

## MS-L LIGHT SOURCE 180 W

Order-No. 670-10000



### Natural Illumination

180 W Xenon light sources provide illumination in daylight quality. The natural light – composed of the entire spectrum of white light – is the optimum for endoscopic surgery.

### Xenon Lamp

The lamp has an average life of 500 hours. A counter is situated on the front display.

### Light Regulation

Manual light regulation provides exact illumination control.

### User Friendly Display

The MS-L control panel is robust and clearly arranged. Simple controls allow effective cleaning.

### Lamp Exchange

The lamp has an average life of 500 hours. A counter is situated on the display. With integrated replacement indicator: 3 integrated silent fans control the temperature stability.



**Universal Light Guide Connector Port**  
The universal light guide connector port allows the use of different light guides without paying any attention for having the right adapter.



**Replacement Indicator**



**Light Regulation**  
Manual light regulation provides exact illumination control.

## GENERAL

<i>Order-No.</i>	
<b>686-10000</b>	MS-L Light source
<i>Main Connection</i>	
Power supply	100 -250 V AC
Frequency	50/60 Hz
Power consumption	350 VA
Fuse	2 x (T 315 AL /250)
<i>Classification</i>	
Safety class	1 with potential equalization connection
Protection	IP X 1
Type	BF
Approval	<b>CE</b>
<i>Dimension and Weight</i>	
Dimension (w/h/d)	380 x 100 x 340 mm
Weight	10.0 kg
<i>Operating Conditions</i>	
Operating temperature	+10° C ~ +40° C
Operating humidity	30 % ~ 75 %
<i>Extent of Delivery</i>	
MS-L	<ul style="list-style-type: none"> <li>■ Power cable</li> <li>■ User manual</li> </ul>

## SPECIFICATION

<i>Main Unit</i>	
Xenon Lamp	180 W
Color temperature	6.000 K
Life cycle of the lamp	500 h
Light output	Regulation
Counter for operating hours	Front display
Replacement indicator	Front display
Light guide connection	Universal

<i>Order-No.</i>	<i>Accessories</i>
<b>686-00200</b>	Spare lamp Xenon, 180 W
<b>402-11300</b>	Light guide, Ø 4.8 mm, length 2.3 m
<b>402-11100</b>	Light guide, Ø 4.8 mm, length 3.0 m
<b>402-11410</b>	High performance light guide, LG 310 W, length 2.3 m
<b>402-11510</b>	High performance light guide, LG 310 W, length 3.0 m
<b>KE 363159</b>	Potential equalization cable, 1 m

## MS-LH LIGHT SOURCE

Order-No. 682-00010



**Lamp Exchange**  
Drawer on the side.

### **illumination**

The light source *MS-LH* provides halogen light at a lamp output of 250 W. The extremely high luminous efficiency which is unusual for 250 W light sources is obtained by excellent tuning.

### **Consistent Light Quality**

The light source *MS-LH* is designed with a built-in 250 W halogen spare light bulb. In case of a lamp defect, this allows to proceed with the endoscopic intervention.

### **Intended Use**

The light source *MS-LH* provides illumination for fiberoptic endoscopy to gastroenterological and urological cavities, hollow organs and canals.

### **Lamp Quick Exchanger**

Can easily done by side-drawer.

## GENERAL

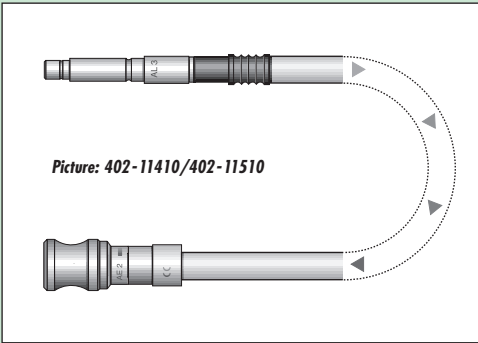
<i>Order-No.</i>	
<b>682-00010</b>	MS-LH
<i>Main Connection</i>	
Power supply	~100-240 V
Frequency	50/60 Hz
Power consumption	260 VA
Fuse	2 x T 4.0 AL/250 V (IEC 127)
<i>Classification</i>	
Safety class	1 with potential equalization connection
Protection	IP X 1
Type	BF
Approval	<b>CE</b>
<i>Dimension and Weight</i>	
Dimension (w/h/d)	350 x 145 x 400 mm
Weight	10.0 kg
<i>Extent of Delivery</i>	
MS-LH	<ul style="list-style-type: none"> <li>■ Power cable</li> <li>■ User manual</li> <li>■ 2 spare lamps (250 W Halogen)</li> <li>■ 2 spare fuses</li> </ul>

