#### **Ultimate** Sharpness

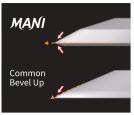
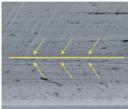


Image of Bevel

#### Bevel Shape (patented)

MANI original bevel shape is applied for the knives. By polishing the blade slightly from the back side, the shape provides excellent sharpness, better usability and better stability on trajectory.



The edge and **Bevel generate** "Ultimate **Sharpness**"

MANI crosslapped edge

#### **Color-Coded Handles** Allow Easy Identification-

The color is different depending on the tip shape.

#### **Crosslapped Edge**

MANI's fine-processing technique has created the crosslapped edge, which provides excellent sharpness and consistent quality.(Crosslapped edge: polishing direction is vertical of the edge)

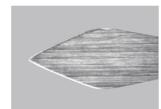


(patented)

To maintain the sharpness, Non-Glare treatment was processed on knives except its edge and back side.



MANI slit knife - front side (Non-Glare)



MANI slit knife - back side (without Non-Glare)

#### Stainless Steel Superior In Safety -

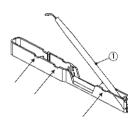


Structure of MANI hard fiber stainless steel



Structure of common stainless steel

#### How to Handle the Case



#### How to Remove the Knife

While taking great care not to let the blade come into contact with any surface, gently pinch and lift section ①.

#### How to Store the Knife

With the blade facing downward,insert section

- 2 fully into the slot. Then, lightly press section
- 1) to secure the knife in place.

You can also rest the knife in one of the three grooves (indicated by arrows),in a manner similar to using a chopstick rest.

#### **Handling Instructions for Safety Type**

#### How to Expose the Blade

MANI's original hard fiber stainless steel (austenite stainless steel) provides reliable strength on the tip and ensure thin but solid edge. (Edge thickness of MANI slit and crescent knife: 0.14mm)



①Pinch the rear end of the cover to release the lock



2)While keeping it pinched, slide the cover backward.



③Release the cover once it has been slid back fully and locked in place.

#### 2 How to Retract the Blade

While pinching the lock release part at the rear end of the cover, slide the cover all the way forward to retract the blade into the cover.

(%Follow the blade exposure steps in reverse order.)

**( (** 0197

#### MANI, INC.

8-3 KIYOHARA INDUSTRIAL PARK, UTSUNOMIYA, TOCHIGI, 321-3231, JAPAN Phone: +81-28-667-7565 / E-mail: seg-ovs@mani.inc / URL: www.mani.co.jp



Note: Design and specifications are subject to change without notice.







OMain Application: Scleral groove incision, Side port

#### Slit Knife

OMain Application: Corneal Incision, Scleral Incision





MSL • MSS



Actual size

ORDER No.	Description	6pcs/box
MSL10	Slit Angled 1.0mm	
MSL11	Slit Angled 1.1mm	
MSL12	Slit Angled 1.2mm	
MSL13	Slit Angled 1.3mm	
MSL14	Slit Angled 1.4mm	
MSL16	Slit Angled 1.6mm	
MSL18	Slit Angled 1.8mm	
MSL19	Slit Angled 1.9mm	
MSL20	Slit Angled 2.0mm	
MSL21	Slit Angled 2.1mm	
MSL22	Slit Angled 2.2mm	
MSL23	Slit Angled 2.3mm	
MSL24	Slit Angled 2.4mm	
MSL25	Slit Angled 2.5mm	
MSL26	Slit Angled 2.65mm	
MSL27	Slit Angled 2.75mm	
MSL28	Slit Angled 2.8mm	
MSL29	Slit Angled 2.9mm	
MSL30	Slit Angled 3.0mm	
MSL32	Slit Angled 3.2mm	
MSL35	Slit Angled 3.5mm	
MSS10	Slit Straight 1.0mm	
MSS28	Slit Straight 2.8mm	
MSS30	Slit Straight 3.0mm	
MSS32	Slit Straight 3.2mm	

# MST ORDER No. Description MST00 MST00 MST15 Straight 15° MST22 Straight 22.5° MST30 Straight 30°

Straight 45°

MST45

#### **Marking Straight Knife**

OMain Application: Scleral groove incision, Side port



#### **Safety Straight Knife**

OMain Application: Scleral groove incision, Side port



MST22SK

MST30SK

Please refer to the page 5 and the back page for Handling Instructions for Safety Type.

