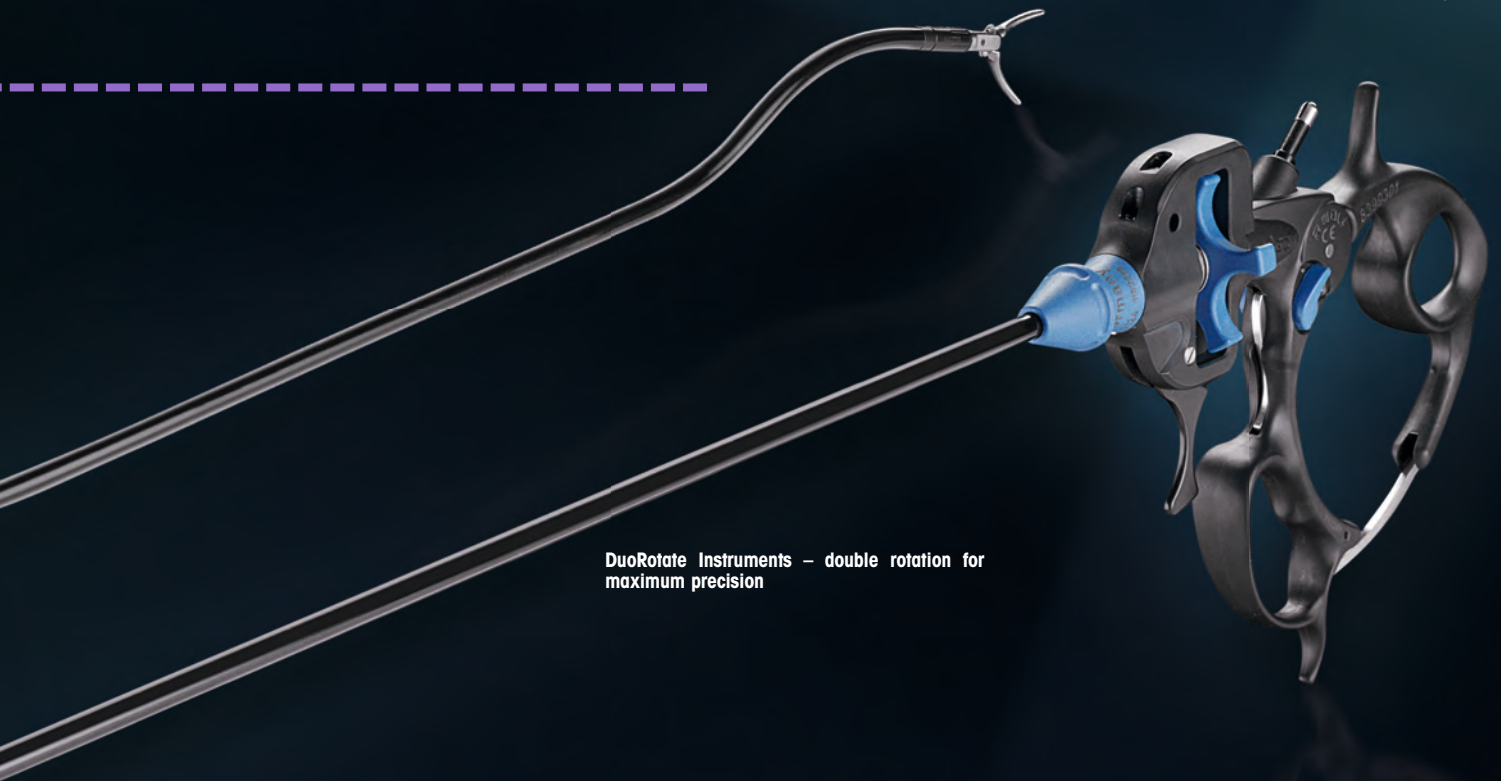
Three-way division – boundless modularity

All components can be linked together using our new instrument generation. Jaw inserts with jaw section and sheath can be universally combined with the two handle types (**DuoRotate**, **InLine**). The three-part structure permits easy dismantling for reliable reprocessing.

InLine instruments – double-curve sheath for maximum freedom of movement.