## SPECIFICATION

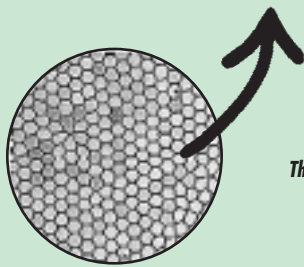
<i>Characteristics</i>	
Lamp	2 x halogen reflect lamp 250 W
Colour temperature	3.250 K
Life cycle of the lamp	50 h

<i>Order-No.</i>	<i>Accessories</i>
402-11300	Light guide cable, Ø 4.8 mm, length 2.3 mm
402-11100	Light guide cable, Ø 4.8 mm, length 3.0 mm
682-00100	Spare lamp (250 W Halogen)
KE 363159	Cable, 1 m, for potential equalization

## HIGH PERFORMANCE LIGHT GUIDE LG 310 W

Product	Order-No.	Length	Cable	AE (Adapter endoscope side)	AL (Adapter light source side)
 <p>Picture: 402-11410/402-11510</p>	402-11410	■ 2.3 m	■ Ø 4.8 mm	■ AE 2 (MGB/Wolf)	■ AL 3 (MGB/Wolf)
	402-11510	■ 3.0 m	■ Ø 4.8 mm	■ AE 2 (MGB/Wolf)	■ AL 3 (MGB/Wolf)
	402-11512	■ 3.0 m	■ Ø 4.8 mm	■ AE 6 (Storz)	■ AL 3 (MGB/Wolf)
	402-11415	■ 2.3 m	■ Ø 4.8 mm	■ None	■ None
	402-11515	■ 3.0 m	■ Ø 4.8 mm	■ None	■ None

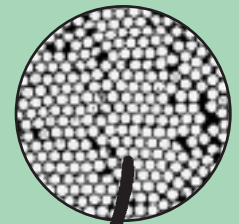
We recommend the High Performance Light Guide *LG 310 W* for the use of Xenon light sources. At the light entry side (connection cable light source) the fibers are melted together resulting in higher resistance towards heat and better transmission compared with a conventional light guide. Special marking: during using, the sleeve on the side of the light source will light orange. Our light guides are available with or without adapters.



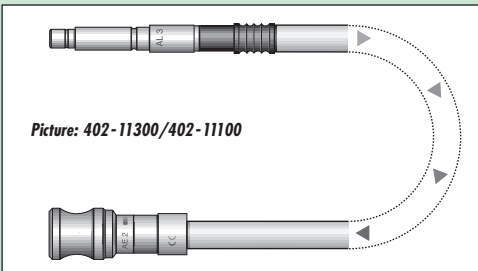
High Performance

The fibers are melted together resulting in higher resistance towards heat and more transmission.

Conventional Light Guide


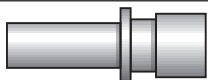




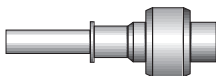


## STANDARD LIGHT GUIDE LG 200

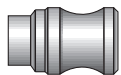
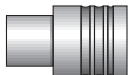


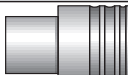
Product	Order-No.	Length	Cable	AE (Adapter endoscope side)	AL (Adapter light-source side)
 <p>Picture: 402-11300/402-11100</p>	402-11300	■ 2.3 m	■ Ø 4.8 mm	■ AE 2 (MGB/Wolf)	■ AL 3 (MGB/Wolf)
	402-11100	■ 3.0 m	■ Ø 4.8 mm	■ AE 2 (MGB/Wolf)	■ AL 3 (MGB/Wolf)
	402-11310	■ 2.3 m	■ Ø 4.8 mm	■ AE 6 (Storz)	■ AL 7 (Storz)
	402-11305	■ 2.3 m	■ Ø 4.8 mm	■ None	■ None
	402-11105	■ 3.0 m	■ Ø 4.8 mm	■ None	■ None
	402-11000	■ 1.8 m	■ Ø 3.5 mm	■ AE 2 (MGB/Wolf)	■ AL 3 (MGB/Wolf)
	402-11010	■ 1.8 m	■ Ø 3.5 mm	■ AE 6 (Storz)	■ AL 7 (Storz)
	402-11005	■ 1.8 m	■ Ø 3.5 mm	■ None	■ None

