

BESDATA

ILLUMINATING RETRACTOR

Clear plastic retractor with cordless LED light
brightens up the operative field.



Illuminating retractor

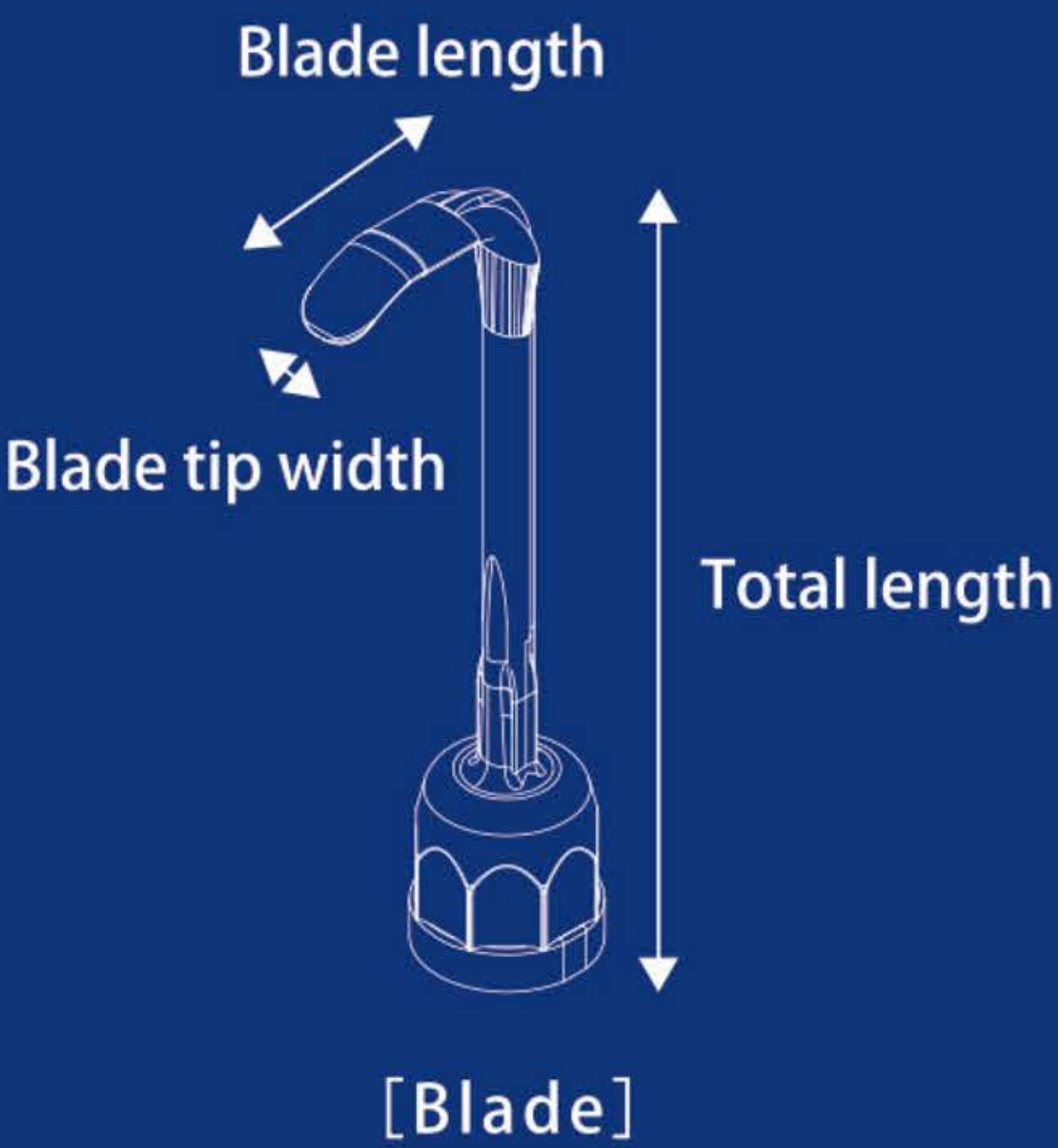
- LED holding time: Up to 2 hours (It varies depending on battery and capacity.)
Recommended battery: Ni-MH rechargeable battery (FDK Product No.: HR-4UTHC)
(Note) The following batteries can be used equivalently to recommended batteries as above.
 - Panasonic Eneloop Pro Rechargeable batteries (Product No.: BK - 4 HCD, AAA High end battery 930 mAh)
 - Panasonic rechargeable Evolta Rechargeable batteries (Product No.: BK - 4HLD, AAA High end battery 950 mAh)
- Note: 2 x AAA batteries required (Not included in the package)
- Light intensity of plastic blade: Greater than or equal to 30,000 lx (light intensity at the plastic blade tip)
- Color temperature: 5,000 K
- Waterproof feature: IPX-7 compatible (immersion in 1m depth water for 30 minutes)
- Mechanical strength: Tensile and bending strengths up to 100N load are allowable.
- Number of times of use: Plastic blade can be used up to 5 times.

