

# LIGHT SOURCES

Optimal Lighting for Industrial Endoscopy



# PORTABLE LIGHT SOURCES

Battery-operated LED light sources



The battery-operated LED light source is available in a conventional battery version or with a rechargeable battery. It features extraordinarily high light intensity of more than 100,000 Lux and produces the purest white light. This unit also has a boost mode, which will increase the light intensity above normal operating levels for a short duration. Major advantages are the long life of an LED (up to 50,000 hours) and the run time of more than 120 minutes. The battery-operated LED light source is compatible with almost all KARL STORZ NDTec™ endoscopes and is directly attached to the light connector. Therefore, no light cable is needed.

### Special Features:

- Very bright, portable LED light source with very good light coupling efficiency
- Boost mood can be activated to increase light intensity above normal operating levels
- Average LED life of up to 50,000 hours
- Intuitive use
- High-quality design for industrial use
- Run time of more than 120 minutes

### Technical data

Lamp type	LED
Color temperature	5,500 K
Weight	150 g
Run time	approx. 120 minutes
Designed in accordance with CE guidelines	CE RoHS-compliant
Complies with standards	EN 60601-1, EN 60601-2-18



**11301 D4**  
**Battery Light Source LED for Endoscopes,** with fast screw thread, boost mode for temporary increase in brightness, burning time > 120 min, brightness > 110 lm / > 150 klx, weight approx. 150 g, ready for use, suitable for wipe disinfection



**11301 DE**  
**Battery Light Source LED for Endoscopes,** rechargeable, with click connection, boost mode for temporary increase in brightness, color temperature 5500 K, lithium-ion batteries, charging time 60 min, burning time at 100% brightness 40 min, weight approx. 150 g, suitable for wipe disinfection

### Accessories



**11301 DG**  
**Charging Unit,** for two LED battery light sources, with fixed integrated power supply and adaptor for EU, UK, USA and Australia, power supply 110-240 VAC, 50/60 Hz, suitable for wipe disinfection, for use with Battery Light Source LED 11301 DE/DF



**11301 DH**  
**Holder,** for mounting on a surface, for use with Charging Units 11301 DG, 8546 LE/LE1 and 8401 XDL



**121306 P**  
**Photo Battery,** lithium, 3 V, CR 123 A, for use with Battery Insert LED 8548 LD1 and Battery Light Sources (11301 D1/D3/D4)



**094129**  
**Battery Charger Li-Ion,** for charging Rechargeable Battery Box 094124 or Battery Light Source LED 11301 DE/DF, for use with Mains Cord 094127 (EU connection only), power supply 100-240 VAC, 50/60 Hz  
**Note: Also suitable for continuous use**



**094127**  
**Mains Cord,** for Battery Charger 094129, length 150 cm

# LIGHT SOURCES – TABLETOP UNITS

## TECHNO LED NOVA 150



The compact, high-performance cold light source TECHNO LED NOVA 150 delivers cold, white light that generates virtually no heat. The device is energy-efficient, noiseless, and does not require lamp changes since the LED module has a life of up to 30,000 hours. Its international power supply enables worldwide use.

### Special Features:

- LED module with a service life up to 30,000 hours
- Infinitely adjustable light intensity
- Energy-efficient
- International power supply enables use worldwide

### Technical data

Lamp type	High-performance LED
Color temperature	6,400 K
Light intensity	Infinitely adjustable
Dimensions	305 × 84.5 × 238 mm (w × h × d)
Weight	2.3 kg
Designed in accordance with CE guidelines	RoHS-compliant
Complies with standards	IEC 61010-1, UL 61010-1, Can/CSA-C22.2. No. 61010-1, IEC 62471, IEC 61326-1



SL 150

**TECHNO LED NOVA 150**, high-performance LED cold light fountain with one KARL STORZ NDTec™ light outlet, power supply 100-240 VAC, 50/60 Hz color temperature approx. 6400 K including:  
**Mains Cord**, Schuko plug  
**Mains Cord**, US plug

### Accessories



1973290

**Fuse**, T 1.6 AL (SB), package of 10



400 FUS

**Mains Cord**, with 90° angled connector plug, straight unit connector, US plug, length 250 cm

# LIGHT SOURCES – TABLETOP UNITS

## POWER LED 175



The POWER LED 175 is a high-performance LED cold light source. It has a life of 30,000 hours and therefore does not require lamp changes. The POWER LED 175 features cutting-edge LED technology and guarantees excellent, bright light. Its international power supply enables worldwide use.

