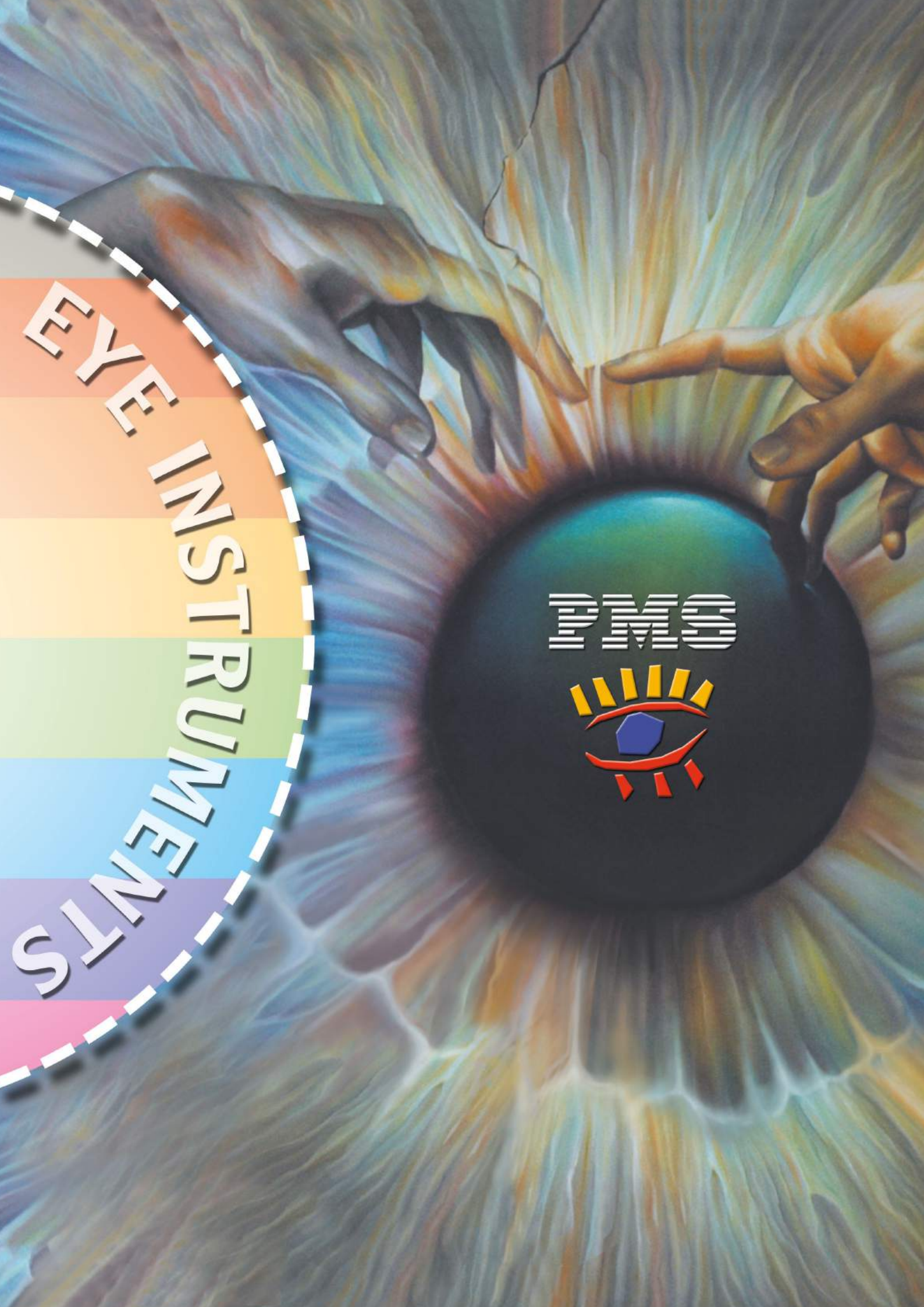




EYE INSTRUMENTS

PMS



General Information

Basic Eye Instruments

Titanium Eye Instruments

Cataract Instruments

Keratorefractive Instruments

Vitreoretinal Instruments

Speciality Products

Miscellaneous Instruments

Sterilising Equipment

Index

TABLE OF CONTENTS



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CD

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PMS ONLINE

Our new Ophthalmic Product Catalogue, CD and Website are an excellent basis and support for future growth. There you will find precise product descriptions, general technical and medical data, and tips for proper care and maintenance on the complete range of PMS Ophthalmic Surgical Products. So if you want a general idea or detailed information about our company, our philosophy and our high quality products - come and have a look. You can visit PMS "Precision Medical Specialities" online -

www.pms-tuttlingen.de

NOTES



20TH ANNIVERSARY	2
HUMANITARIAN SUPPORT	3
CORPORATE PROFILE	4-5
WORLDWIDE DISTRIBUTION	6
GENERAL TERMS AND CONDITIONS	7
MATERIAL INFORMATION	8-9
INSTRUMENT CARE	10-11
ISO CERTIFICATE	12
REGULATORY INFORMATION	13

GENERAL
1

BUREAU VERITAS
Certification



Certificate
for

**PMS Präzisions Medizinische
Spezialitäten**

78532 Tuttlingen / Deutschland

Bureau Veritas Certification hereby confirms that the management system of the
above-mentioned organisation has been assessed and complies with the requirements
set out in the following standards / regulations:

Standards/Regulations

**SN EN ISO 9001 : 2000
SN EN ISO 13485 : 2003**

The management system comprises:

Sales of special medical instruments (Group I)

Classic quotes in celebration of PMS's 20th Anniversary

An anniversary is the celebration of love, trust, partnership, tolerance and tenacity. The order varies for any given year.
—Paul Sweeney

At 20 a man is full of fight and hope. He wants to reform the world. When he's 70 he still wants to reform the world, but he knows he can't.
—Clarence S. Darrow

Celebrate what you want to see more of.
—Thomas J. Peteres

There's not one wise man among 20, who will praise himself.
—William Shakespeare

Instead of thinking about where you are, think about where you want to be. It takes 20 years of hard work to become an overnight success.
—Diana Rankin

The more you praise and celebrate your life, the more there is in life to celebrate.
—Oprah Winfrey

At 20 years of age the will reigns; at 30 the wit; at 40 the judgement.
—Benjamin Franklin

The measure of a master is his success in bringing all men around to his opinion 20 years later.
—Ralph Waldo Emerson

Hindsight is always 20-20.
—Billy Wilder

Though it sounds absurd, it is true to say I felt younger at 60 than I felt at 20.
—Ellen Glasgow

PMS

Precision Medical Specialities GmbH was founded in 1988 with the total commitment to produce eye surgical instruments of excellent quality and to provide unexcelled service to our clients. Our dedication to that promise has earned us hundreds of satisfied customers all over the world for which we are very grateful. Whilst we are proud of our achievements during the last 20 years, our success would not have been possible without the continued patronage from you, our valued customers.

From the management

I would like to take this opportunity to personally thank you for your support and allowing us to serve you over the last 20 years. You have made our success possible and I promise that we will continue to maintain the same standard of excellence in the future. With sincere thanks, Volker Schneckeburger (CEO).

The future development

PMS is currently made up of a small group of highly experienced people. We produce our instruments entirely in Tuttlingen, the home of the surgical instrument making industry, since more than 200 years with continual improvements. In the near future, we shall also improve on communication, image, packaging and PR, which will better correspond to the high standard of our surgical instruments.

Comprehensive product presentation

This is the most modern and extensive line of German made ophthalmic microsurgical instruments we have ever presented. You will find almost 1000 items including many new products to aid the progressive eye surgeon in performing the most delicate procedures, in particular Cataract, Keratorefractive and Vitreoretinal Surgery. This easy to use catalogue is designed to provide full details on all PMS products – please use it as a reference.

New catalogue design

Inside this new catalogue, you will find that our pages have been redesigned, not because we did not like our old look, but because of the 20th anniversary, we felt it was simply time to freshen up our image and our presentation. We trust you will like it, and we look forward to hearing your comments on the catalogue's new design.



YOU CAN HELP US HELP

In this anniversary year, there are many ways to express the spirit of giving, of thankfulness, of celebration, and of hope. We at PMS GmbH would like to support a humanitarian project of your choice.

Therefore, we plan to establish a fund with the aim to deliver assistance to a charity that helps children or families in need, regardless of race, creed, religion or nationality.

One of our main principles is to support people in countries, where deprivation, hunger, disease and destitution are strong realities, and where people struggle daily for survival.

Starting January 1st, 2009, for each ophthalmic surgical instrument sold, we shall equally contribute 0.20 EUR to a humanitarian project – chosen by you.

At the close of each year, we shall inform you of the contribution amount available. We will also provide a list of charities to you and you should let us know which project you prefer. Your favoured charity will receive this financial donation from PMS GmbH.

HUMANITARIAN SUPPORT



CORPORATE PROFILE

Precision Means Security

In 1988, PMS GmbH was established by Volker Schneckeburger with an aim to specialise in the manufacturing, promotion and sales of medical instruments and related equipment for hospitals, clinics and research institutes.

The company's objective was and remains to manufacture and market the finest and most delicate surgical instruments - of affordable quality and excellence - for OPHTHALMOLOGY and the following disciplines: ENT, Plastic & Reconstructive, Micro and Neuro Surgery.

Based on a team of highly skilled, quality conscious and experienced craftsmen (instrument makers) and modern milling centres and equipment, PMS GmbH became, over the last 20 years, a synonym for supplying consistent, superior quality Precision Medical Specialities.

This consistency is guaranteed by a Quality Assurance System. All PMS facilities are certified according to the prestigious ISO 9001:2000 / EN 13485:2003 as well as acc. to the European Medical Devices Directive 93/42/EEC, Annex II, to ensure compliance with the CE-Marking requirements.

Quality is a key word at PMS GmbH. This starts with the design and the choice of raw material (medical grade stainless steel), and is valid throughout the manufacturing process including the final inspection and shipment of the products.

New products have contributed significantly to the growth and success of PMS GmbH. We have a dedication to provide innovative products as surgical techniques and requirements may change. If you have a new instrument idea which may simplify surgical techniques and reduce procedural costs, please contact us directly and/or your local distributor (listed on page 6 of this catalogue).