The longevity of light handle depends on usage and storage situation.

Note: This product is unsterilized. EOG sterilization needs to be performed before use.

<Classification> Mechanical tool 38 Medical retractor
<Product name> kopligh
<General name> Retractor (General-purpose light source)
<Medical Device Notification No.> 45B2X10003000001
<Classification> Class I (General medical device)
[Blade]

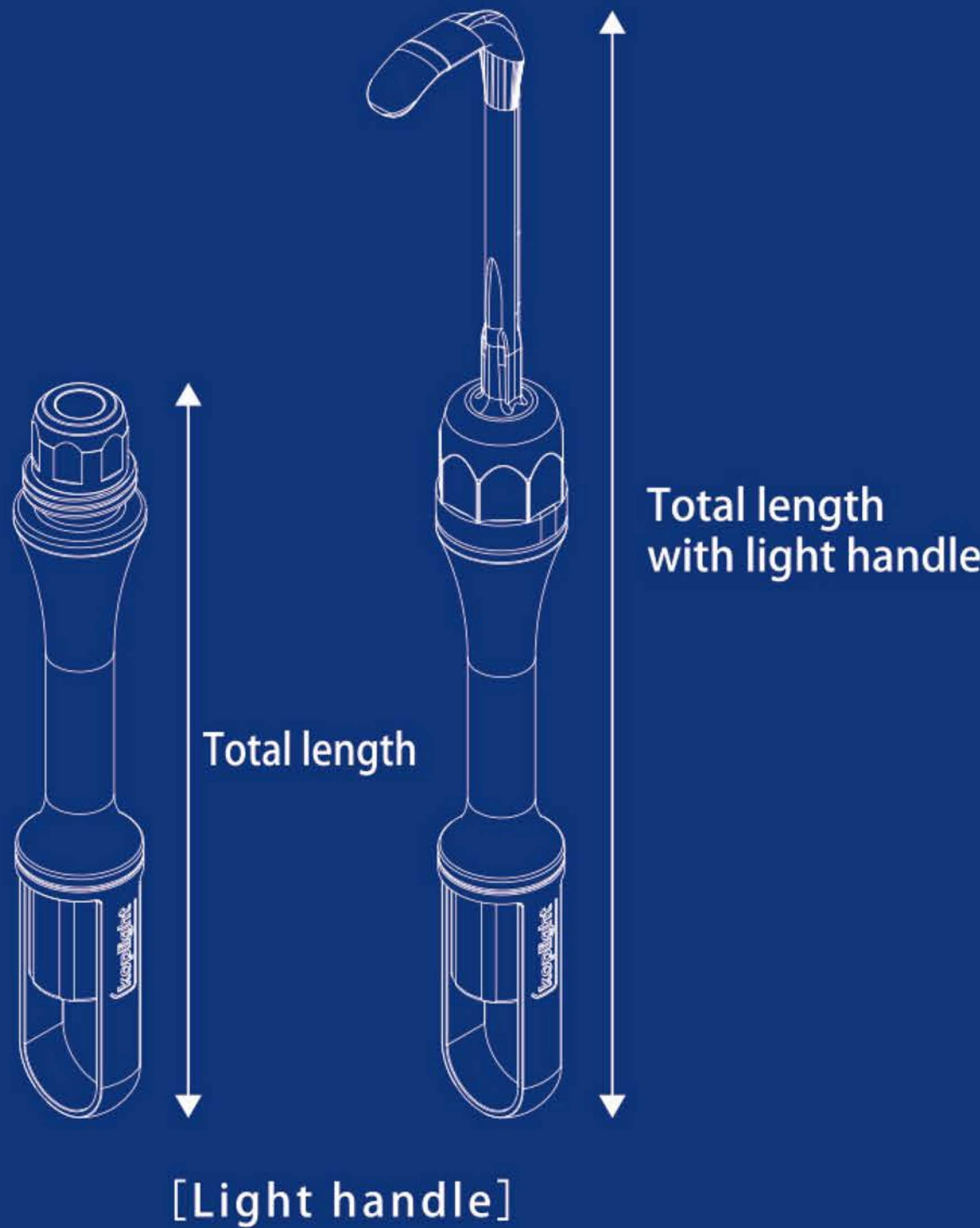
Product name	Type	Blade tip width (mm)	Blade length (mm)	Total length (mm)	Product code	Number of pieces per set
koplight Retractor	KS-1	10	30	139	KS-1-12	12 pieces
	KS-2	13	45	139	KS-2-12	
					KS-3-12	
					KS-4-12	
					KS-5-12	
	KS-1-06	6 pieces				
	KS-2-06					
	KS-3-06					
	KS-4-06					
	KS-5-06					
	KS-1-03	3 pieces				
	KS-2-03					
	KS-3-03					
	KS-4-03					
	KS-5-03					
	KS-SET	Set of 5 different -sized blades				