(Safety)

Straight 22.5° (Safety)

Straight 30°

2

#### **Short-Head Slit Knife**

OMain Application: Corneal Incision, Scleral Incision

Angle = 45°



MSL-SH (with Marking)



ORDER No. Description 6pcs/box MSL20SH Slit Angled 2.0mm (Short-Head) (Short-Head) MSL21SH Slit Angled 2.1mm Slit Angled 2.2mm (Short-Head) MSL22SH (Short-Head) MSL23SH Slit Angled 2.3mm Slit Angled 2.4mm (Short-Head) MSL24SH MSL25SH Slit Angled 2.5mm (Short-Head) Slit Angled 2.65mm (Short-Head) MSL26SH MSL27SH Slit Angled 2.75mm (Short-Head) MSL28SH Slit Angled 2.8mm (Short-Head) Slit Angled 2.9mm (Short-Head) MSL29SH

Slit Angled 3.0mm (Short-Head)

#### Comparison with conventional knives



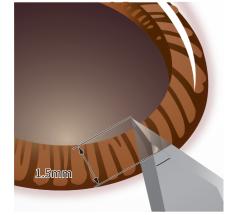
#### Extreme Sharpness, Simple Operation, High Visibility

Position of Knife Angle moved 2mm towards the tip and the blade became smaller with extreme sharpness as our conventional models. Effective for a patient who has sunken/deep-set eye (enophthalmos) or narrow lid fissure. Less possibility of contacting with eye speculum and drapes. In addition, marking lines at 1.5mm and 2.0mm from the blade tip enable simple operation for creating tunnel.

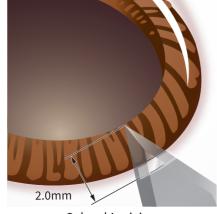
%MSL20SH ~ (8mm→6mm)
%MSL25SH ~ (9mm→7mm)

MSL30SH

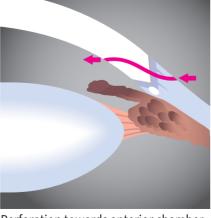
#### Example of use of the marking lines



Corneal Incision



Scleral Incision



Perforation towards anterior chamber using the marking lines as an indicator.

#### Safety Slit Knife

Angle = 45°



Actual size

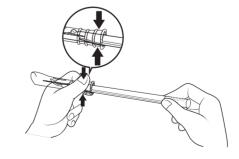
OMain Application: Corneal Incision, Scleral Incision

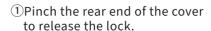
ORDER No.	Description		6pcs/box
MSL10SK	Slit Angled 1.0mm	(Safety)	
MSL12SK	Slit Angled 1.2mm	(Safety)	
MSL14SK	Slit Angled 1.4mm	(Safety)	
MSL18SK	Slit Angled 1.8mm	(Safety)	
MSL20SK	Slit Angled 2.0mm	(Safety)	
MSL22SK	Slit Angled 2.2mm	(Safety)	
MSL23SK	Slit Angled 2.3mm	(Safety)	
MSL24SK	Slit Angled 2.4mm	(Safety)	
MSL25SK	Slit Angled 2.5mm	(Safety)	
MSL26SK	Slit Angled 2.65mm	(Safety)	
MSL27SK	Slit Angled 2.75mm	(Safety)	
MSL28SK	Slit Angled 2.8mm	(Safety)	
MSL30SK	Slit Angled 3.0mm	(Safety)	
MSL32SK	Slit Angled 3.2mm	(Safety)	

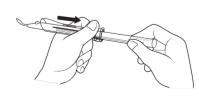
Please refer to the below and the back page for Handling Instrustions for Safety Type.

#### **Handling Instructions for Safety Type**

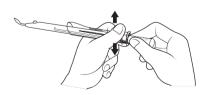
#### 1 How to Expose the Blade







②While keeping it pinched, slide the cover backward.



③Release the cover once it has been slid back fully and locked in place.

#### 2 How to Retract the Blade

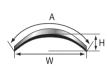
While pinching the lock release part at the rear end of the cover, slide the cover all the way forward to retract the blade into the cover. (\*Follow the blade exposure steps in reverse order.)