PMS



CORPORATE PROFILE

The world is changing faster than ever before in history - and so are the specific needs of the customers. The demand is for flexibility, reliability, quick response, and quality.

Everywhere service is the key. PMS GmbH is taking this into account. Our sales and customer service representatives, as well as competent international distributors around the world, will provide the assistance you may need for PMS products.

At PMS, people make the difference. A dedicated service team - backed up by an efficient stocking and distribution system - will give you the competitive edge you need to build your business.

PMS



MORE THAN MEETS THE EYE

Tuttlingen, home of the instrument making industry for almost 200 years.



WORLDWIDE DISTRIBUTION

HERE YOU ARE SERVED BEST

PMS' distribution partners who are based throughout the world are available to visit you to demonstrate instruments, offer technical advice or solve administrative problems.

- **AUSTRALIA:** McFARLANE, Surrey Hills (VIC)
- **BAHRAIN:** WAEI PHARMACY W.L.L., Manama
- **CANADA:** INSTRUMENTARIUM, Terrebonne (QC)
- **CHINA:** --> TAIWAN
- **CZECH REPUBLIC:** PETR BÍLEK 3B instruments, Nove Mesto na Morave
- **EGYPT:** CARE FOR TRADING S.A.E, Cairo
- **FRANCE:** ALCYON FRANCE, Paris
- **GERMANY:** WEFISINNOVID GMBH, Cologne
- **GREECE:** PHARMEX S.A., Sepolia-Athens
- **HONG KONG:** MILVERTON LIMITED, Tsimshatsui, Kowloon
- **HUNGARY:** OPHTHALMIC PRODUCT CENTER LTD., Budapest
- **INDONESIA:** PT. AJIAGUNG LANGGENG ABADI, Depok
- **IRAN:** CDX IRAN COMPANY, Tehran
- **IRELAND:** TEKNO SURGICAL LTD., Dublin
- **ITALY:** ALFA INTES SRL., Casoria (NA)
- **JAPAN:** T.M.I. COMPANY LTD., Niiza-Shi, Saitama
- **JORDAN:** AL GHAD DRUG STORE, Amman
- **KUWAIT:** GROUPTTEK FOR MEDICAL/SCIENTIFIC
- **KOREA, SOUTH:** MEERE TECHNOLOGY CO. LTD., Seoul
- **LEBANON:** HAGE MEDICAL S.A.R.L., Dora, Beirut
- **MALAYSIA:** SURGICAL IMPLANTS AND APPLIANCES, Kuala Lumpur
- **MOROCCO:** USAGE MEDICAL S.A.R.L., Casablanca
- **PERU:** GLATT S.A., Surco, Lima
- **PHILLIPINES:** --> SINGAPORE
- **POLAND:** ELITE SP. ZO.O., Warsaw
- **PORTUGAL:** PRODULAB LDA., Lisbon
- **SAUDI ARABIA:** CIAME MEDICAL DIVISION, Jeddah
- **SINGAPORE:** SURGIPO PRIVATE LIMITED
- **SPAIN:** BIOGAL S.A., Vigo
- **SWEDEN:** PREISLER INSTRUMENT AB, Lund
- **SYRIA:** KINDA COMMERCIAL COMPANY, Damascus
- **TAIWAN:** CLINICO INC., Junghe City, Taipei
- **THAILAND:** PS PROSEARCH COMPANY LTD., Bangkok
- **TUNESIA:** OPHTALMOCONSULT, Tunis
- **USA:** VOLKER INSTRUMENTS, Goleta (CA)
- **VIETNAM:** BMS CO. LTD., Hanoi



GENERAL TERMS AND CONDITIONS

GENERAL INFORMATION

GENERAL INFORMATION

DESIGN

PMS products are designed and manufactured according to the recognised institute of standards and technology. We reserve the right to modify the instruments illustrated in our catalogue as improved materials, finishes and designs become available.

MATERIAL

All products shown in our catalogue are made of medical grade stainless steel material, unless otherwise indicated.

MEDICAL INFORMATION

The medical information contained in this catalogue is for informational purposes only. It is not intended as instructional material for the use of the instruments, procedures or techniques.

LIABILITY

A great deal of care has been taken during the development of this catalogue. However, we are not liable for the accuracy, completeness and up-to-dateness of the technical and medical information given.



SYMBOL

This symbol is intended to alert the user to the presence of important operating and maintenance instructions in the catalogue.

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CATALOGUE

This catalogue has been completed and printed in June 2008. It is our exclusive property. In case of misuse, we reserve the right to recall all copies of this catalogue in your possession.

TUTTLINGEN, June 2008
PMS GmbH

PRICES

Our prices are to be understood in EURO, ex works Tuttlingen, Germany, excluding packing, delivery charges and insurance. Prices in the price list are for one unit, unless otherwise stated. Prices may be changed without prior notice.

PAYMENT

Invoices are payable net 30 days of invoice date.

DELIVERY

From stock or according to order confirmation. Partial shipments must be permitted. Delayed deliveries do not entitle the buyer to claims.

RETENTION OF TITLE

The goods delivered by us remain our property until they have been fully paid. This also includes all goods supplied previously or at a later date.

WARRANTY

Our warranty is valid world wide and for life from date of purchase. It covers any defects in material and craftsmanship. Damage resulting from inexpert use and/or misuse with regard to handling, cleaning, sterilisation and storage does not fall under this warranty.

COMPLAINTS

Any complaints should be made in writing within 30 days upon receipt of goods. Any product which appears unsatisfactory in material and craftsmanship will be repaired or replaced free of charge.

RETURN GOODS POLICY

Returned items should be:

- in perfect condition
- never have been used
- boxes should be complete.

Returns are subject to a 20% restocking charge. Product returns will be accepted within 90 days from date of shipment. NOTE: No return will be accepted without authorisation.

PLACE OF PERFORMANCE

The place of performance for shipment and payment as well as the court of jurisdiction is Tuttlingen.

APPLICABLE LAW

German law only.



MATERIAL INFORMATION

STAINLESS STEEL

The material used for most surgical instruments today is stainless steel. Stainless steel is an alloy, consisting of various elements which make it extremely resistant to staining and corrosion. Despite the multitude of papers, articles, and research reports on this material, the misconception that “stainless” will not stain or corrode still lingers. Although it is strong, durable, aesthetically appealing, and ranks high among corrosion-resistant metals, stainless steel can and will corrode.

Of the many different types of stainless steel, those used for surgical instruments generally fall into two basic categories:

300 Series Steel

(austenitic) contains no carbon and is considered the most stain-resistant of all steels. However, because it doesn't contain carbon, it can't be hardened. In ophthalmology, it is typically used for making eye speculae and handles for instruments, such as hooks, retractors and knives.

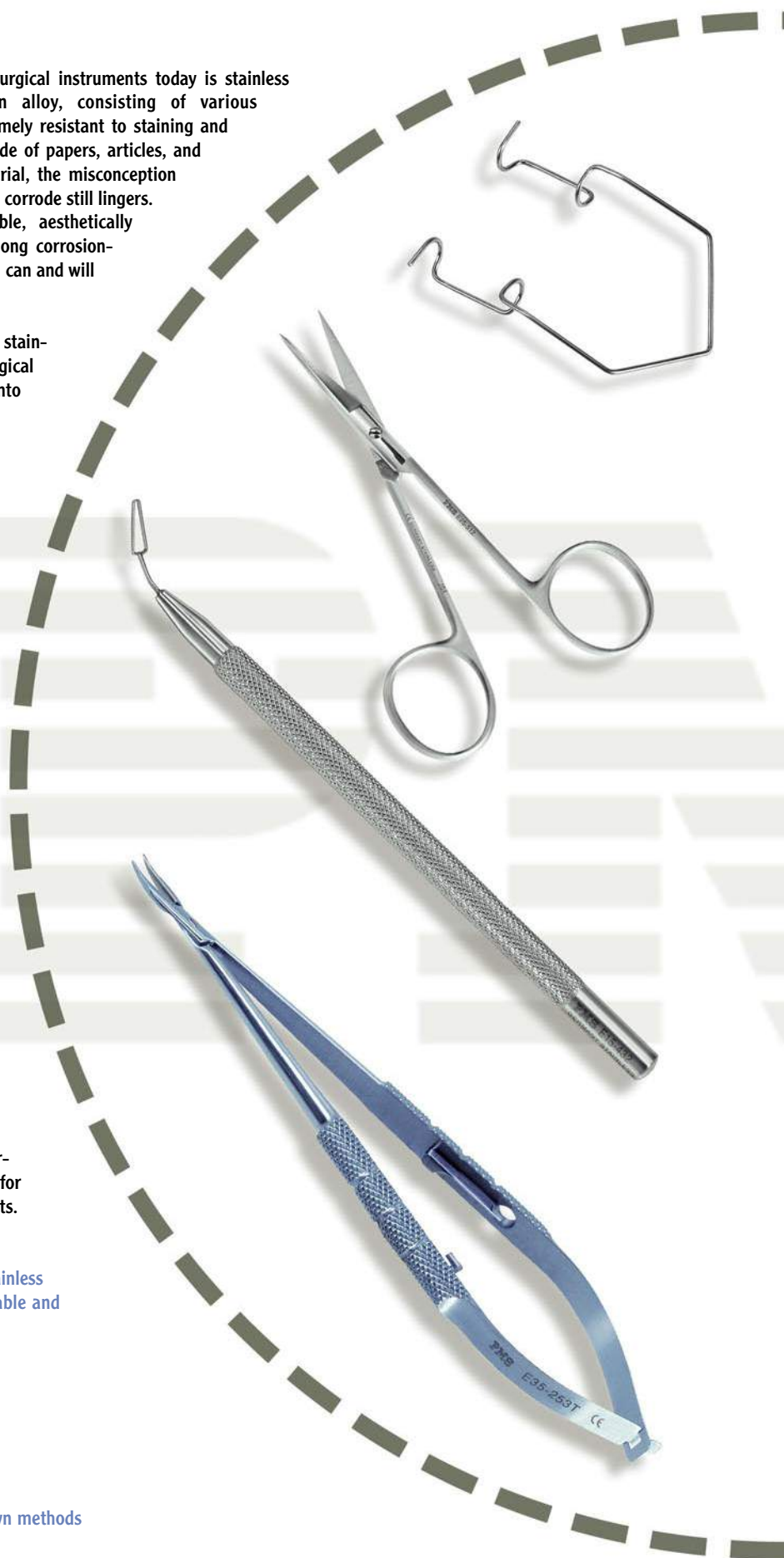
400 Series Steel

(martensitic) contains a small percentage of carbon and thus can be hardened. The percentage of carbon content determines its hardness, the more carbon, the higher the attainable hardness. Steels with a lower percentage of carbon are typically used for making forceps, needle holders and haemostats. Steels with a higher percentage of carbon are used for scissors and cutting instruments.