[Light handle]

Product name	Product code	Available colors		Total length (mm)	Number of pieces per set
kopligh light handle	KG-1-SI	Basic colors	Silver	188	1 piece
	KG-1-BK		Black		
	KG-1-BZ		Bronze		
	KG-1-GY	Custom colors	Gray		
	KG-1-BU		Blue		
	KG-1-PI		Pink		

KS-1 - KS-3: Total length 299 mm with light handle KS-4 and KS-5: Total length 274 mm with light handle



<Domestic distributor>

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If any trouble or inconvenience occurs, please contact your local distributor.

**Cordless LED light is installed.
Clear plastic retractor enhances the
visibility of the operative field.
koplight**

The strong blade with excellent visibility adopts
insulating clear plastics.
It is possible to quickly replace the blade suitable
for surgery.
LED light brightens up the operative field.

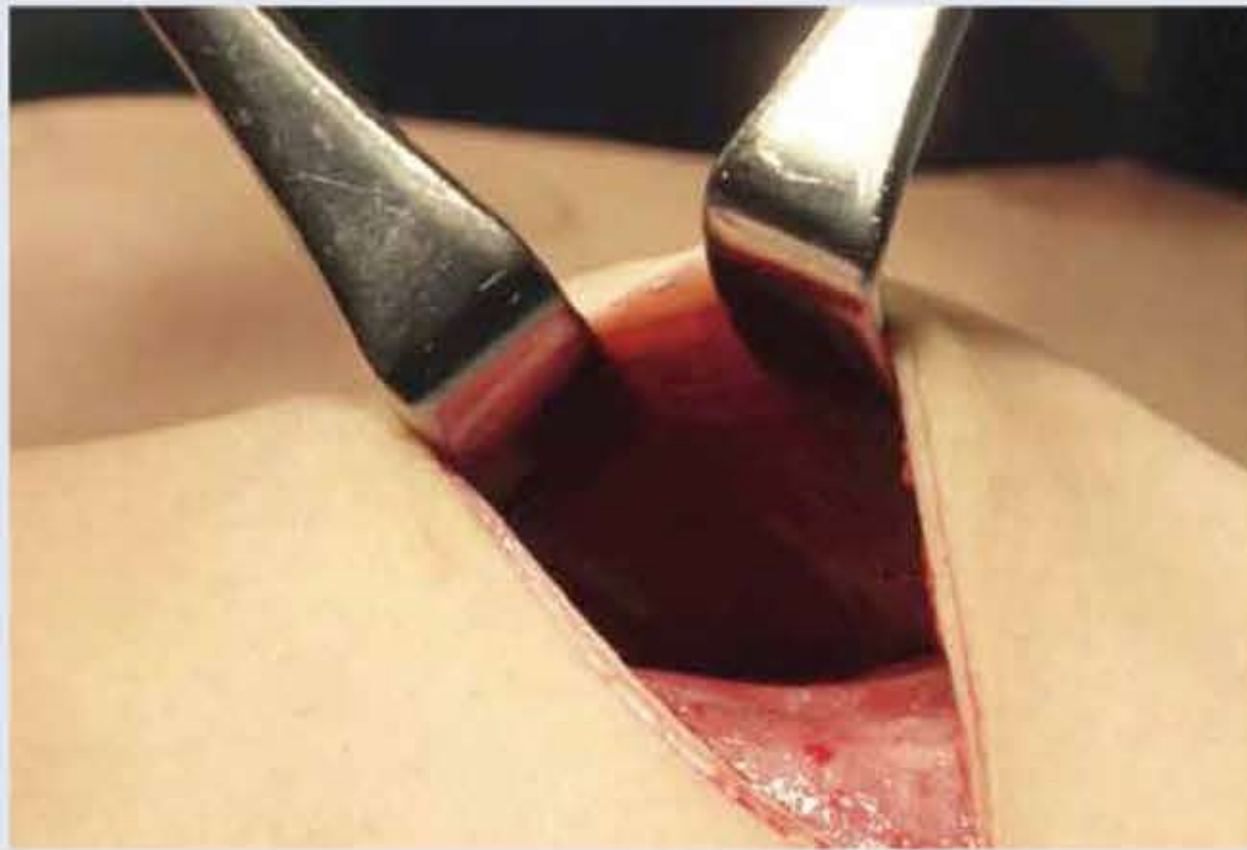
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BESDATA basic concept

Retractor blade is made of clear plastic and illuminated.