The InLine Instrument – always "in line" with the hand of the surgeon. Movable jaw section, sheath positionable in advance



DuoRotate Instruments – double rotation for maximum precision

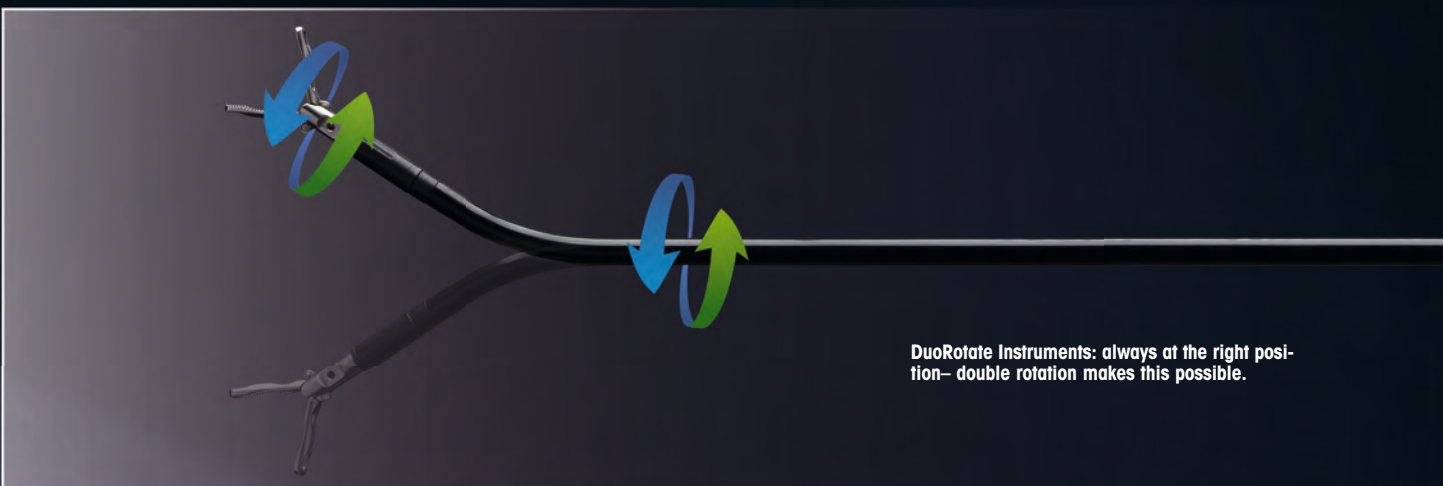
Double movement, simply fantastic

Our **DuoRotate** Instruments are a pioneering innovation. They elevate Single Port Surgery to a new level. The double rotation function always guarantees the right position for reliable exposure, dissection or retraction.

The sheath bent at the distal end can be rotated through 360° using a large and easily

operated multi function control wheel on the handle. The finger operated selector lever allows instant switching from one control mode to the other allowing either jaw rotation, rotation of the sheath or fixed mode. This allows the individual jaw section to be precisely positioned. A real technical achievement made in Germany!

All this is carried out using the selector lever and the adjustment wheel whilst your hand remains in a relaxed position at all time. The ergonomic design of our proven ERAGON grip with switchable ratchet completes the overall concept.



DuoRotate Instruments: always at the right position – double rotation makes this possible.

Innovation with System – Quality in Detail

Overview of Port System

<p>KEYPORT trocar sleeve</p> 	<p>Autoclavable, triangular shape with 21 mm passage, WL 30 mm, with thread anchor, interface for retainer arm (Endo-Motion retainer arm 37500.001 and U-shaped retainer arm 8840.9721) and fixing option for fascia thread, interface for silicone seal insert (8850243) 885020</p>
<p>KEYPORT trocar</p> 	<p>Autoclavable, conical blunt shape, with central bore for primary insufflation, for Single Port trocar sleeve (885020) 885021</p>
<p>KEYPORT trocar sleeve</p> 	<p>Autoclavable, triangular shape with 24 mm passage, WL 36 mm, with thread anchor, interface for retainer arm (Endo-Motion retainer arm 37500.001 and U-shaped retainer arm 8840.9721) and fixing option for fascia thread, interface for silicone seal insert (8850243) 885030</p>
<p>KEYPORT trocar</p> 	<p>Autoclavable, conical blunt shape, with central bore for primary insufflation, for Single Port trocar sleeve (885030) 885031</p>

KEYPORT SILICONE seal insert set



comprising:

- KeyPort** silicone seal insert (pack of 3, 8850243),
- Adapter with twist lock (885005),
- Adapter with twist lock (885010),
- Adapter with twist lock (885015),
- Plastic sleeve (8850005),
- Plastic sleeve (8850010),
- Seal cap (pack of 10, 89.02),
- seal cap (pack of 10, 89.08),
- seal cap (pack of 10, 89.10),
- seal cap (pack of 10, 8930),
- seal cap (pack of 10, 8931),
- seal cap (pack of 10, 8932),
- two-way stopcock (8850501) 88502431

The seal insert set contains all the necessary adapters, plastic sleeves and seal caps (packs of 10) for instrument diameters of 5–15 mm.

PANOVIEW telescopes




- Ø 5.3 mm, WL 430 mm, distortion-free, full format
- 0° 89354414
- 30° 89354424

- Ø 5.7 mm, WL 500 mm, distortion-free, full format
- 0° 89354415
- 30° 89354425

New Instruments – Modularity is Trumps


The individual components of the **DuoRotate** and **InLine** Instrument Series can be freely combined with each other.