The Standard Light Guide *LG 200* is suitable for Halogen light sources and 180 W Xenon light sources; the ends are bonded with special adhesive. Our light guides are available with or without adapters.

## ADAPTER LIGHT SOURCE SIDE (AL)

Product	Order-No.	Description	Light Source Side with Connection
	402-00050	■ AL 3	■ MGB/Wolf
	402-00042	■ AL 7	■ Storz/Aesculap
	402-00033	■ AL 8	■ Olympus
	402-00101	■ AL 9	■ ACMI
	402-00104	■ AL 10	■ Olympus/ACMI
	402-00102	■ AL 11	■ Pentax
	402-00034		■ Solos

## ADAPTER ENDOSCOPE SIDE (AE)

Product	Order-No.	Description	Light Source Side with Connection
	402-00051	■ AE 2	■ MGB/Wolf
	402-00015	■ AE 4	■ MGB/old MGB-telescopes
	402-00005	■ AE 5	■ MGB
	402-00052	■ AE 6	■ Storz/Olympus/Aesculap/WISAP
	402-00103	■ AE 9	■ ACMI/CIRCON

## ML-G INSUFFLATOR

Order-No. 670-95600 (220 V)  
670-95601 (110 V)



40 Liter/min  
Insufflation

### Specification

The latest computer controlled technology for safe and precise insufflation. 4 unique selectable flow standards for exact control of intermittent insufflation (2 l, 8 l, 40 l/min automatic mode). The adjustable preselection of intraabdominal pressure (1-30 mm/Hg) meets every requirement (paediatric, gynaecology, general laparoscopy and bariatric procedure).

### High Safety

The *ML-G* guarantees the highest safety based on electrical control. Additionally, it covers all functions mechanically. Abdominal overpressure will be automatically reduced through integrated gas valve.

### Clear Arrangement

Clear arrangement is the essential characteristics of the *ML-G*. Its display gives a quick overview of the rated and actual values of gas flow- and-pressure. The setting of the flow rate is made by a simple touch of a button. The gas volume is shown by a separate display.

### Compatibility

*ML-G* is compatible to central CO<sub>2</sub> supply or different kind of gas bottles.



### Insufflation Medium: CO<sub>2</sub> Insufflation Rate

**Low:** approx. 2l/min.  
**Med:** approx. 8l/min.  
**High:** approx. 40l/min.  
**Auto:** automatic flow



### Irrigation Included

The *ML-G* has a gas pressure Irrigation function, which allows liquids irrigation. In combination with the MGB-Suction-/Irrigation instrument, simple handling and high flow Irrigation is guaranteed.



### Voice Feedback

All settings are confirmed acoustically through an adjustable speech module.

## GENERAL

Order-No.	
670-95600	ML-G Insufflator 220 V
670-95601	ML-G Insufflator 110 V
Main Connection	
Power supply	100 - 120 V/200 - 240 V
Frequency	50 - 60 Hz
Power consumption	45 VA
Fuse (~100 - 120 V)	2 x T 1.0 A/250 V (IEC 127)
Fuse (~200 - 240 V)	2 x T 2.0 A/120 V (IEC 127)
Classification	
Safety class	1 with potential equalization connection
Protection	IP X 1
Type	BF
Approval	CE
Dimension and Weight	
Dimension (w/h/d)	400 x 200 x 400 mm (without gas bottle)
Weight	17.6 kg
Operating Conditions	
Operating temperature	+10° C ~ +40° C
Operating humidity	30 % ~ 75 %
Extent of Delivery	
ML-G	<ul style="list-style-type: none"> <li>■ Silicone tube set for Insufflation</li> <li>■ Disposable Filter for Insufflation</li> <li>■ Adapter for Insufflation</li> <li>■ Silicone tube set for Irrigation</li> <li>■ Power cable</li> <li>■ User manual</li> </ul>
Interface	
To patient	■ Gas connection: conus
CO <sub>2</sub> connection	<ul style="list-style-type: none"> <li>■ Irrigation connection: Luer (male)</li> <li>■ DIN</li> </ul>

