



Variolens N

for handheld light sources of ilumCURE family
(Art.-Nr.: 1600000071)

User manual and data sheet





SAFETY MEASURES AND WARNINGS

- **Comply with safety regulations according to currently valid standards! (2006/25/EC, DIN EN 62471-2009, etc.)**
- **Do not stare directly into the light source. Ultra violet or visible radiation can permanently damage the eyes!**
- **Take precautions; use protective window or eye protection made of suitable materials!**
- **Always avoid exposure to skin and eyes!**
- **Avoid humidity! (excessive air moisture > 95% r. h., splash water, direct immersion in water)**
- **Do not expose the UV light source to excessive temperatures! (see specifications)**
- **Operation only by trained personnel! (keep away from children)**
- **Device contains glass components, so protect from vibrations!**

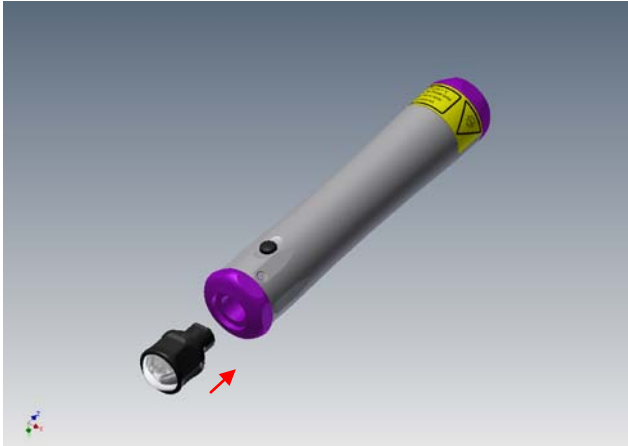
USAGE

The Variolens N is attached on the handheld light sources of ilumCURE family to harden wide areas of adhesives homogeneously and fast.

PROPERTIES

By rotating the lens holder the nearly square shaped exposure window is focused in a working distance from approx. 25 mm to 125 mm. By tightening the screw, the lens holder can be secured against further rotation.

HOW TO MOUNT THE VARIOLENS N ON THE ilumCURE DEVICES



- 1) Remove the lighting tip of the ilumCURE by carefully pulling towards the front.
- 2) **1G / 2G series:** Plug the adaptor of the Variolens N into the receptacle of the ilumCURE (flattened side is facing upward directing to the push button, see picture) until it snaps into place.
Industrial series: Plug the adaptor of the Variolens N into the receptacle of the ilumCURE (flattened side is facing upward directing to the push button, see picture) and tighten the screw in the ilumCURE- housing (size hexagon wrench 1.5 mm).
- 3) By rotating the lens holder the illuminated area can be focused on the desired working distance and locked. If required it can be locked in this position by using the supplied Allen key.

OPERATION

- 1G series:** Operated by the push button of the handheld light source
- 2G series:** Operated by the push button of the handheld light source **or** via Software
- Industrial series:** Operated via Software only