TITANIUM

is a natural complement to stainless steel. It is stronger, more durable and offers the following features:

- High strength
- Non toxic
- Non magnetic
- Non corrosive
- Non-glare, blue finish
- Tungsten carbide coated tips
- Can be sterilised by all known methods





MATERIAL INFORMATION

1. SELECTION AND TESTING OF MATERIAL

To meet the rigorous demands of the medical industry utmost care is given to the selection of the proper material, which is an essential prerequisite for quality and safety. Comprehensive analytical examinations and inspections of the selected materials are carried out in metallurgical test laboratories.

2. PROCESS CONTROLS

After PMS craftsmen shape stainless steel into semi-formed instruments, highly skilled instrument makers grind, file and shape each instrument by hand into the finished form. At every stage the new instrument is matched carefully to the precise specifications to avoid any deviations in regard to structure of material, true measurements, function and surface finish.

3. HEAT TREATMENT

Surgical instruments require special heat treatment for hardening. Thus, tempering furnaces are used to control the elasticity, resistance to fracture, high cutting ability, and corrosion-resistant quality.

4. SURFACE FINISH

After initial polishing, instruments are returned to the instrument maker for inspection. Then, they are exposed to an electro-polishing process which removes the loose iron and reseals the surface. This process greatly enhances the ability of the instrument surface to resist corrosion.

5. QUALITY CONTROL

A final quality control is carried out prior to packaging the instruments. Under the microscope the following is inspected: Exact product duplication, true to size, surface finish and function. This attention to detail and care assures the finest quality products and contributes to the PMS tradition of excellence and affordable quality.

Quality counts!

MATERIAL INFORMATION



PROPER CARE AND MAINTENANCE

As a manufacturer of surgical products, we often receive inquiries from customers asking for information on the proper care of instruments. These questions encompass decontamination, cleaning methods, drying, lubrication, inspection, sterilisation and storage. Described here are basic informations regarding the care and maintenance procedures necessary in the hospital to help insure a longer, more trouble-free life for your valuable tools.



THE BASICS AT A GLANCE

- Always inspect, clean, rinse and lubricate brand-new surgical instruments prior to the first sterilisation.
- Do not allow blood, tissue, cellular debris or saline to dry on the instruments.
- Always use a demineralised or distilled water for the last cleaning process.
- Remember that instruments cleaned with BSS without thorough rinsing thereafter, will start corroding in the autoclave.
- Use a soft brush to clean handles and nothing rougher than facial tissue for the tips of the instruments.
- If ultrasonic cleaning is practised, do not clean by this method for more than 3 minutes and use only low-powered cleaners.
- Dry the instrument carefully by using a dust-free cloth or a hot-air blast before storing them.
- Lubricate the joints and locking devices after cleaning.
- Store and sterilise instruments in a protective tray.
- Autoclave instruments. The temperature should not exceed 273°F / 134°C.

AND ALWAYS REMEMBER:

HANDLE YOUR INSTRUMENTS WITH TENDER LOVING CARE

Everything you need to know about the proper care and maintenance of micro surgical instruments please contact:

www.A-K-I.org



IMPROPER CARE AND MAINTENANCE

INSTRUMENT CARE

Fretting corrosion is due to lack of sufficient lubrication agents.

Encrusted and brownish-red contamination layers on surface are due to insufficient cleaning.

Microsurgical instruments are subject to extreme wear. Therefore, inspect them regularly and replace, if necessary.

Chloride induced pitting. Pitting can only be avoided if instruments are cleaned immediately after use.

Worn, corroded, deformed or otherwise damaged instruments must be sorted out and discarded.

Discolourations on Barraquer Iris Scissors appear because of poor quality water used for cleaning and/or autoclaving.

Faulty instruments returned for repair must be cleaned and sterilised by the hospital prior to despatch in order to avoid contamination.

Stress corrosion cracking. In order to avoid such damage all instruments should be kept in an open position during the complete cleaning phase.

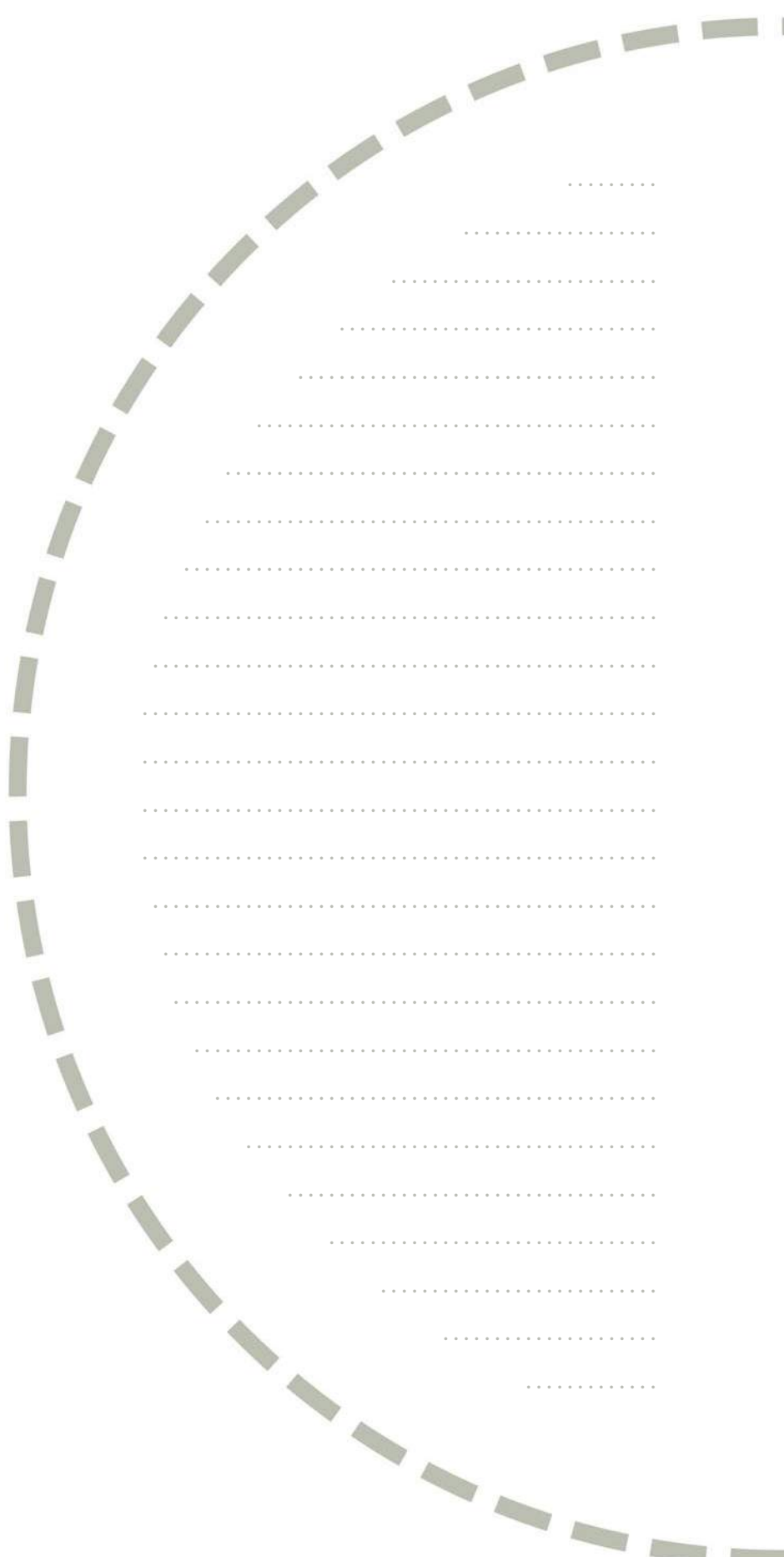
The processing and sterilisation of the instruments remains exclusively your responsibility.

Water spots are due to an excessively high concentration of minerals in the water.

PMS shall not be liable for any damage arising from the use of the device.

Contact corrosion is due to preparation of instruments on a brass rack.

NOTES



PMS



BASIC

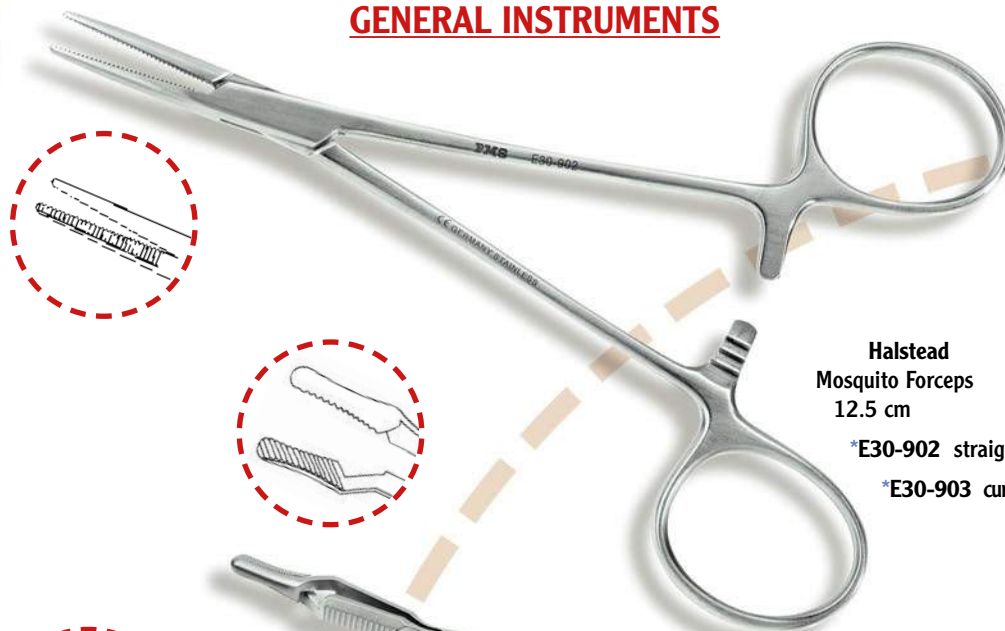


GENERAL INSTRUMENTS	16
SPECULAE & RETRACTORS	17
BLADE BREAKERS, HANDLES & BLADES	18
CALIPERS & FIXATION RINGS	19
CANNULAE & ACCESSORIES	20
IOL & PHACO INSTRUMENTS	21
SCISSORS	22
FORCEPS + TYPES OF FORCEPS TIPS	23-24
NEEDLE HOLDERS	25
MISCELLANEOUS PRODUCTS	26
DISPOSABLE PRODUCTS	27
BASIC EYE SET	28