Existing retractor (Metal)

- Shadowless lights are hard to reach in the narrow and deep areas of operative field.
- Metal material is unclear and blocks visibility.
- There is a risk of electrical burns due to current of electric scalpels.
- Reflections in X-ray fluoroscopy and CT guide operations.



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- LED light brightens up the operative field and workability is improved.
- Lightweight plastic and aluminum material reduce the surgical burden affecting operators.
- Visibility of the surgical field is high via clear plastics.
- Prevention of electrical burns caused by electric scalpel.
- No reflections in fluoroscopy and CT-guided surgeries.



BESDATA features

The clear plastic blade can be interchangeable with one light handle according to surgical procedures.

Five types of lightweight and highly visible blades are available. Depending on the operating surgery, the screw-in detachable blade can easily be interchangeable on the spot.



<Type> KS-5 KS-4 KS-3 KS-2 KS-1

Optimum long-lasting durability and insulation are achieved.

The blade suppresses the bending and deformation against the normally anticipated traction force of 100 N or less. It eliminates the risk of disconnection from the light handle. Also, it has a feature of no current flow due to its plastic nature.

Aluminum material is adopted to the light handle to ensure waterproof and lightweight.

Lightweight aluminum is adopted for a light handle. Waterproof design and IPX-7 standards.

Both plastic blade and light handle are reusable.

Both plastic blade and light handle can be EOG (ethylene oxide gas) sterilized. The plastic blade is reused up to 4 times. The number of times of use for the light handle differs depending on the conditions of use, cleaning, sterilization, and storage.

The light handle is equipped with a cordless LED light source.

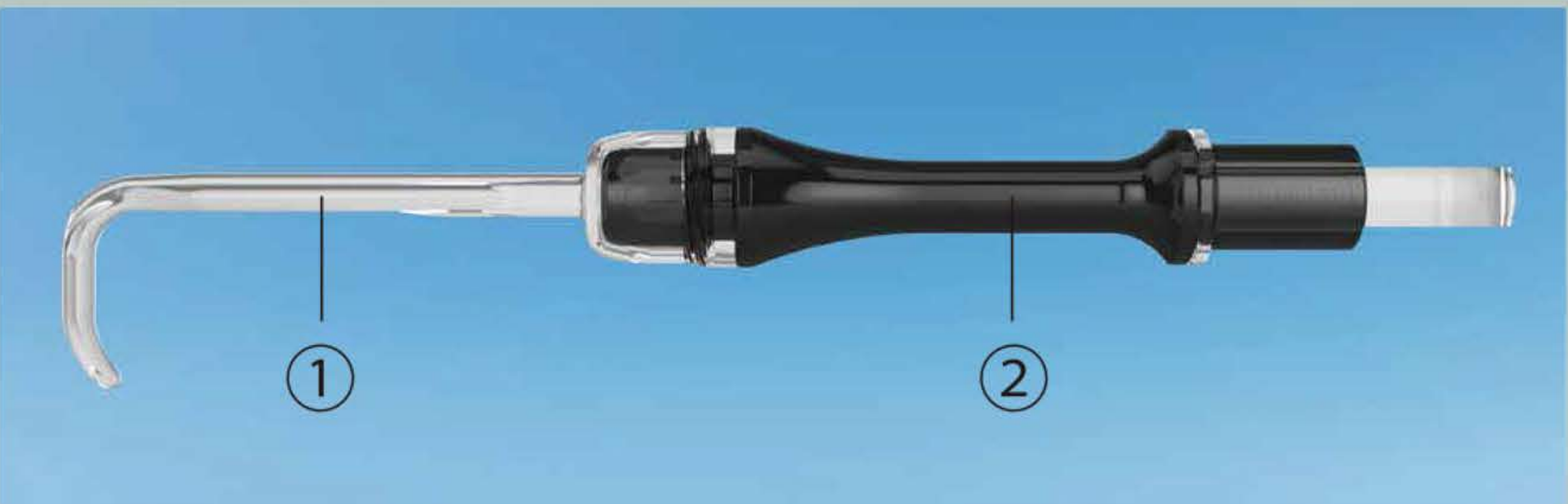
Cordless operations result in excellent workability. The retractor hook can illuminate the surgical field with a light intensity greater than or equal to 30,000 lx.

The retractor is powered by Ni-MH rechargeable batteries.



BESDATA structure

< structure >



- ① Plastic blade = polycarbonate resin
- ② Light handle = Aluminum (alumite-treated)
 - The plastic blade is screw-in replaceable with other various sized plastic blades.
 - A removable finger hook is an optional attachment used with light handle for facilitating retractor pulling.

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Available in 6 colors

Basic colors	Silver	Black	Bronze
Custom colors	Gray	Blue	Pink

(Note) Not their real-life size