TWISTER™
XCAVATOR™
Minimally invasive laser therapy of BPH and tumors

- Excellent hemostasis
- Fast and efficient prostate ablation
- Tolerated with high risk patient
- Local or minimal anesthesia
BPH – Benigne Prostatic Hyperplasia

Contact fiber approach with the XCAVATOR™ and the TWISTER™ fibers

Our contact fibers are developed to reach out for unmatched ablation rates and excellent reliability. Working in contact mode offers direct and high energy delivery exact on the area where you want to ablate or vaporize the results are smooth intrasurgical surfaces. Special developed glass tips assure working without fiber degradation and consistently high performance. More fiber control through tactile feedback shows the best outcome and permits outstanding treatment.
XC AVATOR™

Time is precious, so we designed the XCAVATOR™ as the first true Laser-TURP to combine the efficacy of trans-urethral resection with the unmatched safety and hemostasis of the Ceralas® HPD laser system series. The patent pending glass tip of the XCAVATOR™ fiber ensures a safe treatment of benign prostate hyperplasia powered by optimized absorption in water and hemoglobin of the Ceralas® HPD laser.

- Unique glass tip makes the XCAVATOR™ as the first choice treating prostate bigger than 100 grams
- Increased contact surface area results in a wider area of tissue resection
- Efficient vaporization, coagulation and resection
- Specially designed resectoscope decreases likelihood of costly optic damage
- Optimized field of view due to vapor bubbles concentrated at fiber tip only
- Tissue resection with possible histological diagnosis
- Short learning curve
The new TWISTER™ XL fiber is designed to increase the well known ablation rates of the TWISTER™ L and improve precision fiber handling by optimizing rigidity. Larger fiber tip design increases the surface area to almost 20% larger than the TWISTER™ L. A specially designed coating enhances the rigidity and handling of the fiber tip while increasing durability.

- Increased fiber tip surface area for fast and efficient ablation
- Contact mode for tactile feedback
- Increased control of the fiber tip
- Excellent hemostasis
- Short catheter time and fast recovery
- Cystoscope compatibility in line with TWISTER™
Tumor surgery

Our specialty fibers ensure a safe treatment of bladder tumors powered by optimized absorption in water and hemoglobin when utilizing the Ceralas® HPD laser, LEONARDO® DUAL 45 or LEONARDO® HPD (available in 2014).

Bladder tumors

The ability of simultaneous cutting and coagulation offers a simple and safe method with a minimal to no loss of blood. Different methods are possible, the standard procedure in a theater with general/regional anesthesia or outpatient procedure which is even tolerated of high risk patient. The outpatient procedure using a flexible cystoscopy and different kinds of bare fibers does not require general/regional anesthesia and is a gentle way of treating bladder tumors. Both laser treatments for bladder tumors reduce risks for the patient and can be performed quickly.

- Outpatient procedure using flexible cystoscopy
- Tolerated with high risk patient
- Can be performed safely and effectively in the office

Partial nephrectomy

Cutting and coagulation properties of our optical fibers contribute to a successful nephron sparing surgery securing better overall renal function. Our high-tech fibers would be the fiber of choice to ensure best results. Cutting and coagulating at the same time and provides minimal bleeding with a good view on the tissue. Use of our special diode lasers for (open, laparoscopic or robotic) partial nephrectomy offers benefit of no or shorter warm ischemia time with more effective tissue coagulation, hemostasis and reduced parenchymal damage.

- Less bleeding
- No need of suppressing feeding arteries – no time pressure
- Cutting and coagulating at the same time
- Laparoscopic or open procedure
Ceralas®

HPD DUAL – Unique combination of two simultaneous wavelengths
Ceralas® HPD DUAL combines the wavelengths 980 nm and 1470 nm with high absorption in H₂O and haemoglobin for multiple applications not only in urology.

HPD – Available in several powers. Well approved!
Wavelength of 980 nm provides high absorption in H₂O and is therefore well suited for applications in urology. Due to absorption properties the emitted laser beam does not affect the bladder.

Fibers for holmium laser

<table>
<thead>
<tr>
<th>REF</th>
<th>Product Description</th>
<th>Length [m]</th>
<th>Core ø [μm]/[Fr]</th>
<th>OD ø [μm]/[Fr]</th>
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<tbody>
<tr>
<td>500200789</td>
<td>Reusable Holmium Bare Fiber 230 μm, Flat Tip</td>
<td>3.1</td>
<td>272/0.8</td>
<td>420/1.4</td>
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<td>500200790</td>
<td>Reusable Holmium Bare Fiber 365 μm, Flat Tip</td>
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<td>365/1.1</td>
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<td>Reusable Holmium Bare Fiber 550 μm, Flat Tip</td>
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<td>750/2.3</td>
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<td>3.1</td>
<td>945/2.9</td>
<td>1400/4.2</td>
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</table>

All fibers are free of latex and DEHP. Our fibers are single use products (unless otherwise indicated) delivered sterile for immediate use.