### Special Features:

- LED module with a service life up to 30,000 hours
- Infinitely adjustable brightness control
- International power supply enables use worldwide
- Very high energy efficiency
- Extremely quiet operation with low heat generation

### Technical data

Lamp type	High-performance LED
Color temperature	6,500 K
Light intensity	Infinitely adjustable
Dimensions	305 × 110 × 233 mm (w × h × d)
Weight	4 kg
Designed in accordance with CE guidelines	RoHS-compliant
Complies with standards	IEC 60601-1, IEC 60601-2-18, UL 60601-1, CAN/CSA C22.2. No 601.1-M90, IEC 60601-1-2



**20161401-1**      **Cold Light Fountain Power LED 175 SCB**, with integrated KARL STORZ-SCB, high-performance LED lamp and one KARL STORZ NDTec light outlet, power supply 110-240 VAC, 50/60 Hz including:  
**Mains Cord**  
**SCB Connecting Cable**

### Accessories



**400 FUS**      **Mains Cord**, with 90° angled connector plug, straight unit connector, US plug, length 250 cm

# LIGHT SOURCES – TABLETOP UNITS

## POWER LED 300



The POWER LED 300 is a high-performance LED cold light source and is the first light source to combine the light intensity of 300 Watt light sources with the benefits of LED technology. At 30,000 hours (approximately 10-12 years at an average daily consumption), the service life of the POWER LED 300 is approximately 60 times longer than comparable Xenon light sources. As a result, the frequent replacement of lamps is no longer necessary.

### Special Features:

- LED laser hybrid technology ensures excellent and bright light
- Homogenous color temperature of 6000 Kelvin throughout the entire service life
- Touch display for user-friendliness
- Intelligent cooling system

### Technical data

Lamp type	High-performance-laser-light LED
Color temperature	6,000 K
Light intensity	Infinitely variable
Dimensions	305 × 155 × 313 mm (w × h × d)
Weight	8.6 kg
Designed in accordance with	CE guidelines according to MDD 93/42/EEC
Complies with standards	IEC 60601-1, IEC 60601-1-6, ANSI/AAMI ES606001-1, CAN/CSA-C22.2 No. 60601-1

Making use of the latest LED technology, the LED Laser hybrid technology ensures excellent bright light at a homogenous color temperature of 6,000 Kelvin throughout the entire operating life. Economy and ecology go hand in hand as the POWER LED 300 only consumes approximately one-third of the energy of a comparable Xenon light source. The touch display of the POWER LED 300 provides a modern and user-friendly interface. Thanks to its universal power adaptor, it can be used anywhere in the world.



TL 300

**Cold Light Fountain POWER LED 300 SCB,** with integrated KARL STORZ-SCB, high-performance LED module and one KARL STORZ NDTec light outlet, power supply 100-240 VAC, 50/60 Hz, including:  
**Mains Cord**

### Accessories



400 FUS

**Mains Cord,** with 90° angled connector plug, straight unit connector, US plug, length 250 cm



# LIGHT CABLES FOR COLD LIGHT SOURCES

For each endoscope, there is an optimal light cable. For example, large-diameter endoscopes should be used with light cables with a large cross-section (active diameters), so that the high light output can be fully delivered. Therefore, it is important to choose a suitable light cable.