GENERAL INSTRUMENTS



**Halstead
Mosquito Forceps**
12.5 cm

*E30-902 straight

*E30-903 curved



**Dieffenbach
Serrefine, 3.5 cm**

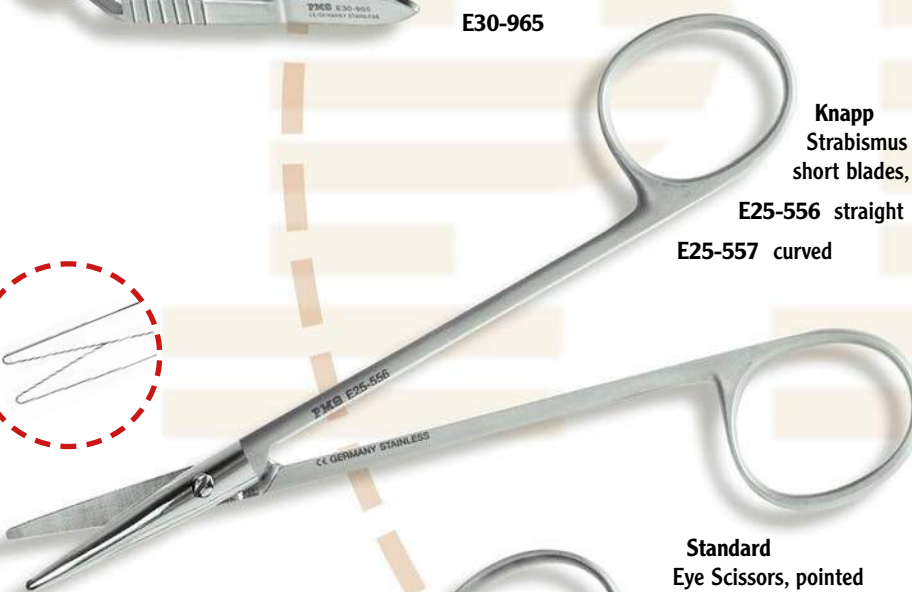
E30-934 straight

E30-935 curved



**Baby Jones
Towel Clamp, 5.5 cm**

E30-965



**Knapp
Strabismus Scissors**
short blades, blunt, 12.0 cm

E25-556 straight

E25-557 curved



**Standard
Eye Scissors, pointed**

E25-510 straight, 9.0 cm

E25-512 straight, 10.5 cm

E25-514 straight, 11.5 cm

E25-511 curved, 9.0 cm

E25-513 curved, 10.5 cm

E25-515 curved, 11.5 cm

*also available in titanium, please add "T" when ordering

SPECULAE & RETRACTORS



BASIC EYE INSTRUMENTS

Barraquer Wire Speculum

E40-011 adult size

E40-012 child size

E40-013 infant size

E40-014 premature size

Kratz-Barraquer Wire Speculum

E40-031 adult size

E40-032 child size

E40-033 adult size,
heavy wire model

Desmarres

Lid Retractor, 14.0 cm

*E40-110 #0 11 mm blade

*E40-111 #1 13 mm blade

E40-112 #2 15 mm blade

Conway

pediatric size, 8 mm blade

*E40-108

Castroviejo

Universal Eye Speculum
fenestrated blades, 9.0 cm

E40-078 medium, 16 mm

E40-079 small, 14 mm

Fishkind

Phaco Eye Speculum
open blades, 8.5 cm

E40-080

for use with Phaco
or I/A tips

*also available on round titanium handle, please add "T" when ordering



BLADE BREAKER, HANDLES & BLADES

BASIC EYE INSTRUMENTS



Razor Blade
easy to break,
stainless steel,
non-sterile,
(box of 10)

E35-001



Troutman-Chris
Blade Breaker & Holder
5.5 mm dia. x 9.5 cm long handle
straight jaws with concave/
convex inside surfaces

***E35-010**



Chuck Handle
(for miniature edged blades)

***E10-003K #3K, 10.0 cm**

***E10-003KM #3KM, 7.5 cm**



Blade Collet
***E10-003BC**



Miniature Edged Blades
surgical stainless steel,
single use, sterile (box of 10)

E10-064 #64



E10-065 #65



E10-067 #67



E10-069 #69

**for precise
microsurgical incisions**

**also available in titanium, please add "T" when ordering*

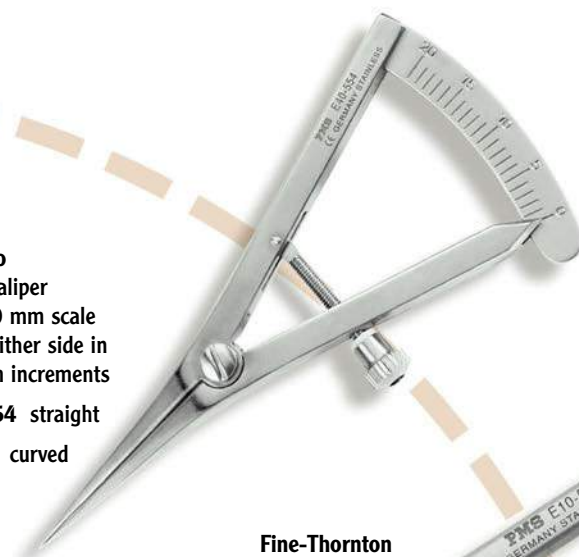


Castroviejo

Eye Caliper
0-20 mm scale
on either side in
1 mm increments

*E40-554 straight

E40-555 curved



Fine-Thornton

Phaco Fixation Ring

3/4 open swivel ring,
with multiple teeth, 13.5 cm

*E10-513 13 mm ID
for clear cornea incision

E10-516 16 mm ID
for scleral tunnel incision



Schocket

Scleral Depressor
with pocket clip, 13.5 cm

*E40-613



Flieringa

Scleral Fixation Ring

E40-628 Set of 8 sizes

E40-614 14 mm dia.

E40-615 15 mm dia.

E40-616 16 mm dia.

E40-617 17 mm dia.

E40-618 18 mm dia.

E40-619 19 mm dia.

E40-620 20 mm dia.

E40-622 22 mm dia.



Maloney

Astigmatic Keratometer

E10-690T

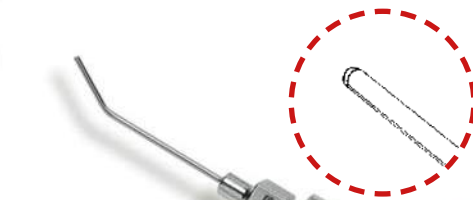
for qualitative evaluation
of astigmatism



*also available in titanium, please add "T" when ordering



CANNULAE & ACCESSORIES



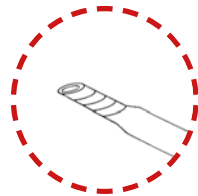
**Bishop-Harmon
AC Irrigator System**

E20-001 complete

E20-002 silicone bulb

E20-003 LL adaptor

E20-004 19GA cannula

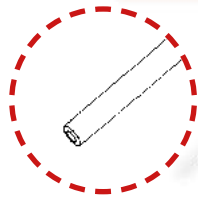


Lewicky

Anterior Chamber Maintainer

20GA/0.9 mm x 3 mm long screw threaded tip
attached to 180 mm silicone tubing with LL cone

E20-020ST



Rycroft

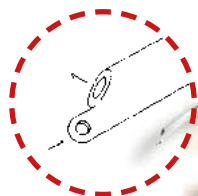
Air Injection Cannula

20 mm tube, angled 5 mm

E20-030 30GA/0.3 mm

E20-031 27GA/0.4 mm

E20-032 25GA/0.5 mm



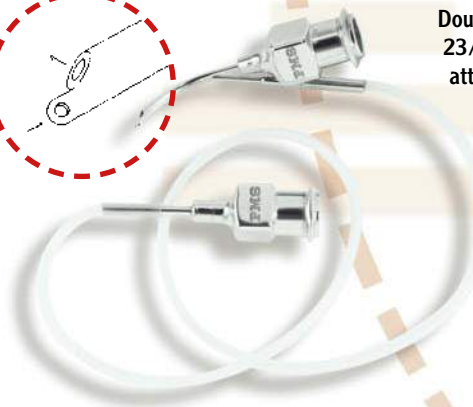
Simcoe

Double I and A Cannula

23/23GA x 15 mm long tube, 0.3 mm aspirating port
attached to 150 mm silicone tubing with LL adaptor

E20-300 original model

E20-301 reverse model



All Glass Syringe E20-801 1 ml

E20-802 2 ml

E20-805 5 ml

ideal for smooth control of
irrigation or maintenance
of the anterior chamber



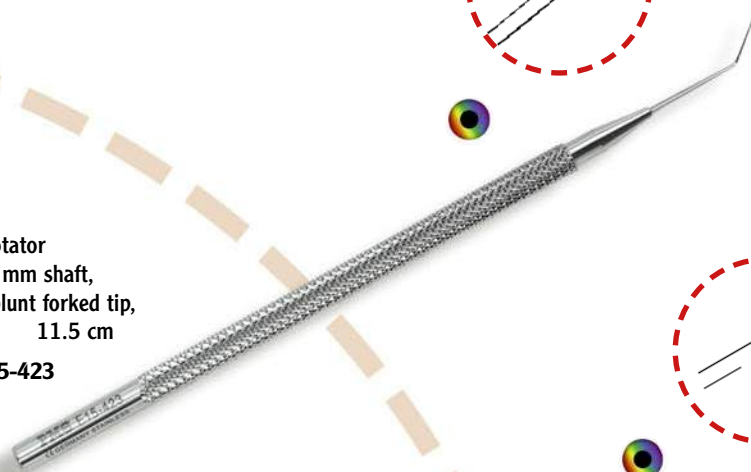
Luer-Lock cone

McIntyre
Aspirating Handpiece
(autoclavable) Teflon, 7.5 cm
male/male Luer connectors