Handpieces and instruments

For Ceralas® and LEONARDO®

<table>
<thead>
<tr>
<th>REF</th>
<th>Product Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>500400355</td>
<td>Storz Laser Cystoscope Set (blue) OD 23 Fr ID 7.5 Fr, no optics, incl. external and internal sheath and obturator*</td>
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<tr>
<td>400400250</td>
<td>XCAVATOR™ Resectoscope 360° Rotating and Continues Irrigation Set OD 26 Fr, no optics</td>
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<tr>
<td>AB2731</td>
<td>ASAP 30° Optics Hopkins II**, compatible Storz Laser Cystoscope blue and XCAVATOR™ Resectoscope</td>
</tr>
<tr>
<td>400100100</td>
<td>Universal Dual Luer Handpiece, for ø 600–1000 μm fibers***</td>
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<tr>
<td>400400110</td>
<td>Laparoscopic sheath 30 cm, ID ø 1.4 mm, OD ø 5 mm</td>
</tr>
<tr>
<td>400400115</td>
<td>Laparoscopic sheath 40 cm, ID ø 1.4 mm, OD ø 5 mm</td>
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</tbody>
</table>

Manufacturer: * Karl Storz GmbH ** ASAP *** Klaus Wenkert Medizintechnik
# Fibers for LEONARDO® and Ceralas®

## TWISTER™

<table>
<thead>
<tr>
<th>REF Ceralas®</th>
<th>Product Ceralas®</th>
<th>REF LEONARDO®</th>
<th>Product LEONARDO®</th>
<th>Length [m]</th>
<th>Core [Fr]</th>
<th>ODa [μm]/[Fr]</th>
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<td>501200220</td>
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<td>TWISTER™ XL Fiber</td>
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## XCAVATOR™

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<tr>
<th>REF Ceralas®</th>
<th>Product Ceralas®</th>
<th>REF LEONARDO®</th>
<th>Product LEONARDO®</th>
<th>Length [m]</th>
<th>Core [Fr]</th>
<th>ODa [μm]/[Fr]</th>
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</thead>
<tbody>
<tr>
<td>501200250</td>
<td>XCAVATOR™ Fiber</td>
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<td>–</td>
<td>3</td>
<td>1.8</td>
<td>–</td>
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</table>

### Bare Fibers Flat Tip

| –             | –                 | 503200744 | Bare Fiber 400μm, Flat Tip, IC | 2.6       | 1.2      | 750 / 2.3    |
| 501200740    | Bare Fiber 600 μm, Flat Tip, ID | 503200740 | Bare Fiber 600 μm, Flat Tip, IC | 2.6       | 1.7      | 960 / 2.6    |
| 501200745    | Bare Fiber 600 μm, Flat Tip, Adj. Luer, ID | –         | –                  | 3         | 1.7      | 950 / 2.9    |
| 501300400    | Bare Fiber 1000 μm, Flat Tip, ID | 503300400 | Bare Fiber 1000 μm, Flat Tip, IC | 2.6       | 2.9      | 1400 / 4.2   |
| 501300415    | Bare Fiber 1000 μm, Flat Tip, Adj. Luer, ID | –         | –                  | 2.6       | 2.9      | 1400 / 4.2   |

### Bare Fibers Ball Tip

| 501200750    | Bare Fiber 600 μm, Ball Tip, Adj. Luer, ID (1 × 6 h) | 503200750 | Bare Fiber 600 μm, Ball Tip, Adj. Luer, IC (1 × 6 h) | 2.5       | 1.7      | 960 / 2.6    |
| 501300410    | Bare Fiber 1000 μm, Ball Tip, ID | 503300410 | Bare Fiber 1000 μm, Ball Tip, IC | 2.6       | 2.9      | 1400 / 4.2   |

### Bare Fibers Conical Tip

| 501200741    | Bare Fiber 600 μm, Conical Tip, ID | 503200741 | Bare Fiber 600 μm, Conical Tip, IC | 2.6       | 1.7      | 960 / 2.6    |
| 501300405    | Bare Fiber 1000 μm, Conical Tip, ID | 503300405 | Bare Fiber 1000 μm, Conical Tip, IC | 2.6       | 2.9      | 1400 / 4     |

### Accessories

**For Ceralas® and LEONARDO®**

- AB2570 Mobile Table for HPD Laser
- LA1371 Laser safety goggles 950 – 110 L4 + 1470 L2 (FULL) type: ear piece*
- LA1493 Laser safety goggles DIR 925 – 1080 L5 (FULL), white frame (31 – 3985)*
- LA5199 Laser safety goggles DIR 804 – 1755 L3 (FULL), type: basket, clear*
- LA5165 Sticker Laser warning 20 × 20 cm
- 400100115 Medi Strip 0.7 / 1.2 BF 600 μm, autoclavable – Fiber stripper for Bare fiber 600 μm
- 400100120 Medi Strip 1.0 / 1.5 BF 1000 μm, autoclavable – Fiber stripper for Bare fiber 1000 μm
- AB1908 Touhy Borst Adapter

*Manufacturer: * Honeywell Safety Products, USA

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Available in 2014
Contact us
to learn more about a whole new world
of minimally invasive laser therapies

Venous diseases
Hemorrhoids and fistulas
Wide spectrum of ENT diseases
BPH and urological tumor
Uterine tumor
Cervical disk hernia
Lung metastases and bronchial tumors

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