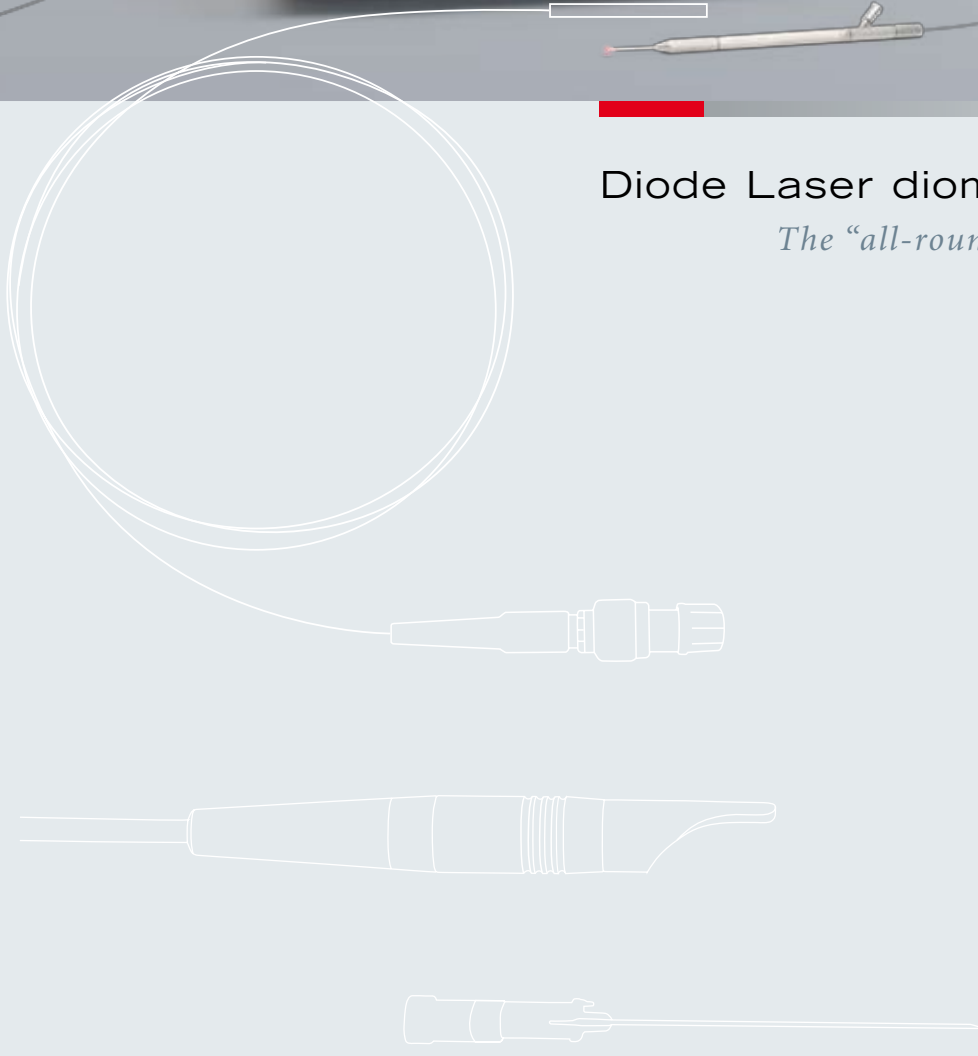




## Diode Laser diomax®

*The "all-rounder" for advanced laser surgery*



*With the diomax® diode laser, KLS Martin offers you a system with a wide range of application, from outpatient practices to endoscopic high-tech operating rooms. The diomax® is very easy to use and puts you in control of a laser beam with physical properties that satisfy the highest demands. This makes it a true all-rounder for state-of-the-art surgery.*