E20-881



Jaffe-Bechert
Lens Nucleus Rotator
 angled 9 mm shaft,
 blunt forked tip,
 11.5 cm
 *E15-423



Sinsky II
IOL Manipulating Hook
 0.2 mm dia. blunt tip,
 12.0 cm
 *E15-552 straight
 *E15-553 angled



Lester
Lens Pusher
 delicate "hour glass" style tip,
 12.0 cm
 *E15-500 straight
 *E15-501 angled



Kuglen
Lens Manipulator and Iris Hook
 "push-pull" model,
 angled 10 mm shaft,
 ball-like tip, 12.0 cm
 *E15-565



Nagahara
Phaco Chopper
 angled 10 mm shaft,
 "wedge-shaped" blade,
 11.5 cm
 *E15-656 60° cutting edge
 *E15-659 90° cutting edge



**introduced in 1975 still
 as popular as ever**



also available on coloured aluminium handles, see page 95, 107 and 131

*also available on titanium handle, see page 34-36

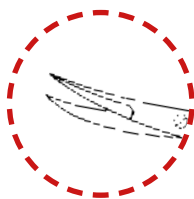


SCISSORS



**Barraquer
Iris Scissors**
7 mm blades,
blunt tips, 5.5 cm

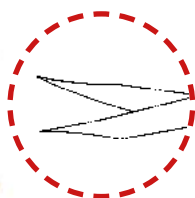
E25-200



Micro Iris Scissors
curved, small blades,
10.0 cm

*E25-251 sharp tips

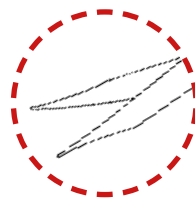
*E25-253 blunt tips



**Westcott
Stitch Scissors**
curved, large blades,
sharp tips, 11.5 cm

*E25-315

the working horse
of cataract surgery

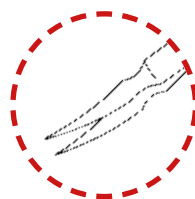


**Westcott
Tenotomy Scissors**
curved, large blades,
blunt tips, 11.5 cm

E25-334T right (shown)

E25-334 right

E25-335 left



**Vannas
Capsulotomy Scissors**
5 mm blades, 8.2 cm

E25-400 straight, sharp

E25-401 curved, sharp

E25-402 straight, blunt

E25-403 curved, blunt

all time favourite

*also available on titanium handle, please add "T" when ordering

FORCEPS

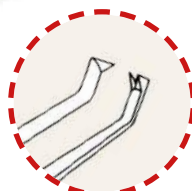
PMS



BASIC EYE INSTRUMENTS

Barraquer-Colibri
Corneal Utility Forceps
1x2 teeth 90°, 0.12 mm,
without tying platform, 7.5 cm

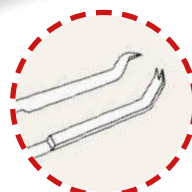
*E30-051



1x2 teeth 90°
(Bonn style)

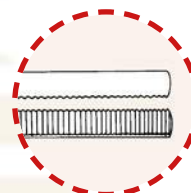
Harms-Colibri
Corneal Suture Forceps
1x2 teeth 45°, 0.12 mm,
tying platform, 7.5 cm

*E30-081



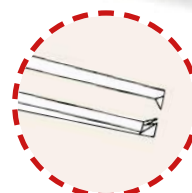
1x2 teeth 45°
(Castroviejo style)

Dressing Forceps
serrated jaws, 10.0 cm
E30-110 0.5 mm wide
E30-114 1.0 mm wide



serrated jaws

Tissue Forceps
toothed jaws, 10.0 cm
E30-120 0.5 mm teeth
E30-124 1.0 mm teeth



toothed jaws

Bishop-Harmon
Dressing & Tissue Forceps
E30-100 criss-cross serrated
E30-103 0.3 mm teeth
E30-106 0.6 mm teeth



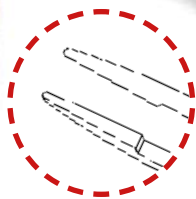
criss-cross serrated

*also available in titanium, see page 44

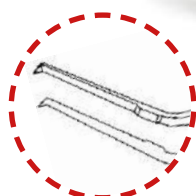
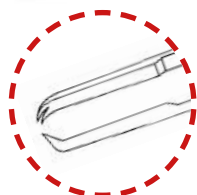
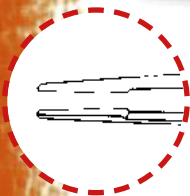


FORCEPS

these forceps are ideal...



...for 11-0 to 8-0 sutures



still the most popular

*also available in titanium, see page 41,43,45

Bonn

Suturing Forceps

1x2 teeth 90°,
0.12 mm, delicate
4 mm platform

*E30-410
short model,
7.2 cm

*E30-430 long model, 9.5 cm

Harms

Tying Forceps

6 mm platform, 10.0 cm

*E30-422 straight

*E30-423 curved

McPherson

Tying Forceps

5 mm platform, 10.5 cm

*E30-460 straight

*E30-461 angled

Castroviejo (standard handle)

Suturing Forceps

1x2 teeth 45°, fine
tying platform, 10.0 cm

*E30-431 0.12 mm

E30-432 0.30 mm

*E30-433 0.50 mm

Utrata

Capsulorhexis Forceps

extra thin 11 mm shanks,
triangular, sharp tips, 10.5 cm

*E30-581S flat handle

*E30-583S knurled handle

NEEDLE HOLDERS

PMS



straight jaws
E35-130
without lock
*E35-132
with lock



Castroviejo
Needle Holders
14.0 cm

delicate jaws, 10 mm x 1.0 mm
ideal for 7-0 to 4-0 sutures

curved jaws
E35-131
without lock
*E35-133
with lock



straight jaws
E35-230
without lock
E35-232
with lock



Barraquer
Needle Holders
13.5 cm

delicate jaws, 10 mm x 0.75 mm
ideal for 9-0 to 6-0 sutures

curved jaws
*E35-231
without lock
*E35-233
with lock



*also available in titanium, please add "T" when ordering

BASIC EYE INSTRUMENTS



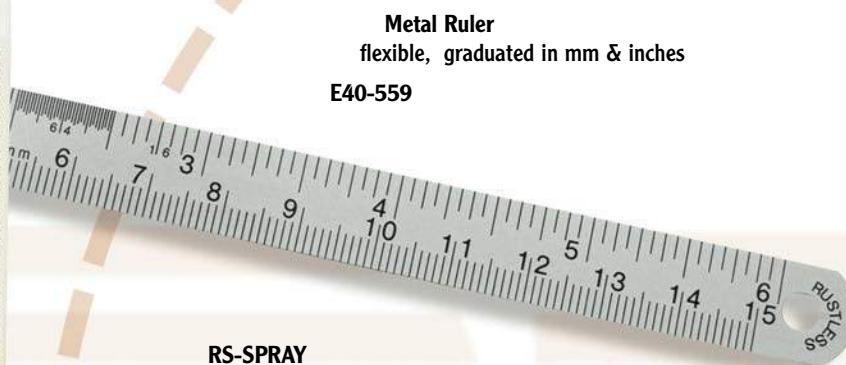
MISCELLANEOUS PRODUCTS



Protector
for Lens Hooks with

E15-002 straight shaft

E15-003 angled shaft



Metal Ruler
flexible, graduated in mm & inches

E40-559

RS-SPRAY

Rust Prevention Spray (sterilisable)
for stainless steel instruments,
spray box of 200 ml

No. 2820

Ideal to prevent rusting of stainless steel surgical instruments during and after sterilisation. Applicable for all methods of sterilisation. Autoclave max. 134°C and hot air sterilizers max. 180°C.

Type	Id. (mm)	Wd. (mm)	Od. (mm)
Product No.			
SIL-00301	0,3	0,1	0,5
SIL-00302	0,3	0,2	0,7
SIL-00502	0,5	0,2	0,9
SIL-00503	0,5	0,3	1,1
SIL-00504	0,5	0,4	1,3
SIL-00505	0,5	0,5	1,5
SIL-00701	0,7	0,1	0,9
SIL-00702	0,7	0,2	1,1
SIL-00703	0,7	0,3	1,3
SIL-00705	0,7	0,5	1,7
SIL-00804	0,8	0,4	1,6
SIL-01002	1,0	0,2	1,4
SIL-01004	1,0	0,4	1,8
SIL-01005	1,0	0,5	2,0
SIL-01010	1,0	1,0	3,0
SIL-01204	1,2	0,4	2,0
SIL-01502	1,5	0,2	1,9
SIL-01503	1,5	0,3	2,1
SIL-01504	1,5	0,4	2,3
SIL-01505	1,5	0,5	2,5
SIL-01507	1,5	0,7	2,9
SIL-01510	1,5	1,0	3,5
SIL-02005	2,0	0,5	3,0
SIL-02007	2,0	0,7	2,9
SIL-02010	2,0	1,0	4,0
SIL-02505	2,5	0,5	3,5
SIL-02510	2,5	1,0	4,5

Silicone Tubing (VMQ Quality)
autoclavable up to max. 140°C,
available in coils of 100 cm

SIL-00302 for E40-900 and E40-910

SIL-00804 for E20-015 to E20-019

SIL-01004 E20-300 to E20-319 and Lieberman style
aspirating speculae (side connectors)

SIL-01204 for E20-321 and E20-323

SIL-01504 for E20-751 to E20-753 and Lieberman
aspirating speculae (main connectors)

SIL-02005 for E20-741, E20-754 to E20-757

Further sizes are available by
request and in coils of 25 metres.