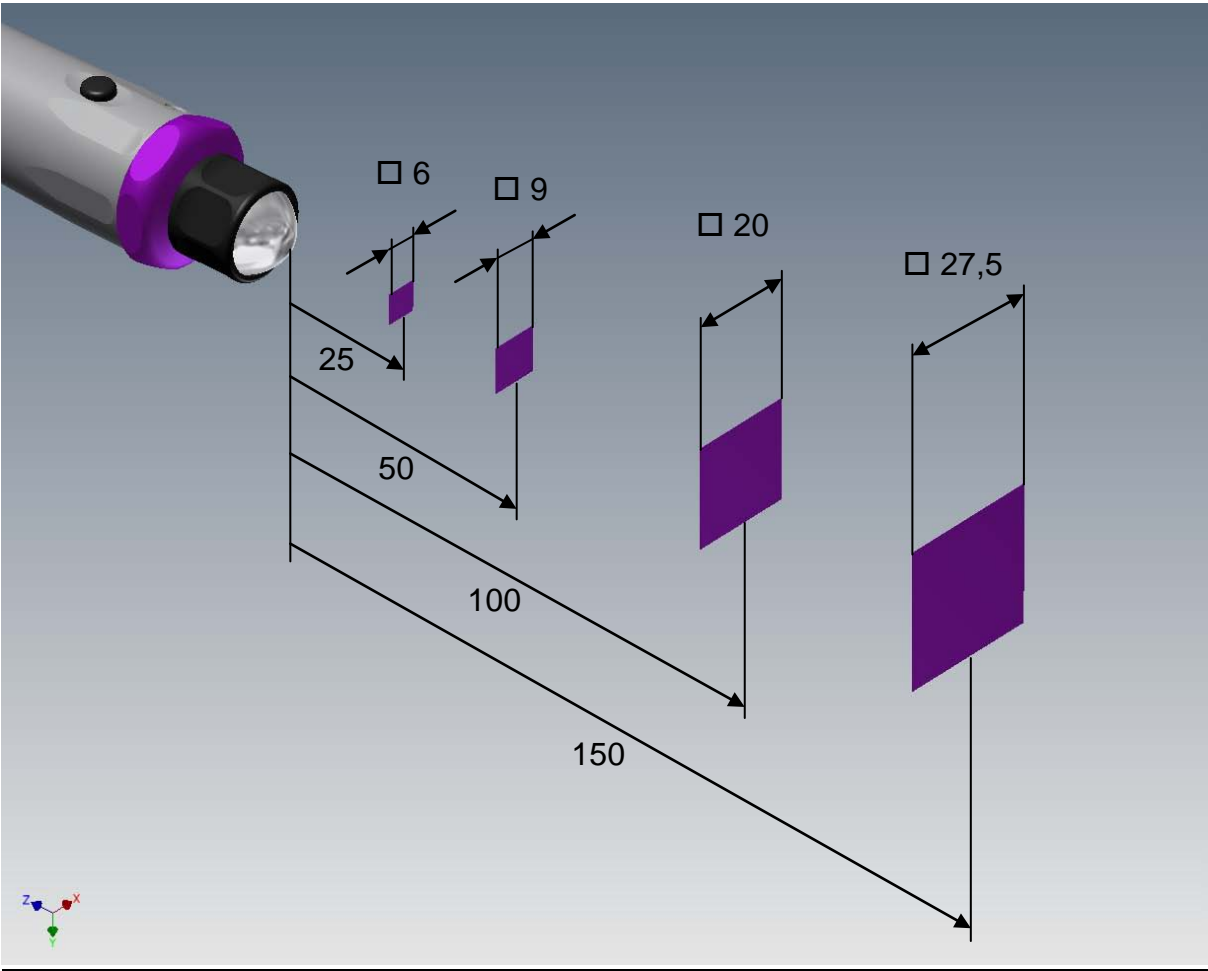
CLEANING

The Variolens N can be cleaned carefully with a soft lint-free cloth (such as a lens cleaning cloth). Don't use aggressive or abrasive cleansing agents or detergents!

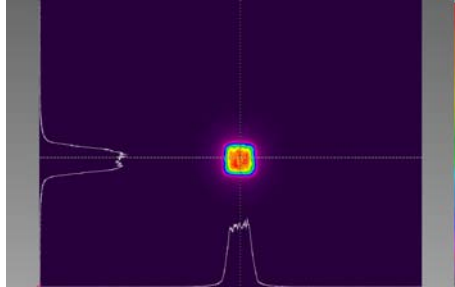
MAINTENANCE

The device is generally maintenance-free. Please avoid fingerprints on the glass surface! If the Variolens N is quite dirty (e.g. hardened adhesive residues) it should be replaced by a new one. Otherwise the homogeneity of the beam is no longer warranted.