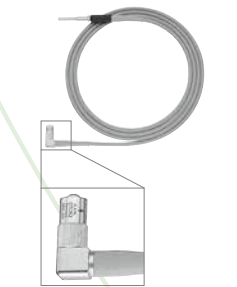
**High-Performance Fluid Light Cable**, with robust industrial design for heavy-duty industrial use with extra robust kink protector, steel housing, protective metal sleeve for the quartz rod component of the light plug

- 81594 SB **High-Performance Fluid Light Cable**, length 250 cm, outer diameter 9 mm, active diameter 5 mm
- 81594 SA **High-Performance Fluid Light Cable**, length 350 cm, outer diameter 9 mm, active diameter 5 mm



**Fiber Optic Light Guide**, watertight, mineral oil resistant and mechanically stable, suitable for almost all KARL STORZ NDTec™ endoscopes up to diameter 6.5 mm

- 81594 GW **Fiber Optic Light Guide**, length 180 cm, outer diameter 6.5 mm, active diameter 3.5 mm
- 81594 GV **Fiber Optic Light Guide**, length 250 cm, outer diameter 6.5 mm, active diameter 3.5 mm
- 81594 GU **Fiber Optic Light Guide**, length 350 cm, outer diameter 6.5 mm, active diameter 3.5 mm



**Fiber Optic Light Guide**, watertight, mineral oil resistant and mechanically stable, suitable for almost all KARL STORZ NDTec™ endoscopes. To optimize the connection between the endoscope and the light cable, the light connector is angled 90°.

- 81594 GW1 **Fiber Optic Light Guide**, length 180 cm, outer diameter 6.5 mm, active diameter 3.5 mm
- 81594 GV1 **Fiber Optic Light Guide**, length 250 cm, outer diameter 6.5 mm, active diameter 3.5 mm