4

#### Angle = 45°







Slit Angled 3.0mm Arched
Actual size

ORDER No.	Description 6pcs/	box
MSL18AB	Slit Angled 1.8mm Arched (A 1.8mm W 1.7mm H 0.3mm)	)
MSL20AB	Slit Angled 2.0mm Arched (A 2.0mm W 1.85mm H 0.35mm	n)
MSL22AB	Slit Angled 2.2mm Arched (A 2.2mm W 2.05mm H 0.35mr	n)
MSL23AB	Slit Angled 2.3mm Arched (A 2.3mm W 2.2mm H 0.35mm	)
MSL25AB	Slit Angled 2.5mm Arched (A 2.5mm W 2.4mm H 0.35mm	n)
MSL26AB	Slit Angled 2.65mm Arched (A 2.65mm W 2.5mm H 0.35mr	n)
MSL28AB	Slit Angled 2.8mm Arched (A 2.8mm W 2.6mm H 0.4mm)	)

Slit Angled 2.9mm Arched (A 2.9mm W 2.7mm H 0.45mm)

Slit Angled 3.0mm Arched (A 3.0mm W 2.8mm H 0.45mm)

Slit Angled 3.2mm Arched (A 3.2mm W 3.0mm H 0.55mm)

Slit Angled 3.4mm Arched (A 3.4mm W 3.2mm H 0.55mm)

\*Better self-sealing incision. Low rink of infection.

#### Arched Knife is a slit knife designed for clear corneal incision with IOL injector system.

MSL29AB

MSL30AB

MSL32AB

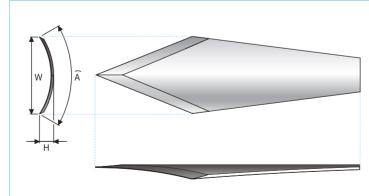
MSL34AB

Please refer to the width in order to find your best size. If you are using MSL24 (2.4mm) now, MSL25AB should be the correct choice as its width (W) is 2.4mm.

The incision location is different from that of normal "flat" knife because the arched knife has a three-dimensional blade.

Please make sure that your Phaco tip and Injector fit properly with the arched knife you chose. We recommend to try the compatibility between the arched knife & your Injector at a wet lab in order to find the right size from our line-up.

Please contact us for the case report.



IT IS UNABLE TO MAKE THE WOUND WIDER AFTER THE INCISION **BECAUSE OF INCISION SHAPE.** 

Please read Instruction for Use carefully before use.

Angle =  $30^{\circ}$  (L) •  $45^{\circ}$ Side Port 1.0mmL MSP

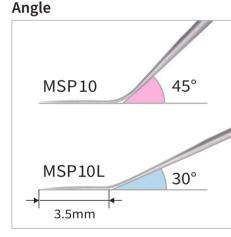
ctual	SIZE	

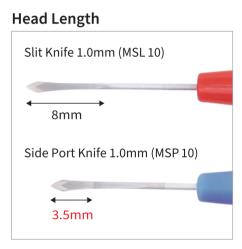
ORDER No.	Description	6pcs/box
MSP10	Side Port 1.0mm Angled 45°	
MSP10L	Side Port 1.0mm Angled 30°	

#### **Features of Side Port Knife**

**Side Port Knife** 

### Width 1.0mm MSP10





- Designed to deliver exceptional precision 1.0mm side port incision.
- Angled; 30 or 45 degree depend on condition of your patient and your prefence.
- Excellent controllability with shorter (3.5mm) head length. Effective for patients who have sunken/deep-set eye (enophthalmos) or narrow lid fissure.
- Stress-free incision with ultimate sharpness.

#### **MVR Knife**

OMain Application: Side port, Scleral port

#### **Crescent Knife**

MCU · MCD

MCS

Angle = 60°

OMain Application: Scleral tunnel, Scleral flap

Crescent Bevel Up 2.3mm

Actual size

Crescent Bevel Up (2.0mm)

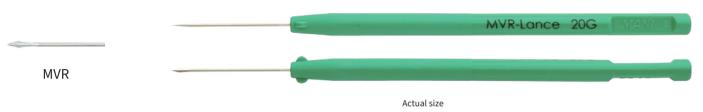
Crescent Bevel Up (2.3mm)

Crescent Straight (2.3mm)

Crescent Bevel Down (2.3mm)

