

Fiber Optic Light Cables Innovative Technology from KARL STORZ, Bringing Light into Darkness for 60 Years







for Cold Light Fountains

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, since the light intensity could cause burns in the patient or set the drape on fire.

Sterilization and Disinfection:

The fiber optic light cables can be sterilized in the autoclave at 134 °C. Gas sterilization and chemical disinfection are also possible.

The new 495 NCSC and 495 NAC cables have a safety lock to prevent accidental separation of the light cable from the telescope. These are compatible with all endoscopes in the new telescope design available from March 2012. Screw Base 495 G is required to connect all telescopes with the old design and must be added to the order if the safety lock function should be implemented. 495 NCSC and 495 NAC are compatible with older telescopes without the lock function.



495 NCSC Fiber Optic Light Cable, safety lock

Recommended combination*

Light Cable Diameter	Endoscope Diameter		
4.8 – 5.0 mm O	6.6 – 12.0 mm 🔘		
3.0 – 3.5 mm O	3.0 – 6.5 mm 🔘		
2.0 – 2.5 mm 💿	0.8 – 2.9 mm 💿		

^{*} Special endoscope may deviate

Innovative Technology from KARL STORZ, Bringing Light into Darkness for 60 Years

KARL STORZ offers a wide range of fiber optic light cables and adaptors that are designed to meet the high levels of light required for minimally invasive surgery.

High-quality Components

KARL STORZ uses extremely heat-resistant materials in the endoscopic optic connectors. Consequently, the light cables can easily be used with high-performance Xenon lamps. A double reinforced silicone coating offers effective protection against damage or wear and tear and prolongs the service life of the cables. High-quality glass fibers, manufactured according to the most stringent quality requirements, provide excellent light transmission. This prevents shadow formation and loss of light in procedures that require high light intensity, such as cruciate ligament reconstruction in arthroscopy or bladder inspection in urology. The powerful KARL STORZ cables also enable the use of telescopes with small diameters like those used in ENT and Gynecology.

Heat-resistant materials – for use with high-performance light sources such as XENON 300 SCB or POWER LED 175

Robust silicone outer coating prolongs the service life of the cables

Click locking mechanism for enhanced safety during a procedure requiring an endoscope

Double reinforcement in sections under heavy load



Stainless steel inner coating offers additional protection

Robust, yet flexible glass fibers for first-class light transmission

for Cold Light Fountains

	Fiber Optic	Light Cable with Straight Connector			
	495 NE	Fiber Optic Light Cable, dia. 4.8 mm, length 300 cm			
	495 NCS	Fiber Optic Light Cable, extremely heat-resistant, diameter 4.8 mm, length 250 cm			
	495 NCSC	Fiber Optic Light Cable, extremely heat-resistant, with safety locking device, dia. 4.8 mm, length 250 cm			
	495 NB	Fiber Optic Light Cable, dia. 4.8 mm, length 180 cm			
	495 ND	Fiber Optic Light Cable, dia. 3.5 mm, length 300 cm			
	495 NA	Fiber Optic Light Cable, dia. 3.5 mm, length 230 cm			
495 NCSC	495 NAC	Fiber Optic Light Cable, extremely heat-resistant, with safety locking device, dia. 3.5 mm, length 230 cm			
	495 NL	Fiber Optic Light Cable, dia. 3.5 mm, length 180 cm			
	495 NTA	Fiber Optic Light Cable, dia. 2.5 mm, length 230 cm			
	495 NT	Fiber Optic Light Cable, dia. 2.5 mm, length 180 cm			
	495 TIP	Fiber Optic Light Cable, highly heat resistant, diameter 4.8 mm, length 300 cm, for use with TIPCAM®			
	Fiber Optic	Light Cable with 90° Deflection to the Light Source			
	495 NWL	Fiber Optic Light Cable, with 90° deflection to the cold light fountain on the fountain side, diameter 3.5 mm, length 300 cm			
	495 NWMS	Fiber Optic Light Cable, with 90° deflection to the cold light fountain, diameter 3.5 mm, length 230 cm			
	495 NW	Fiber Optic Light Cable, with 90° deflection to the cold light fountain on the fountain side, diameter 3.5 mm, length 230 cm			
495 NWL	495 NTXS	Fiber Optic Light Cable, with 90° deflection to the cold light fountain, diameter 2.5 mm, length 230 cm			
493 INVVL	495 NTW	Fiber Optic Light Cable, with 90° deflection to the cold light fountain on the fountain side, diameter 2.5 mm, length 180 cm			

for Cold Light Fountains

	Fiber Optic Light Cable with Straight Connector				
495 AD/BD	495 BD	Fiber Optic Light Cable, diameter 4.8 mm, length 180 cm, for double incidental light radiation in film and TV and when used as demonstration devices			
	495 AD	Fiber Optic Light Cable, diameter 3.5 mm, length 180 cm, for double incidental light radiation in film and TV and when used as demonstration devices			
495 UD	495 UD	Fiber Optic Light Cable, 2x dia. 3.5 mm, length 180 cm, for simultaneous light transmission for 2 instruments			
495 DC/DV	495 DC	Fiber Optic Light Cable, diameter 3.5 mm, length 320 cm, for use with DCI® Camera Heads 20262030, 20262130, 22260031-3 and 22260131-3			
	495 DV	Fiber Optic Light Cable, diameter 2.5 mm, length 320 cm, for use with DCI® Camera Heads 20262030, 20262131, 22260031-3 and 22260131-3			
	The given diameter is the diameter of the built-in glass fibers on the instrument side.				