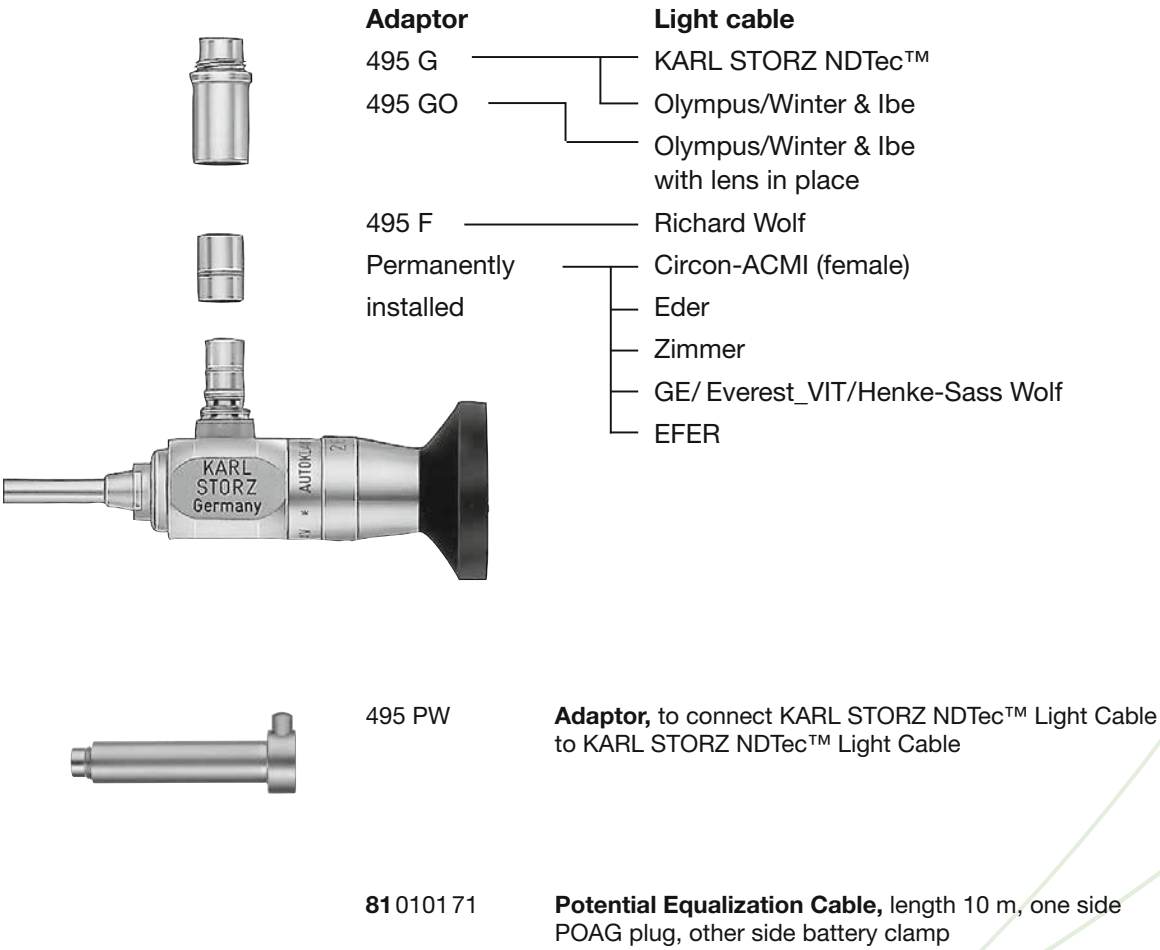


**Fiber Optic Light Guide**, watertight, mineral oil resistant and mechanically stable, with larger cross-section. Much higher luminous intensity is achieved thanks to the adaptation to the larger fiberglass cross-section of the 8 mm borescopes.

- 81594 GC **Fiber Optic Light Guide**, length 180 cm, outer diameter 9 mm, active diameter 5 mm
- 81594 GB **Fiber Optic Light Guide**, length 250 cm, outer diameter 9 mm, active diameter 5 mm
- 81594 GA **Fiber Optic Light Guide**, length 350 cm, outer diameter 9 mm, active diameter 5 mm