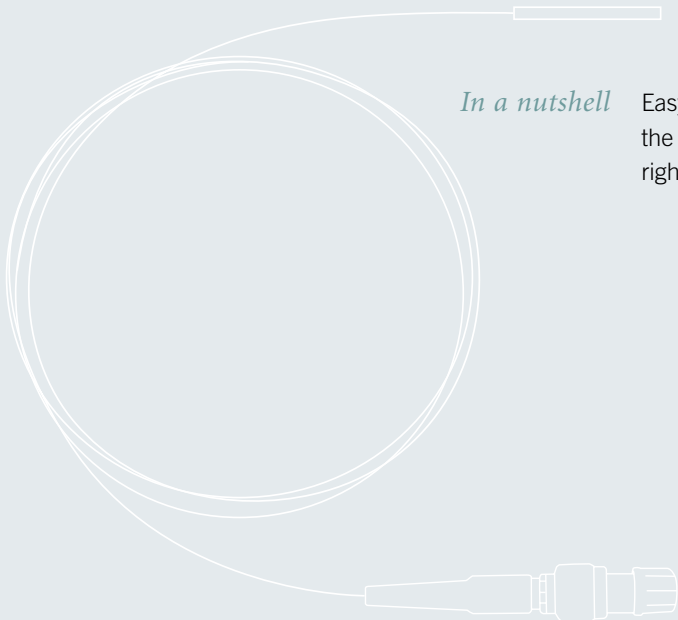


## *The New Diode Laser –* Impressive in Quality and Flexibility

The greatest assets of the diomax® are its well-thought-out design concept and its intuitive handling. The unit offers memory space for up to 50 user-defined programs. All parameters can be easily set by means of a single rotary switch and all settings are clearly displayed on the large color screen. No cluttering, no cumbersome sub-menu structures – you have everything under control at a glance.

Laser beam quality marks another field where the diomax® sets new standards. With its numerical aperture of 0.22 – the “quality characteristic” for laser radiation – the diomax® offers a beam quality previously available only with solid-state lasers.

*In a nutshell* Easy to use, first-rate beam quality. This enables the surgeon to concentrate fully on the surgical job – right from first use of the unit!