Fiber Optic Light Cable for Headlights

495 NAS Fiber Optic Light Cable, dia. 3.5 mm, length 230 cm
 495 NTAS Fiber Optic Light Cable, dia. 2.5 mm, length 230 cm

for Cold Light Fountains



Fiber Optic Light Cable with 90° Deflection to the Instrument

495 NVC Fiber Optic Light Cable, with 90° deflection to the instrument, very narrow radius of curvature,

diameter 4.8 mm, length 300 cm

495 NVL Fiber Optic Light Cable, with 90° deflection to the

instrument, diameter 3.5 mm, length 300 cm

Fiber Optic Light Cable, with 90° deflection to the 495 NV

instrument, diameter 3.5 mm, length 230 cm



Light Adaptor, angled 90°

495 EW Light Adaptor, angled 90°, diameter 4.8 mm, free

rotatable, to connect with standard telescopes

New, Tightly Angled Light Cable 495 NVC

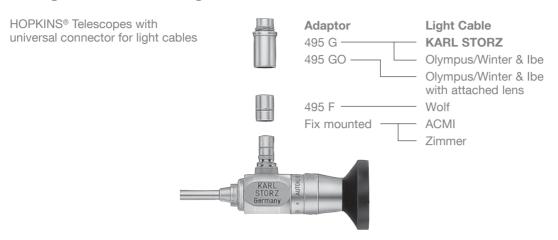
The new Fiber Optic Light Cable 495 NVC has a 90° deflection to the instrument and a very narrow radius of curvature. This space-saving feature makes it easier for the physician to handle the light cable at the endoscope and considerably enhances light management. Furthermore, a newly designed connector on the instrument side ensures that the light cable is securely attached to the endoscope.

The Fiber Optic Light Cable 495 NVC replaces the combination of the Light Adaptor 495 EW with the light cables of the 495 series.



Adaptors

for Light Sources and Light Cables



	I = Instrument	KARL STORZ						
Other Manufacturers	CF= Cold Light Fountain LC= Light Cable	Light Cable	Cold Light Fountain	Former Instrument	Current Instrument	Special Applications		
	1	495 W	_	_	_			
ACMI	CF	495 PA	_	_	_	ACMI connector to ACMI connector 495 Y		
	LC	_	495 C	_	_			
Downs	CF	495 PA	_	_	_			
Dyonics	CF	495 Q	_	_	_			
Effner	CF	495 Q	_	_	_			
Fuji	CF	495 FU	_	_	_			
KLI	LC	_	495 C	_	_			
KLI	CF	495 PA	_	_	_			
Machida	CF	495 SM	_	_	_			
	CF	495 SON	_	_	_	Olympus Techno Fountain for KARL STORZ Cable		
Olympus	LC	-	495 D	_	-	81495 OT, Olympus Light Cable for KARL STORZ Techno Fountain 81450/81495 OL		
Pentax	CF	495 T	_	_	_			
Pentax	LC	_	495 D	_	_			
HSW	CF	495 Q	_	_	_			
ПЭТ	LC	_	495 E	495 N	495 N			
	1	495 ST	_	_	_			
	CF	495 PA	_	_	_			
	1	495 X	_	_	_			
Richard Wolf	CF	495 Q	_	_	_			
	LC	_	495 E	495 M	_			
Olympus/	CF	495 S	-	_	_	495 S: The use of KARL STORZ fiberscopes with integrated fiber optic light cable and KARL STORZ light cables		
Winter & Ibe	LC with attached lens	-	_	495 GO	495 GO	with non-graduated distal connection (diameter 7 mm) requires an additional adapt 495 PWS to adaptor 495 S.		