# ADAPTORS

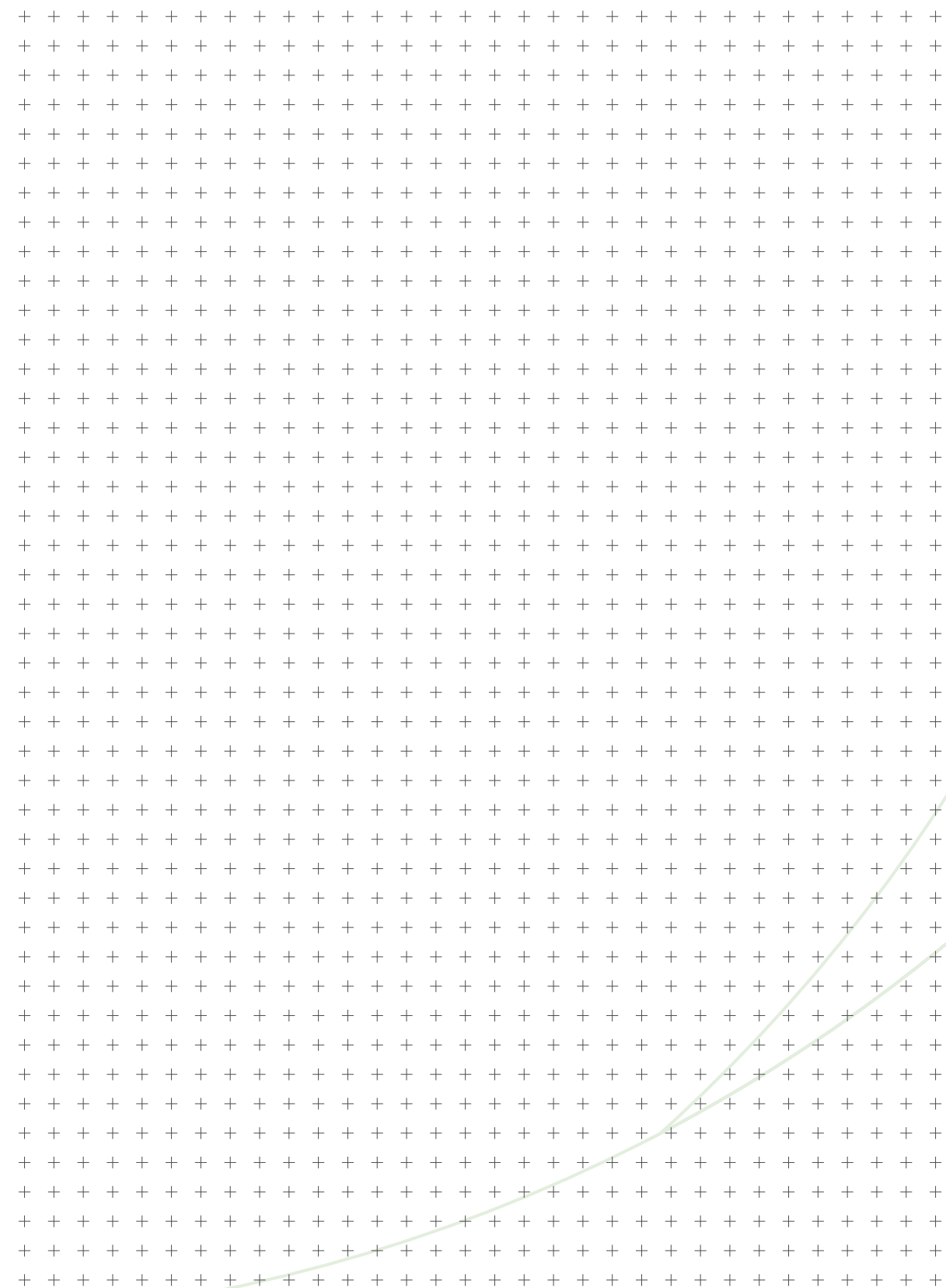
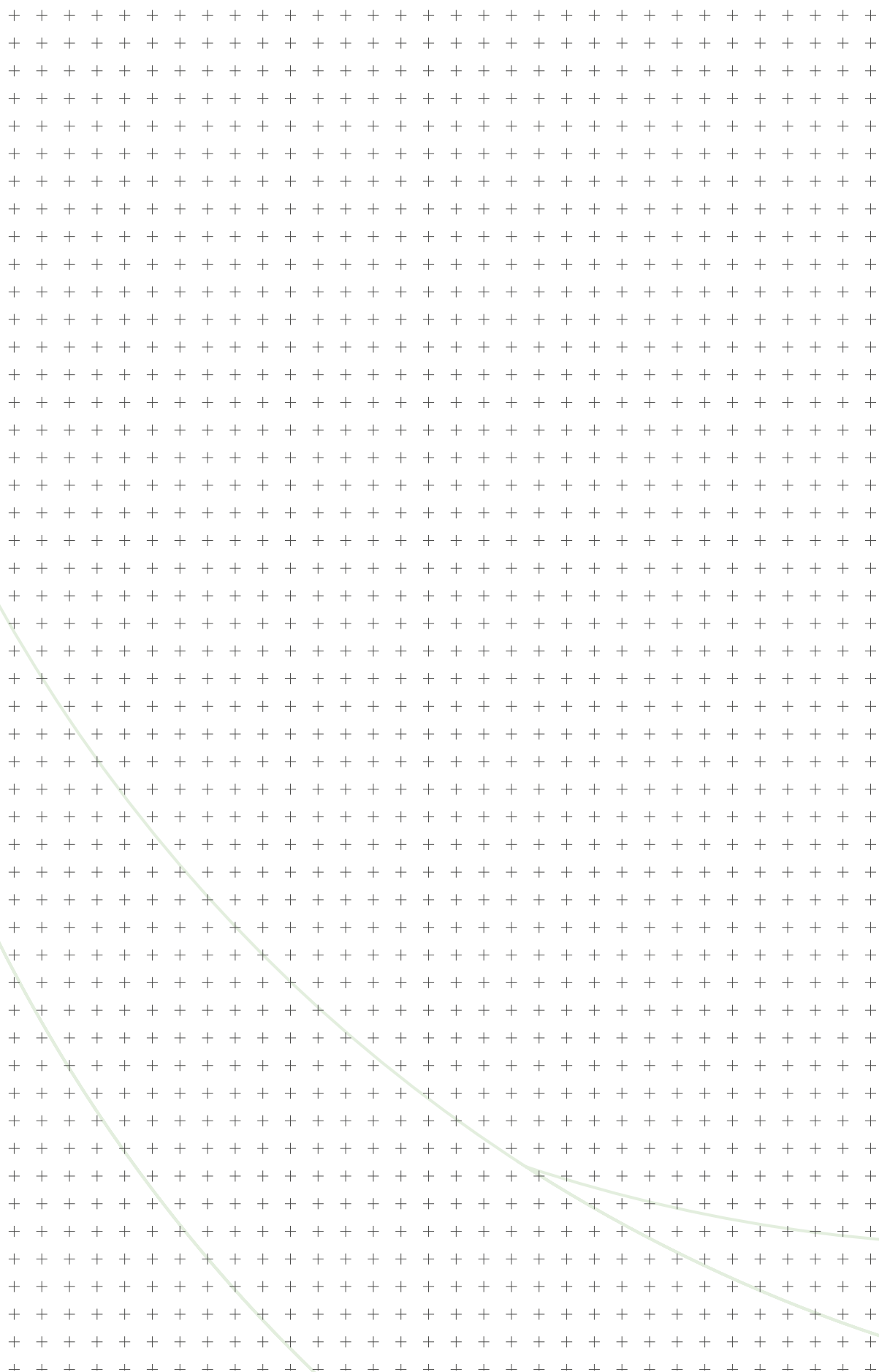
HOPKINS® telescopes with universal connector for light cables