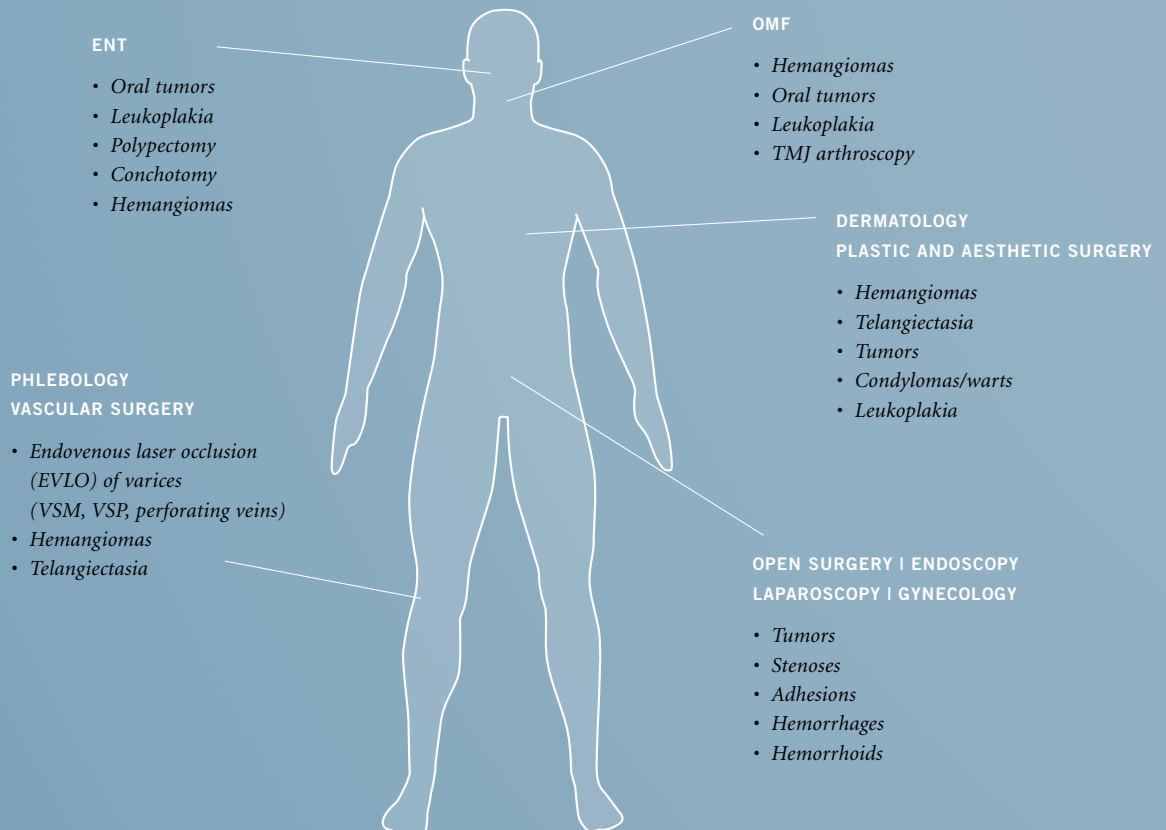


## diomax® – Great Versatility

*Matching a Wide Range of Indications*



What makes the diomax® diode laser so versatile is its wavelength of 980 nm, which allows it to be used in almost any surgical field.





*Excellent absorption*

The hallmark of the 980-nm wavelength is its excellent absorption in hemoglobin and water.

*Short pulse time*

Another prominent feature of the diomax® that sets it apart from any other diode laser is its extremely short pulse time of 5 ms. This keeps patient strain very low.

*Wide application range*

Whatever your surgical specialization – the diomax® meets any challenge. Thanks to its comprehensive range of accessories, it can be used for open as well as endoscopic or endoluminal applications, in contact or non-contact mode.



# The Laser, the Handpiece *and the Catheter Sets*

## The Advantages at a Glance

- 980-nm wavelength for high absorption in hemoglobin and water
- Easy, straightforward handling
- Large color display for perfect parameter overview even in darkened ORs
- Top-notch beam quality for precise cutting
- 50 memory locations for standardized treatment programs
- Comprehensive range of application accessories for open as well as endoscopic or endoluminal surgery

## Ordering Data

Diode laser diomax® 980 nm, 20 W, incl. foot switch	79-520-00-04
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## Technical Data

Laser power	0.1–20 W
Laser wavelength	980 nm
Operating modes	continuous (CW) and pulsed
Pulse modes	Single pulses, pulse trains and cyclical pulse
Operation	Soft keys plus rotary pushbutton (double-function switch)
Display/indicator	TFT color display, luminous ring
Programs	50 memory locations
Memory	Activation and error registers (logs)
Laser class	4

## Power Density

as a function of beam spot diameter and laser power

Spot Ø (µm)	Power density kW/cm <sup>2</sup> at a power setting of		
	5 W	10 W	20 W
500	2.55	5.09	10.19
1000	0.64	1.27	2.55
1500	0.28	0.57	1.13

## Energy Density

as a function of pulse time and beam spot diameter when using a laser power of 20 W

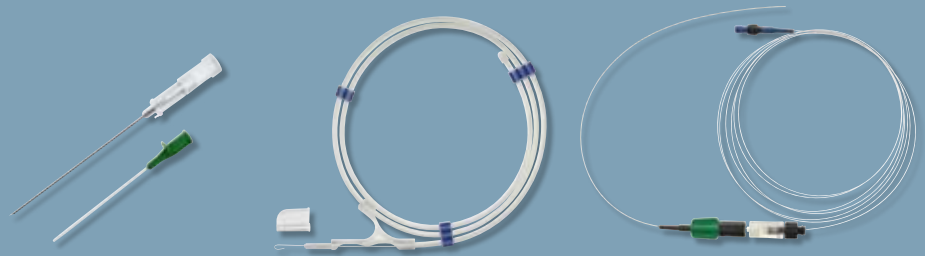
Spot Ø (µm)	Energy density kJ/cm <sup>2</sup> at a power setting of 20 W / pulse time (ms)		
	10 ms	100 ms	1000 ms
500	0.10	1.02	10.19
1000	0.03	0.25	2.55
1500	0.01	0.11	1.13