## SPECIFICATION

Main Unit	
Insufflation medium: CO <sub>2</sub> , Insufflation rate	<ul style="list-style-type: none"> <li>■ <b>Low:</b> approx. 2 l/min</li> <li>■ <b>Med:</b> approx. 8 l/min</li> <li>■ <b>High:</b> approx. 40 l/min</li> <li>■ <b>Auto:</b> automatic flow</li> </ul>
Intra-abdominal working pressure	<ul style="list-style-type: none"> <li>■ 0-30 mm Hg infinitely selectable and limitable</li> <li>■ Maximal pressure of bottle: 80 bar</li> <li>■ Display of critical low bottle pressure</li> <li>■ Irrigation P±: 800 mbar</li> </ul>

Order-No.	Accessories
670-95300	Silicone tube set for Insufflation
670-95310	CO <sub>2</sub> gas bottle 1l (empty)
670-95311	Key for CO <sub>2</sub> gas bottle connection
670-95313	High pressure tube, GI:DIN, bottle: DIN
670-95314	High pressure tube, GI:DIN, bottle: PIN
670-95316	High pressure tube, GI:DIN, bottle: ITALY
<i>See Laparoscopic-Folder</i>	Veress needle, different lengths
675-11203	Gas-filter, 25 pieces
675-11202	Adapter for Insufflation
670-95301	Silicone tube set for Irrigation
670-96330	Irrigation trocar, short (0.5 l)
670-96331	Irrigation trocar, long (1.0 l)
670-96325	Irrigation bottle holder for cart
670-96310	Filter for Irrigation, 10 pieces

## DISTO II DIGITAL STORAGE SYSTEM

Order-No. 470-62000



Still Image  
and Video Storage



### A Time Saving Storage System

With our new Digital Storage System DISTO II you are able to store:

- Live-image on CD in digital format or
- Still image on USB memory stick.

This system is very easy to use. By recording the operation with DISTO II you will have an excellent digital image on CD which can easy transfer files to PC. DISTO II generates brilliant image quality without any loss while transferring data to PC.

### Specification

- Real time direct recording of analog video signal on CD-RW
- Recording time according to picture quality:
 

Normal	80 min.
Fine	40 min.
S-Fine	20 min.
X-Fine	10 min.
- Still image capturing on USB memory stick
- Foot-pedal remote control
- IR wireless remote control



### Easy Using System

Insert CD or stick and start recording pictures.