Adaptors

Third-party device	I KF LK	= Instrument = Cold light source = Light cable	KARL STORZ NDTec				Special applications
			Light cable	Cold light source	Older instrument	New instrument	
Aesculap	KF		495 PWS				Only required for <b>KARL STORZ NDTec™</b> flexible endoscope as well as light cables with distal connection 7 mm, with Adaptors <b>495 S/495 PWS</b>
Circon-ACMI	I		495 W				Circon-ACMI connector to Circon-ACMI connector <b>495 Y</b>
	I – female		495 KM				
	KF		495 PA				
	LK – female			495 C	495 K		
	LK – male					495 Y	
American Optical	LK			495 AO			
Downs	KF		495 PA				
Dyonics	KF		495 Q				
Effner	KF		495 Q				
Fort	KF		495 KF				
	LK			495 KA			
Fuji	KF		495F U				
	LK			495 ZU			
Heine-Optotechnik	I		495 U				
	KF		495 O				
	LK			495 B	495 J	495 J	
Homoth	KF		495 KH				
KLI	LK			495 C			
	KF		495 PA				
Lumatec	KF		495 LU				
Machida	KF		495 SM				
MLW	I		495 KN				
	KF		495 KL				
	LK			495 KD	495 KD		
Olympus	KF (technology)		81495 OT				
	LK			495 D			
Pentax	KF		495 T				
	LK			495 D			
Pilling	I		495 SP				
	KF		495 R				
	LK				495 PKS	495 PKS	
Richards	LK			495 LR	495 JR	495 JR	
	I		495 V				
HSW	KF		495 Q				
	LK			495 E	495 N	495 N	
Schott	KF		495 SCH				
Stryker	I		495 ST				
	KF		495 PA				
Thackray	KF		495 BT				
Richard Wolf/EFER	I		495 X				
	KF		495 Q				
	LK			495 E	495 M	495 F	
Olympus/Winter & Ibe	KF		495 S		495 GO	495 GO	<b>495 S:</b> When using <b>KARL STORZ NDTec</b> flexible endoscope with integrated fiber-optic light cable or <b>KARL STORZ NDTec</b> light cables with distal connection diameter 7 mm, the adaptor <b>495 PWS</b> is required in addition to the adaptor <b>495 S</b> .
	LK with lens in place						
Zeiss	KF		495 ZE				
	LK			495 ZF	495 ZJ	495 ZJ	
	Surgical microscope		495 ZM				
	Surgical microscope, 14 mm diameter		495 ZS				
	Cap 303477		495 ZK				
Screw Base	Cap 303484		495 ZK 1				
	KF		495 STR				
Schöilly	I		495 G				
	KF		495 STR				
Volpi	KF		495 STR				
Eltrotec	KF		495 STR				
ITI	KF		495 PA				
Lenoy	KF		495 PA				
GE/Everest_VIT	I		495 G				
	KF – ELSV60		81495 OT				
	KF – ELSV24		495 PA				





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\* Die aktuelle Übersicht über die einzelnen Produktgruppen finden Sie in den jeweiligen Broschüren von KARL STORZ NDTec™ GmbH.





## DRIVING NDT SOLUTIONS

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