Sugi®
Cellulose Eye Spears
white plastic handle,
single use, sterile

30601 box of 200
(20 pouches of 10 pcs)

highly absorbent sponge for removal of blood,
fluids and cellular debris within the operating field

Sugi®
Cellulose Eye Points
single use, sterile

31602 box of 200 (20 pouches of 10 pcs)

31603 box of 500 (bulk, non-sterile)

Pro-ophta®
Ocular Sticks
5 mm dia. x 66 mm,
single use, sterile

16516 box of 400 (20 pouches of 20 pcs)

16515 box of 500 (bulk, non-sterile)

Insight®
Universal Eye Shield
single, sterile blister packed (box of 100)
ES/100/C

dual fitting to either eye
with ventilation holes for vision

crystal clear K Resine material

Universal Eye Shield
single, sterile blister packed (box of 100)
ES/100/W

Latex free

white polypropylene material



BASIC EYE SET



E40-086



E25-334



E30-532



E40-771



E40-777

- E20-001 AC Irrigator System, page 20
- E20-031 Air Injection Cannula, page 20
- E30-965 Schaedel Towel Clamp, page 16
- E30-902 Halstead Artery Forceps, page 16
- E30-934 Dieffenbach Serrefine, page 16
- E40-011 Barraquer Eye Speculum, page 17
- E40-086 Lancaster Universal Eye Speculum**
- E10-014 Sapphire Knife 45° blade, page 63
- E35-001 Razor Blade (box of 10), page 18
- E35-010 Blade Breaker & Holder, page 18
- E25-200 DeWecker Iris Scissors, page 22
- E25-315 Westcott Stitch Scissors, page 22
- E25-334 Westcott Tenotomy Scissors, page 22
- E25-401 Vannas Capsulotomy Scissors, page 22
- E25-512 Standard Eye Scissors, page 16
- E25-556 Knapp Strabismus Scissors, page 16
- E30-051 Barraquer Colibri Forceps, page 23
- E30-106 Bishop-Harmon Tissue Forceps, page 23
- E30-110 Dressing Forceps, straight, page 23
- E30-232 Lester Conjunctival Fixation Forceps**
- E30-431 Castroviejo Suture Forceps, page 24
- E30-432 Castroviejo Suture Forceps, page 24
- E30-460 McPherson Tying Forceps, page 24
- E30-463 Kelman-McPherson Forceps, page 124
- E30-532 Bipolar Forceps "Jewelers" Style**
- E35-231 Barraquer Needle Holder, page 25
- E35-132 Castroviejo Needle Holder, page 25
- E40-111 Desmarres Lid Retractor, page 17
- E40-559 Stainless Steel Ruler, page 26
- E40-554 Castroviejo Eye Caliper, page 19
- E40-613 Schocket Scleral Depressor, page 19
- E40-771 Graefe Strabismus Hook**
- E40-777 Gass Retinal Detachment Hook**
- Schioetz Tonometer, Wash Trays
and Sterilising Trays (see section)

PMS





WHY TITANIUM? 30

SPECIALITY INSTRUMENTS 31

EYE SPECULAE 32

KNIVES, FIXATION RINGS AND CALIPERS 33

LENS HOOKS AND NUCLEUS MANIPULATORS 34-35

PHACO-CHOPPERS AND SPATULAE 36-37

AKAHOSHI STYLE NUCLEUS INSTRUMENTS 38-39

FIXATION FORCEPS 40

CAPSULORHEXIS FORCEPS 41

FOLDABLE LENS FORCEPS 42

TYING & LENS HOLDING FORCEPS + PLATFORM DESIGNS 43

SUTURE TYING FORCEPS 44-45

NEEDLE HOLDERS 46

PMS-ECOLINE® 47

SET 48





WHY TITANIUM?

Titanium is a natural complement to stainless steel for ophthalmic surgical instruments

- Absolute precision
- High strength
- Non toxic
- Non magnetic
- Non corrosive
- Non-glare, blue finish
- Tungsten carbide coated tips
- Can be sterilised by all known methods

LIGHT WEIGHT

Titanium is 40% lighter than stainless steel. This is very important for surgeon's hands as it provides extra comfort and control that reduces fatigue during long operations under the microscope.

ANTIMAGNETIC

Titanium is non-toxic and non-magnetic. In contrast to stainless steel, titanium instruments cannot be magnetic. For example, a stainless steel needle will not "stick" to a titanium needle holder.

NO RUST & LONG LIFE

Titanium is highly corrosion resistant. It is stronger and more durable than stainless steel. Still, the life and durability of titanium instruments depend upon the care it receives during use, cleaning, sterilisation and storage.



CARE AND HANDLING TIPS

The following guidelines are given to allow you to optimise the performance and longevity of the instrument.

- Do not allow blood, tissue, cellular debris or saline to dry on the instrument.
- Flush the instrument in distilled water and a neutral pH detergent; avoid any acid based products.
- Inspect the instrument regularly under magnification for cleanliness and damage, replace if necessary.
- Use a soft brush to clean handles and nothing rougher than facial tissue for the tips of the instrument.
- Ultrasonic cleaning may be used where appropriate.
- Store instruments in a protective tray for sterilisation.



single level tray
E45-005

MINITAINER TRAYS

The Minitainer line of small to medium sized trays is specifically designed to help organise and protect delicate instruments during sterilisation, transport and storage.

BENEFITS

- Various sizes help customise procedural sets.
- Soft silicone finger mats (latex free) gently secure instruments and provide ventilation to facilitate drying.
- Clear Radel® lids allow easy identification of instruments.

E45-005 (180x75x18.5 mm)
for 3-5 instruments

E45-015 (267x160x16 mm)
for 10-15 instruments

E45-025 (267x160x35 mm)
double level tray
for 15-25 instruments



TITANIUM EYE INSTRUMENTS

**Sapphire and
Diamond Knives**
page 64-69



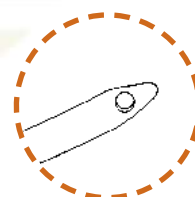
Vitreoretinal Instruments
page 170-177



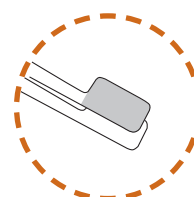
IOL Cutters
page 132-133

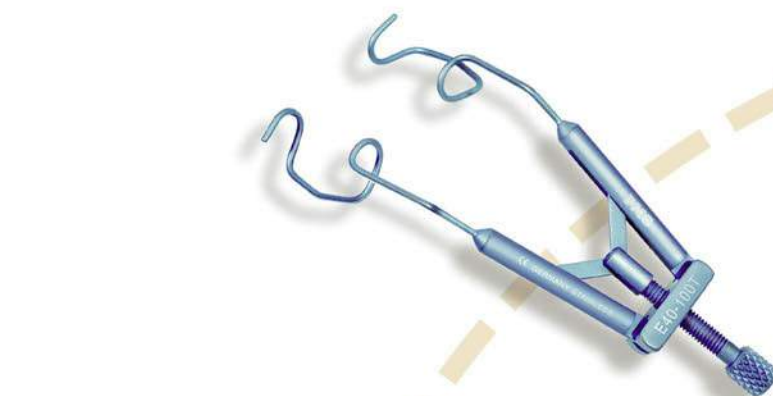


Bimanual I/A Systems
page 110-119



Salz
Nucleus Splitter Forceps
cross-action paddle style jaws,
textured external surfaces,
7.5 cm
E30-562T





**Lieberman
Temporal Speculum**
E40-100T adult size
E40-100TS child size



**Lieberman
Nasal Speculum**
E40-101T adult size
E40-101TS child size



**Lieberman
Nasal Speculum**
E40-103T adult size
E40-103TS child size



**Lieberman
Temporal Speculum**
E40-104T adult size
E40-104TS child size



further sapphire knives are
shown on page 64 to 67

Sapphire
Clear Cornea Knives
0.2 mm thick blades
available in 3 widths:

E10-042 2.8 mm

E10-043 3.0 mm

E10-044 3.2 mm



for controlled and
precise clear corneal incision

Fyodorov
Phaco Fixation Ring
3/4 open swivel ring with
atraumatic concentric rings,
11.5 mm ID, 13.0 cm

E10-511T

for atraumatic fixation of the eye during phaco



Fine-Thornton
Phaco Fixation Ring
3/4 open swivel ring
with multiple teeth,
13.0 cm

E10-513T 13 mm ID for clear corneal incision

E10-516T 16 mm ID for scleral tunnel incision



Maloney
Astigmatic Keratometer
E10-690T

for qualitative evaluation of astigmatism



Castroviejo
Eye Caliper
double sided scale
in 1 mm increments
E40-552T 0-15 mm
E40-554T 0-20 mm



TITANIUM EYE INSTRUMENTS



NUCLEUS MANIPULATORS

with stainless steel shafts and tips

**Micro
Nucleus Spatula**
vaulted 12 mm shaft,
disc shaped tip, 12.0 cm
E15-400T

ideal for
manipulating and
rotating the nucleus as well as to push back
the iris in case of a small pupil

**Koch II
Nucleus Spatula**, light curved shaft,
duckbill style tip with notches, 12.0 cm
E15-418T

to manipulate and control
the nucleus during phaco procedures; the notched tip facilitates
nucleus rotation if needed

**Jaffe-Bechert
Nucleus Rotator**
angled 9 mm shaft, blunt forked tip, 12.0 cm
E15-423T

ideal to impale, manipulate
and rotate soft and hard nucleus

**Drysdale
Nucleus Manipulator**
angled 10 mm shaft, paddle shaped tip, 12.0 cm
E15-465T

ideal for manipulating
tissue, rotating and cracking
the nucleus; used by many surgeons for
the "Divide and Conquer" technique

**"Connor Wand"
Nucleus Manipulator**
curved, ball-like tip,
12.0 cm
E15-467T

designed to spin, chop and crack
the nucleus; ideal to protect the
capsule posteriorly, and Iris
during Phaco & I/A
cortical clean up



also available on coloured aluminium handles, see page 94 and 95

LENS AND IRIS HOOKS

with stainless steel shafts and tips



Lester
Lens Pusher
angled 10 mm shaft, 0.25 mm dia.
hour glass shaped tip, 12.0 cm