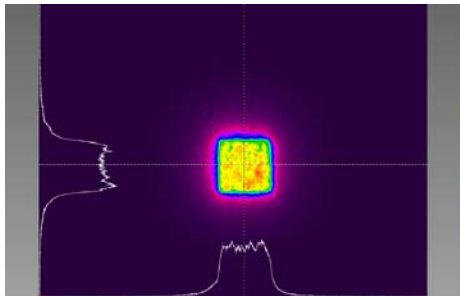
ILLUMINATED AREA VS. WORKING DISTANCE



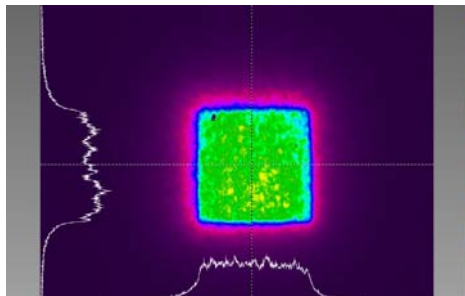
BEAM PROFILES



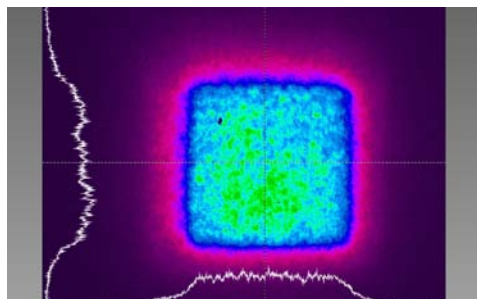
Beam profile at a distance of 25 mm



Beam profile at a distance of 50 mm



Beam profile at a distance of 125 mm



Beam profile at a distance of 150 mm

SPECIFICATIONS OF THE VARIOLENS N

Typical max. optical output power*² of ilumCURE 1G, 2G*¹ or industrial*¹ with Variolens N	100 mW @ 365 nm
Typical optical power density*³ of ilumCURE 1G, 2G*¹ or 3G*¹ with Variolens N	95 mW/cm ² @ 0 mm distance 110 mW/cm ² @ 5 mm distance 135 mW/cm ² @ 10 mm distance 150 mW/cm ² @ 15 mm distance 157 mW/cm ² @ 20 mm distance 160 mW/cm ² @ 25 mm distance 157 mW/cm ² @ 30 mm distance 140 mW/cm ² @ 40 mm distance 95 mW/cm ² @ 50 mm distance 50 mW/cm ² @ 75 mm distance 28 mW/cm ² @ 100 mm distance 18 mW/cm ² @ 125 mm distance 13 mW/cm ² @ 150 mm distance
Illuminated area	6 mm x 6 mm @ 25 mm distance 9 mm x 9 mm @ 50 mm distance 13,5 mm x 13,5 mm @ 75 mm distance 20,0 mm x 20,0 mm @ 100 mm distance 24,5 mm x 24,5 mm @ 125 mm distance 27,5 mm x 27,5 mm @ 150 mm distance
Homogeneity within illuminated area	>90 %
Working distance	Unlimited
Focal distance	25 mm to 125 mm
Focusing	By rotating the lens holder
Adjustment range of the lens holder	3 mm
Weight / material	Approx. 8 g / glas, anodised aluminium
Dimensions	Total length: 33 mm, diameter 18 mm
Total Dimensions ilumCURE 1G and 2G with Variolens N	Length: Max. 157 mm Diameter: Max. 27.5 mm
Total Dimensions ilumCURE industrial with Variolens N	Length: Max. 157 mm Diameter: Max. 25 mm
Operating / storage temperature	+5 °C to +45 °C / -10 °C to +70 °C
Humidity	5 % to 95 % r. h. (non-condensing)
Included accessories	Hexagon wrench (size 0.9 mm) for locking the lens holder

*¹ Operated at 100 % intensity

*² Measured with Optometer Gigahertz P9710 and Ulbricht Sphere ISD-5P-SiUV-2

*³ Measured with Hoenle UV-Meter µC Basic 16501 and Detector Head 16401/ UV-A D1 E110

Subject to technical modifications. as per May 2016 (v1).