## Focusing Handpiece

Set including laser focusing handpiece and 3 distance sleeves for superficial laser application in non-contact mode

diomax® focusing handpiece .....	79-600-00-04
Distance sleeves for focusing handpiece:	
0.5 mm .....	79-600-05-04
1.0 mm .....	79-600-10-04
1.5 mm .....	79-600-15-04

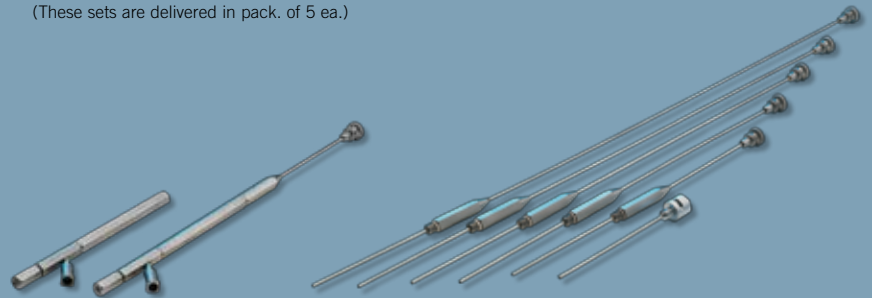


## VENEX® Catheter Sets

Three catheter sets for EVLO operations (endoluminal treatment of varicose veins) – each with a puncture needle, a guide wire, an extremely thin, ultrasonically visible venous catheter and a thin laser fiber

Set 1	For branch and perforating veins, catheter 2 Fr/30 cm, fiber 300 µm .....	79-380-01-04
Set 2	For great/small saphenous veins (VSM/VSP), short working length, catheter 4 Fr/60 cm, fiber 400 µm .....	79-380-02-04
Set 3	For great/small saphenous veins (VSM/VSP), long working length, catheter 4 Fr/100 cm, fiber 400 µm .....	79-380-03-04

(These sets are delivered in pack. of 5 ea.)



## Fiber Holders

Modular system consisting of handpiece and attachment tips (5–28 cm) for all types of interventions using the laser fiber in contact mode on the skin surface or in body cavities

Handle .....	78-300-10-04	Detachable tips with bending mandrel	
Handle spare parts set .....	78-300-01-04	5 cm .....	78-310-05-04
		8 cm .....	78-310-08-04
		13 cm .....	78-310-13-04
		18 cm .....	78-310-18-04
		23 cm .....	78-310-23-04
		28 cm .....	78-310-28-04
		Tip with Luer-Lock connector .....	78-310-01-04

## Flexible Quartz Fibers, Bare Fibers

Extremely thin and powerful, flexible fibers for highly efficient bare fibers offering excellent beam characteristics

Core diameter 300 µm, fiber length 3 m, 5 pcs/pack .....	79-700-30-04
Core diameter 400 µm, fiber length 3 m, 5 pcs/pack .....	79-700-40-04
Core diameter 600 µm, fiber length 3 m, 5 pcs/pack .....	79-700-60-04
Fiber preparation set, autoclavable .....	79-111-00-04

## Laser Protective Goggles

Effective eye protection with high wearing comfort

diomax® laser protective goggles D 980 – 1064 L5 LV DIN CE 5 .....	79-100-60-04
diomax® laser protective goggles for spectacle-wearers D 980 – 1000 L5 LV DIN CE 5 .....	79-100-61-04

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