E15-501T

Sinskey II
Lens Manipulating Hook
0.2 dia. blunt tip, 12.0 cm

E15-560T straight

E15-561T angled

Rentsch
Lens Manipulator
& Iris Retractor
straight shaft, "boat hook" tip, 12.0 cm

E15-562T

Kuglen
"Push-Pull" Lens
Manipulator & Iris Hook
angled 10 mm shaft,
ball shaped tip, 12.0 cm

E15-565T

Bonn
Micro Iris Hook
delicate 0.3 mm
blunt tip, 12.0 cm

E15-602T straight

E15-603T angled



also available on coloured aluminium handles, see page 130 and 131

TITANIUM EYE INSTRUMENTS



PHACO CHOPPERS

with stainless steel shafts and tips



Fukasaku
Phaco Splitter
and Iris Pusher
wedge shaped
90° inferior
cutting edge,
12.0 cm

E15-653T

for the "Snap & Split" technique; used to crack the nucleus in the central "safe area" and to push back the iris for better visibility



Rosen
Universal Phaco Splitter
wedge shaped 90° inferior
cutting edge, 12.0 cm

E15-655T

designed for the "Phaco Chop" technique; the tip is long enough to penetrate the entire nucleus thickness

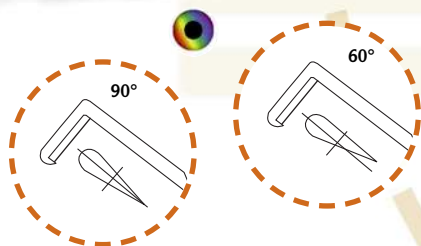


world-wide best seller

Nagahara
Phaco Chopper
wedge shaped tip, 12.0 cm

E15-656T 60° cutting edge
to cut in the same direction as the phaco handpiece

E15-659T 90° cutting edge
to cut toward the side port incision



Seibel
Phaco Chopper
0.5 mm olive tip,
curved 2.2 mm,
12.0 cm

E15-669T

the special wedge shaped, curved blade allows efficient chopping toward the phaco tip, providing effortless separation with maximum safety



also available on coloured aluminium handles, see page 94 and 95

PHACO SPATULAE

PMS



with stainless steel shafts and tips

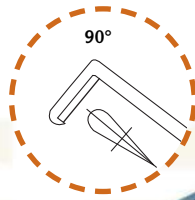
**Rowen
Phaco Spatula
13.0 cm
E15-673T**



combination of a Rosen Phaco Splitter & Bechert Nucleus Rotator



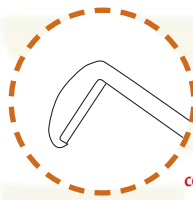
**Nagahara/Sinsky
Phaco Spatula
13.0 cm
E15-675T**



combination of a Nagahara Phaco Chopper & Sinsky IOL Hook



**Masket
Phaco Spatula
13.0 cm
E15-676T**



combination of Rosen Phaco Splitter and round spatula with disc shaped tip

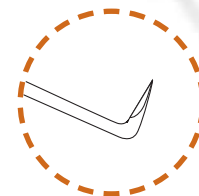


**Chang
Phaco Chopper
13.0 cm
E15-677T**



ideal for vertical and horizontal phaco chopping

combination of Lieberman "Microfinger" & Maloney "Quick Chop" tip

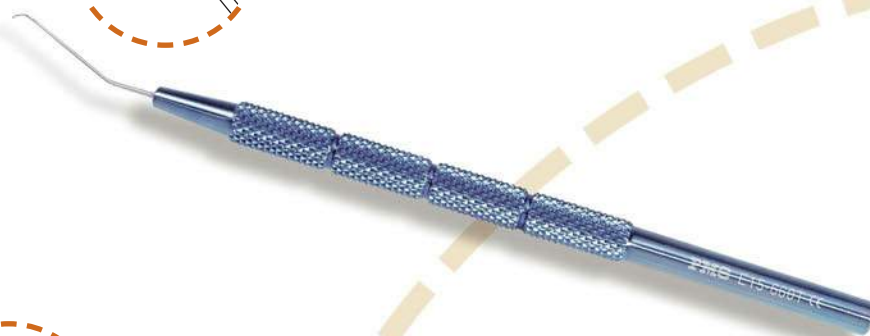


TITANIUM EYE INSTRUMENTS



AKAHOSHI STYLE NUCLEUS SUSTAINERS

with stainless steel shafts and tips



Nucleus Sustainer
microball tip, angled 1.5 mm, 12.0 cm
E15-660T^o

to reduce the stress on the capsular bag and zonules



Nucleus Sustainer
olive shaped tip, angled 1.9 mm, 12.0 cm
E15-661T^o

for stable nuclear support during prechopping



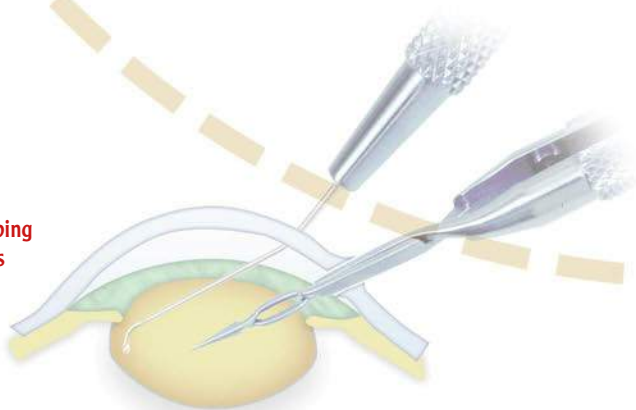
Nucleus Ring Sustainer
1 mm dia. ring, angled 2.5 mm, 12.0 cm
E15-662T^o

supports the nucleus from posterior side
during vertical prechopping



Sharp Prechopper
for very hard nucleus
(grades 4 and 5)
E30-566T straight
E30-567T angled

^o to support the nucleus during prechopping
with the Akahoshi Style Prechoppers
for counter prechop technique.

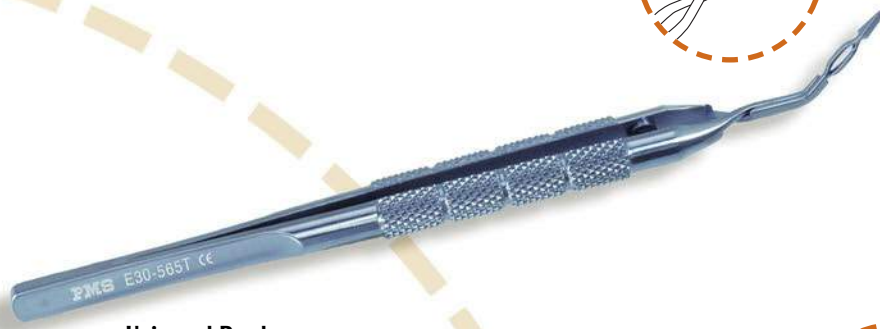


AKAHOSHI STYLE PRECHOPPERS

PMS



for detailed product information,
please refer to page 95

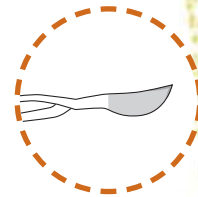


Universal Prechopper

E30-564T straight

E30-565T angled

for medium to hard nucleus



Karate Prechopper

TC textured jaws

E30-568T

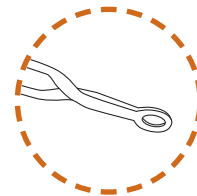
for vertical prechop of soft to medium nucleus



Hybrid Prechopper

E30-569T

for initial split and prechopping nucleus



Nucleus Splitter / Completer

E30-572T

for all prechopping
techniques

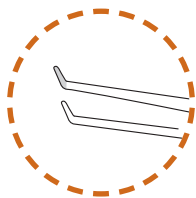
helps to...

- complete the prechopping of a partially prechopped nucleus
- divide the nucleus after grooving for "divide & conquer" technique
- attain nuclear division even if the initial split was not deep enough

TITANIUM EYE INSTRUMENTS



FIXATION FORCEPS

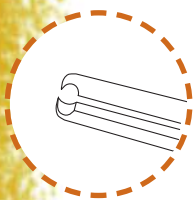


New



Akahoshi Style
Universal Micro Forceps
angled, blunt 0.35 mm fine tips
with TC textured inner surface,
10.5 cm
E30-239T

multi purpose forceps for fixating eye by grasping the bulbar conjunctiva; picking up foldable IOLs from case, implanting PMMA lenses, and fine suture tying

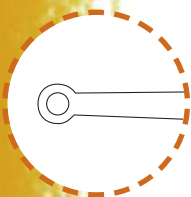


New



Koch
Paracentesis Fixation Forceps
grooved 0.1 mm tips, 11.0 cm
E30-240T

ideal to atraumatically hold the edge of the paracentesis during topical anesthesia procedures



New



Fechtner
Conjunctiva Forceps
ring shaped jaws with hole of 0.5 mm dia.,
fine tying platform, 10.5 cm
E30-241T

these forceps are ideal for atraumatic grasping and handling of the conjunctiva and other soft tissue.