### USB Memory Stick

### Direct Recording

- Foot-pedal remote control
- IR wireless remote control

## GENERAL

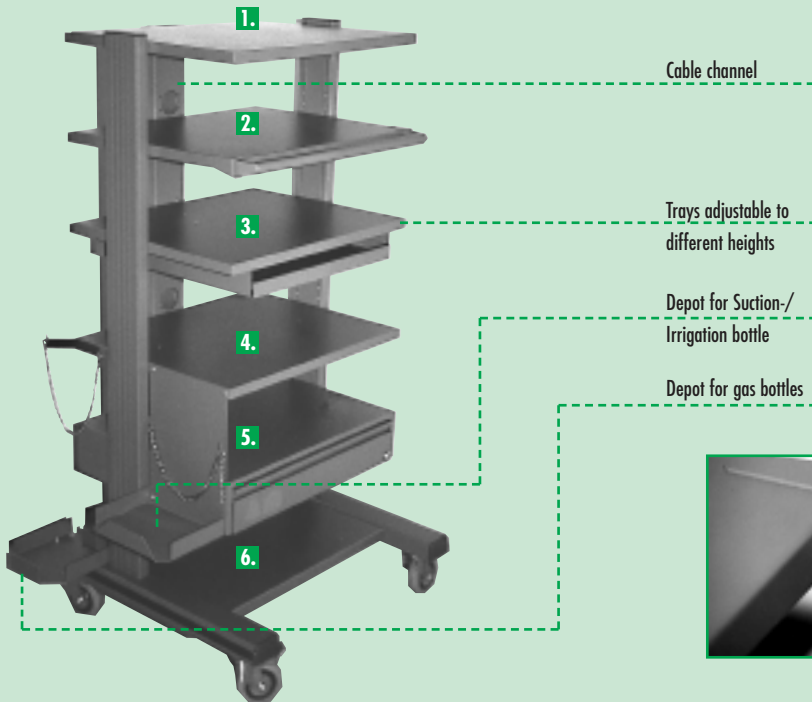
<i>Order-No.</i>	
<b>470-62000</b>	DISTO II
<i>Main Connection</i>	
Power supply selectable	<ul style="list-style-type: none"> <li>■ 100-127 V AC</li> <li>■ 200-240 V AC</li> </ul>
Frequency	50-60 Hz
Power consumption	Max. 33 VA
<i>Classification</i>	
Safety class	–
Protection	IP X 1
Type	BF
Approval	CE
<i>Dimension and Weight</i>	
Dimension (w/h/d)	400 x 120 x 340 mm
Weight	7.9 kg
<i>Operating Conditions</i>	
Operating temperature	+10° C ~ +40° C
Operating humidity	30% ~ 75%
<i>Extent of Delivery</i>	
DISTO II	<ul style="list-style-type: none"> <li>■ Memory stick</li> <li>■ Foot-switch for remote</li> <li>■ IR remote control</li> <li>■ CD-RW</li> <li>■ S-VHS cable</li> <li>■ BNC cable</li> <li>■ Capturing software: DISTO XP</li> <li>■ Power cable</li> <li>■ User manual</li> </ul>
<i>Interface</i>	
	<ul style="list-style-type: none"> <li>■ 1 x Y/C (S-VHS) in</li> <li>■ 1 x Y/C (S-VHS) out</li> <li>■ 1 x composit (BNC) in</li> <li>■ 1 x composit (BNC) out</li> <li>■ 1 x remote</li> </ul>

## SPECIFICATION

<i>Main Unit</i>	
Video-format	MPEG 2 (4 different qualities)
Still image-format	JPEG (200-300 KB)
NTSC/PAL	Selectable
CD-Writer	RW (speed 8 x)
Remaining CD capacity indicator	On Screen Display
Internal HDD	For backup
Hard disk copy	To CD
WINDOW MEDIA PLAYER	Compatibility

## ENDO-CART EC-2000 A

Order-No.: 670-80610



Cable channel

Trays adjustable to different heights

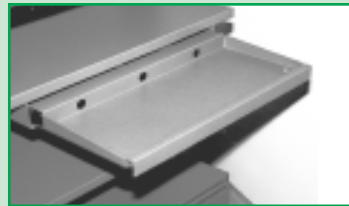
Depot for Suction-/Irrigation bottle

Depot for gas bottles



### Handle for Moving

Controllable positioning and moving of Endo-Cart.



### Special Tray for Keyboard

Pull-out tray for keyboard and storage.



### Lockable Drawer

Large sliding drawer (inside depth 100 mm) for storage of documents and camera.

### Intended Use

- Large cable channel with potential equalization pins and cover
- Gliding wheels with locking brakes
- Surface: metal-powder coating, easy-cleaning, resistant to disinfecting agents
- Dimension (w/h/d): 1390 mm x 710 mm x 700 mm
- Distance between stands: 185 mm
- Space for units (w/d): 600 mm x 480 mm
- Weight: 57 kg
- Stand for gas bottle: 180 mm x 190 mm
- Stand for Suction-/Irrigation bottle: 225 mm x 180 mm

### Stable Construction

#### Example Laparoscopy/Load Capacity:

1. Monitor (35 kg)
2. Light source/Camera (20 kg)
3. Insufflator (20 kg)
4. HF-Generator or Suction-/Irrigation unit (20 kg)
5. Recorder/Printer (20 kg)
6. Isolation Transformer (35 kg)

MGB Endoskopische Geräte GmbH Berlin

Schwarzschildstrasse 6 · 12489 Berlin, Germany

Phone: +49-30-63 92-70 10/-70 00

Fax: +49-30-63 92-70 11

E-mail: sales@mg-b-berlin.de

Internet: www.mgb-berlin.de