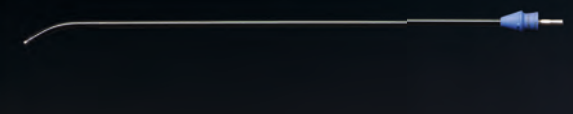
InLine handle
with adjustment wheel for separate rotation of the jaw insert, with disengageable ratchet, with HF connector 8399302




DuoRotate handle
with toggle adjustment wheel for separate rotation of sheath and jaw insert, with disengageable ratchet, with HF connector 8399301




InLine sheath
Ø 5.8 mm, WL 400 mm, double curve at the distal end, angled at the proximal end 8399311




DuoRotate sheath
Ø 5.8 mm, WL 400 mm, curved at the distal end 8399310




DuoRotate / InLine jaw insert
"Maryland", insulated 8399412



DuoRotate / InLine jaw insert "holding forceps", atraumatic, insulated 8399414



DuoRotate / InLine jaw insert
"Mixer", insulated 8399410



DuoRotate / InLine jaw insert
"Metzenbaum", insulated 8399413

We recommend our complete sets for optimum handling and best results



InLine Complete Sets

InLine Dissector "Maryland" Ø 5.8 mm, WL 400 mm comprising: **InLine** handle with adjustment wheel for separate rotation of the jaw insert, with disengageable ratchet, with HF connector (8399302), **InLine** sheath, double curve at the distal end, angled at the proximal end (8399311), **DuoRotate / InLine** jaw insert "Maryland", insulated (8399412), irrigation adapter (8399300)83994012

InLine holding forceps, atraumatic, Ø 5.8 mm, WL 400 mm comprising: **InLine** handle with adjustment wheel for separate rotation of the jaw insert, with disengageable ratchet, with HF connector (8399302), **InLine** sheath, double curve at the distal end, angled at the proximal end (8399311), **DuoRotate / InLine** jaw insert "holding forceps" atraumatic, insulated (8399414), irrigation adapter (8399300) 83994011

InLine Dissector "Mixer" Ø 5.8 mm, WL 400 mm comprising: **InLine** handle with adjustment wheel for separate rotation of the jaw insert, with disengageable ratchet, with HF connector (8399302), **InLine** sheath, double curve at the distal end, angled at the proximal end (8399311), **DuoRotate / InLine** jaw insert "Mixer", insulated (8399410), irrigation adapter (8399300)83994010

InLine scissors "Metzenbaum" Ø 5.8 mm, WL 400 mm comprising: **InLine** handle with adjustment wheel for separate rotation of the jaw insert, with disengageable ratchet, with HF connector (8399302), **InLine** sheath, double curve at the distal end, angled at the proximal end (8399311), **DuoRotate / InLine** jaw insert "Metzenbaum", insulated (8399413), irrigation adapter (8399300)83994013



DuoRotate Complete Sets

DuoRotate Dissector "Maryland", Ø 5.8 mm, WL 400 mm comprising: **DuoRotate** handle with toggle adjustment wheel for separate rotation of sheath and jaw insert, with disengageable ratchet, with HF connector (8399301), **DuoRotate** sheath, curved at the distal end (8399310), **DuoRotate / InLine** jaw insert "Maryland", insulated (8399412), irrigation adapter (8399300)83993012

DuoRotate holding forceps, atraumatic, Ø 5.8 mm, WL 400 mm comprising: **DuoRotate** handle with toggle adjustment wheel for separate rotation of sheath and jaw insert, with disengageable ratchet, with HF connector (8399301), **DuoRotate** sheath, curved at the distal end (8399310), **DuoRotate / InLine** jaw insert "holding forceps" atraumatic, insulated (8399414), irrigation adapter (8399300)83993011

DuoRotate Dissector "Mixer", Ø 5.8 mm, WL 400 mm comprising: **DuoRotate** handle with toggle adjustment wheel for separate rotation of sheath and jaw insert, with disengageable ratchet, with HF connector (8399301), **DuoRotate** sheath, curved at the distal end (8399310), **DuoRotate / InLine** jaw insert "Mixer", insulated (8399410), irrigation adapter (8399300)83993010

DuoRotate scissors "Metzenbaum", Ø 5.8 mm, WL 400 mm comprising: **DuoRotate** handle with toggle adjustment wheel for separate rotation of sheath and jaw insert, with disengageable ratchet, with HF connector (8399301), **DuoRotate** sheath, curved at the distal end (8399310), **DuoRotate / InLine** jaw insert "Metzenbaum", insulated (8399413), irrigation adapter (8399300)83993013

M E D I C A L

V E T E R I N A R Y

I N D U S T R I A L