Description

Angle = 45°



MPK

ORDER No.	Description	6pcs/box
MVR19	MVR-Lance 19G (1.5mm)	
MVR20	MVR-Lance 20G (1.2mm)	
MVR23	MVR-Lance 23G (0.9mm)	
MVR24	MVR-Lance 24G (0.8mm)	
MVR25	MVR-Lance 25G (0.55mm) Usable for creating a 25G sclerotomy. / Compatible for insertion into a 23G cannula.	
MVR19A	MVR-Angled 19G (1.5mm)	
MVR20A	MVR-Angled 20G (1.2mm)	
MVR21A	MVR-Angled 21G (1.1mm)	
MVR23A	MVR-Angled 23G (0.9mm)	*
MVR24A	MVR-Angled 24G (0.8mm)	
MVR23AD	MVR-Angled 23G (0.7mm)	*
MPK25	Port Knife 25G (0.45mm) Designed for insertion into a 25G cannula and fuse in membrane dissection, etc.	or
MPK27	Port Knife 27G (0.40mm) Designed for insertion into a 27G cannula and fuse in membrane dissection, etc.	or

**X** Similar ORDER No. The difference is blade width.

Insert the Knife into the 1st scleral incision and forward the blade into clear cornea with shifting blade from side to side.

ORDER No.

MCU20

MCU26

MCD26

MCS26

2nd Scleral pocket

## **1st Scleral Incision**

6pcs/box

#### Safety MVR Knife

OMain Application: Side port, Scleral port

Angle = 45°



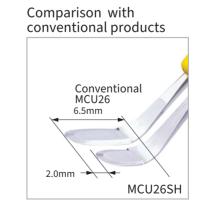
ORDER No.	Description		6pcs/box
MVR20ASK	MVR-Angled 20G (1.2mm)	(Safety)	
MVR21ASK	MVR-Angled 21G (1.1mm)	(Safety)	
MVR23ASK	MVR-Angled 23G (0.9mm)	(Safety)	
MVR24ASK	MVR-Angled 24G (0.8mm)	(Safety)	

Please refer to the page 5 and the back page for Handling Instructions for Safety Type.

#### **Short-Head Crescent Knife**

OMain Application: Scleral tunnel, Scleral flap

Angle = 60°







OMain Application: Scleral tunnel, Scleral flap

#### Golf/Scleral Knife

MGL

OMain Application: Scleral flap, Pterygium







Actual size

ORDER No.	Description	6pcs/box
MGL24	Golf/Scleral 2.4mm	

#### Actual size

ORDER No.	Description	6pcs/box
MCU20SK	Crescent Bevel Up (2.0mm)	(Safety)
MCU26SK	Crescent Bevel Up (2.3mm)	(Safety)

Please refer to the page 5 and the back page for Handling Instrustions for Safety Type.

#### **Mini Crescent Knife**

OMain Application: Scleral flap

Angle = 25°



Actual size

ORDER No.	Description	6pcs/box
MCB10	Crescent Double Bevel (1.0mm)	
MCB12	Crescent Double Bevel (1.25mm)	

#### LRI Knife

OMain Application: Limbal relaxing incision (LRI)



MLR



Actual size

ORDER No.	Description	6pcs/box
MLR50	LRI 500μm (0.50mm)	
MLR55	LRI 550μm (0.55mm)	
MLR60	LRI 600μm (0.60mm)	
MI R65	LRI 650um (0.65mm)	

#### R Slit Knife (Implant)

OMain Applicatoin: IOL enlargement

Angle = 45°



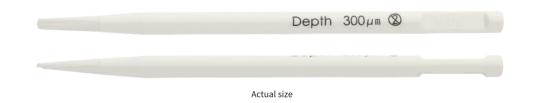
ORDER No.	Description	6pcs/box
MRS26	R Slit Angled 2.6mm	
MRS32	R Slit Angled 3.2mm	
MRS35	R Slit Angled 3.5mm	
MRS37	R Slit Angled 3.75mm	
MRS41	R Slit Angled 4.1mm	
MRS52	R Slit Angled 5.2mm	
MRS55	R Slit Angled 5.5mm	

#### **Depth Knife**

OMain Application: Scleral groove incision



MDP



ORDER No.	Description	6pcs/box
MDP30	Depth 300μm (0.30mm)	
MDP35	Depth 350μm (0.35mm)	

10 11