Adaptor Series

for HALOGEN and XENON Light Sources



487 A	Adaptor, for KARL STORZ light sources in combination with ACMI light cable
487 M	Adaptor, for KARL STORZ light sources in combination with Machida light cable
487 O	Adaptor, for KARL STORZ light sources in combination with Olympus light cable
487 VE	Adaptor, for KARL STORZ light sources in combination with KARL STORZ video endoscopes or Olympus OES flexible endoscopes
487 P	Adaptor, for KARL STORZ light sources in combination with Pilling light cable
487 U	Adaptor, for KARL STORZ light sources in combination with KARL STORZ, Wolf, Dyonics, ACMI, Pilling, V. Müller, Stryker light cable
487 UO	Adaptor, for KARL STORZ light sources in combination with KARL STORZ, Wolf, Dyonics, ACMI, Olympus, V. Müller, Stryker light cable
487 W	Adaptor, for KARL STORZ light sources in combination with Wolf light cable
487 WI	Adaptor, for KARL STORZ light sources in combination with Winter-IBE light cable
487 Z	Adaptor, for KARL STORZ light sources in combination with Zeiss light cable

Adaptor	HALOGEN	LED NOVA 150	LED NOVA	POWER LED	XENON 100.	XENON NOW	XENON 175 C.	XENON NOVA	XENON 300 S.C.	D-LIGHTC SCE	D-LIGHT C/AF co.	D-LIGHT P SCB
487 A	•	-	-	-	_	•	•	•	•	-	-	-
487 M	•	-	-	-	-	•	•	•	•	-	-	_
487 O	•	-	-	_	-	•	•	•	•	-	-	_
487 VE	•	-	-	_	-	-	-	-	-	•	•	•
487 P	•	_	-	_	-	•	•	•	•	-	-	_
487 U	•	-	_	_	_	•	•	•	•	-	-	-
487 UO	•	-	-	_	-	•	•	•	•	-	-	_
487 W	•	-	_	-	_	•	•	•	•	_	-	_
487 WI	•	-	_	-	_	•	•	•	•	_	-	_
487 Z	•	-	_	-	_	•	•	•	•	-	_	_

Adaptor for connecting KARL STORZ fiber optic light cables with endoscopes and light sources from other manufacturers, see page 8

Fluid Light Cables for Cold Light Fountains



495 FO	Fluid Light Cable, diameter 3 mm, length 180 cm
495 FP	Fluid Light Cable, diameter 3 mm, length 250 cm
495 FQ	Fluid Light Cable, diameter 5 mm, length 180 cm
495 FR	Fluid Light Cable, diameter 5 mm, length 250 cm
495 FS	Fluid Light Cable, dia. 2 mm, length 220 cm

In fluid light cables, light is not transmitted via glass fibers, but through a special fluid inside the light cable. Fluid light cables are stiffer than fiber optic light cables, and also should not be bent too much. However, the light transmitted in them is more intensive than when using fiber optic light cables of comparable diameters. Fluid light cables are therefore preferred for photodynamic diagnosis (PDD) in conjunction with KARL STORZ light sources from the D-LIGHT series

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, since the light intensity could cause burns in the patient or set the drape on fire.

Sterilization and Disinfection:

Fluid light cables can be disinfected in solutions and can also be gas-sterilized. Steam sterilization destroys the fluid light cable.

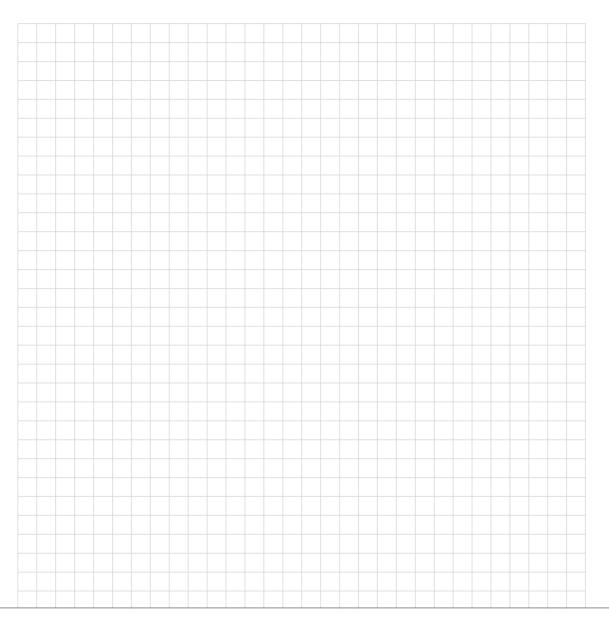
Recommended combination: Light cable with endoscope*

Diameter Fluid Light Cable	Diameter Endoscope
5 mm	10 mm
3 mm	5.0 – 9.9 mm
2 mm	2.9 – 4.9 mm

^{*}Special endoscopes may deviate.

Adaptor for connecting KARL STORZ fiber optic light cables with endoscopes and light sources from other manufacturers see page 8

Notes



It is recommended to check the suitability of the product for the intended procedure prior to use.

Consent to receive electronic information

Consent to receive electronic information								
	Yes, I agree to receive future information by email at the following address:							
Email	Name							
Department	tment / Practice Street address							
ZIP, Town	own Signature							

I agree to my data being stored at KARL STORZ for this purpose. I can withdraw my consent at any time and without giving reasons by emailing KARL STORZ at info@karlstorz.com. KARL STORZ will not make these data available to third parties.



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