New



Solish
Conjunctiva Forceps
ring shaped jaws with
2 holes of 0.4 mm dia.,
tying platform, 10.5 cm
E30-242T

CAPSULORHEXIS FORCEPS

PMS



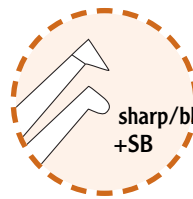
TIP DESIGNS



blunt tips
+BL



sharp tips
+SH



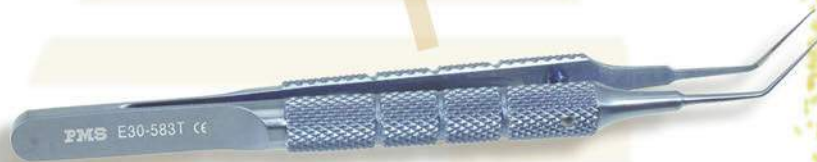
sharp/blunt tips
+SB

triangular jaws with delicate platforms and ultra fine grasping tips

Utrata
Capsulorhexis Forceps
angled 11 mm shanks,
10.5 cm
E30-581T+



Utrata
Capsulorhexis Forceps
angled 11 mm shanks
10.5 cm
E30-583T+



Masket
Capsulorhexis Forceps
vaulted 11 mm shanks,
10.5 cm
E30-589T+



Inamura Style
Capsulorhexis Forceps
13 mm vaulted shanks,
ultra fine grasping tips,
12.0 cm
E30-591T+



+ when ordering please specify tip design: BL=blunt, SH=sharp, SB=sharp/blunt

TITANIUM EYE INSTRUMENTS

**FOLDABLE LENS FORCEPS**

Buratto Style
Lens Insertion Forceps
 angled 9 mm shanks,
 biconvex jaws,
 10.5 cm
E30-646T



Spaleck Style
Lens Insertion Forceps
 angled 15 mm shanks, biconvex jaws, 11.0 cm
E30-648T



Fine Style
Universal Lens Folder
 angled 8 mm shanks,
 biconvex jaws, 10.5 cm
E30-650T



Ernest-McDonald Style
IOL Insertion Forceps
 cross-action shanks, low
 profile biconvex jaws, 10.5 cm
E30-663T



paddles
 effectively
 pick up lens
 for even folding



Seibel Style
Lens Loader
 angled 12 mm,
 paddle style jaws,
 11.0 cm
E30-667T

TYING & LENS HOLDING FORCEPS

PMS



TITANIUM EYE INSTRUMENTS

straight

PLATFORM DESIGNS

Jaffe
Tying Forceps
4 mm platform,
10.5 cm

E30-446T straight
E30-447T curved

curved

Tennant
Tying Forceps
6 mm platform,
10.5 cm

E30-448T straight
E30-449T curved

short
angled

McPherson
Tying Forceps
6 mm platform,
10.5 cm
E30-460T straight
E30-461T angled

Kelman-McPherson
Lens Holding Forceps,
angled, 8 mm platform,
10.5 cm
E30-463T

ideal for implanting PMMA IOLs

long
angled

Faulkner
Soft Lens Holding
Forceps, angled
11 mm round jaws,
10.5 cm

E30-645T

long angled,
round jaws

All tying platforms are covered with **Tungsten Carbide** to ensure that the forceps have a very firm grip.

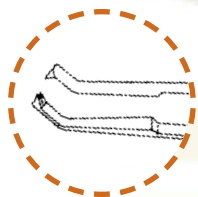


SUTURE TYING FORCEPS

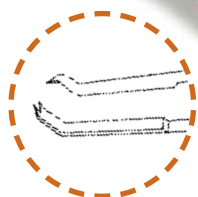
delicate, toothed forceps with tying platforms are ideal for grasping tissue and fine suture tying



Barraquer-Colibri
Corneal Forceps
1x2 teeth 90°, 7.5 cm,
without platform
E30-051T 0.12 mm
E30-052T 0.20 mm



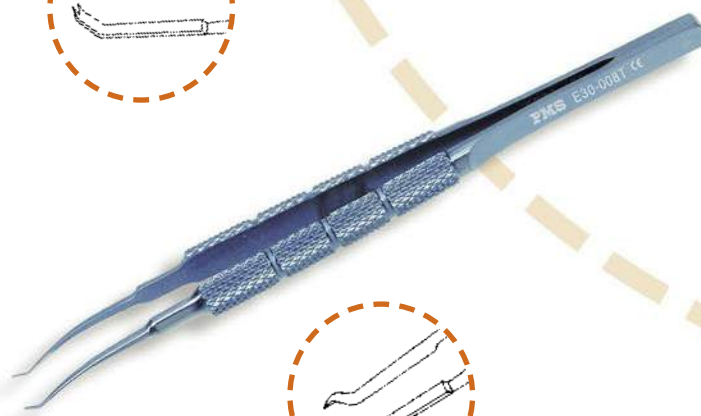
Barraquer-Colibri
Suture Tying Forceps
1x2 teeth 90°, 0.12 mm,
3 mm platform, 7.5 cm
E30-061T



Harms-Colibri
Suture Fixation Forceps
1x2 teeth 45°, 0.12 mm,
3 mm platform, 7.5 cm
E30-081T



Standard-Colibri
Corneal Fixation Forceps
1x2 teeth 45°, 0.4 mm,
5 mm platform, 7.5 cm
E30-085T



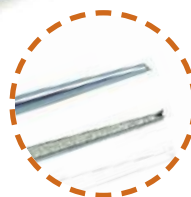
Girard
Corneoscleral Forceps
1x2 teeth 45°, 0.12 mm,
6 mm platform, 10.0 cm
E30-008T

SUTURE TYING FORCEPS

PMS



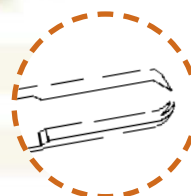
Castroviejo
Suture Tying Forceps
1x2 teeth 45°, 6 mm platform, 10.5 cm
E30-450T 0.12 mm
E30-451T 0.30 mm



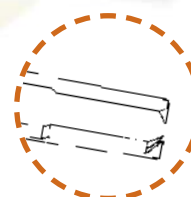
All tying platforms are covered
with **Tungsten Carbide**.



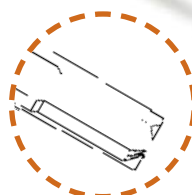
Girard
Corneoscleral Forceps
1x2 teeth 45°, 0.12 mm,
6 mm platform, 10.5 cm
E30-006T



Jaffe (Bonn)
Suture Tying Forceps
1x2 teeth 90°, 0.12 mm,
6 mm platform, 10.5 cm
E30-456T



Tennant
Suture Tying Forceps
1x2 teeth 90°, 0.12 mm,
6 mm platform, 10.5 cm
E30-458T



TITANIUM EYE INSTRUMENTS



NEEDLE HOLDERS

All Titanium Needle Holders have **Tungsten Carbide** covered jaws for firm, atraumatic grip and handling of delicate sutures and tissues.



ideal for 11-0 to 8-0 sutures



Barraquer
Needle Holder
very fine jaws,
9 mm x 0.4 mm,
12.5 cm

*E35-251T curved, without lock

*E35-253T curved, with lock



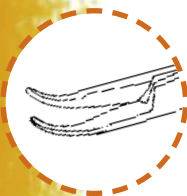
ideal for 11-0 to 8-0 sutures



Anis
Needle Holder
extra fine jaws,
9 mm x 0.3 mm,
12.5 cm

*E35-271T curved, without lock

*E35-273T curved, with lock



ideal for 11-0 to 7-0 sutures



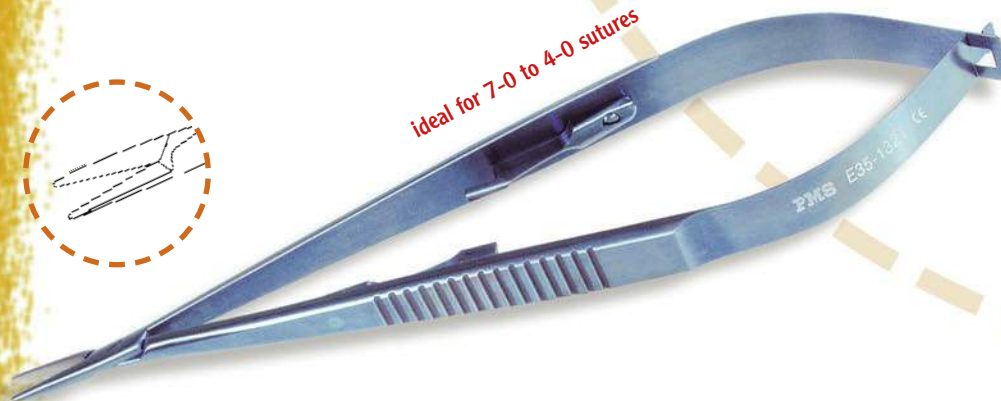
Barraquer
Needle Holder
(Catford Model)
short, fine jaws,
6 mm x 0.4 mm,
12.5 cm

*E35-301T curved, without lock

*E35-303T curved, with lock



ideal for 7-0 to 4-0 sutures



Castroviejo
Needle Holder
delicate jaws, 11 mm x 1.0 mm, 14.0 cm

*E35-132T
straight, with lock

*E35-133T
curved, with lock

*also available in stainless steel, please delete "T" from cat. no. when ordering.

TITANIUM EYE INSTRUMENTS

**ECONOMICAL,
ERGONOMICAL
& EFFICIENT**

- E40-078TE** Castroviejo Speculum, page 17
- E40-554TE** Castroviejo Eye Caliper, page 19
- E10-513TE** Globe Fixation Swivel Ring, page 19
- E10-003TEK** Beaver Chuck Handle #3K, page 18
- E35-010TE** Troutman-Chris Blade Breaker, page 18
- E10-014E** Sapphire Universal Knife 45°, page 65
- E10-022E** Sapphire Phaco Knife, 2.8 mm, page 64
- E15-423TE** Jaffe-Bechert Nucleus Rotator, page 21
- E15-561TE** Sinsky IOL Manipulating Hook, page 21
- E25-251TE** Micro Iris/Utility Scissors, page 22
- E25-334TE** Wescott Tenotomy Scissors, page 22
- E25-401TE** Vannas Capsulotomy Scissors, page 22
- E30-051TE** Barraquer Corneal Utility Forceps, page 23
- E30-430TE** Bonn Suture Forceps, long model, page 24
- E30-431TE** Castroviejo Suture Tying Forceps, page 24
- E30-417TE** Paufigue Suture Utility Forceps, page 140
- E30-422TE** Harms Tying Forceps, straight, page 24
- E30-460TE** McPherson Tying Forceps, straight, page 24
- E30-461TE** McPherson Tying Forceps, angled, page 24
- E30-448TE** Tennant Tying Forceps, straight, page 41
- E30-581TE+** Utrata Capsulorhexis Forceps, page 24
- E35-132TE** Castroviejo Needle Holder, straight, page 24
- E35-231TE** Barraquer Needle Holder, curved, page 25
- E40-110TE** Desmarres Lid Retractor, small, page 17
- E40-613TE** Schocket Scleral Depressor, d/e, page 19
- E20-331TE** Bimanual Irrigation Handle, page 112
- E20-341TE** Bimanual Aspiration Handle, page 113

Once thought to be expensive, titanium in life-cycle costing is now seen as economical. The key to its cost effectiveness is its long life and superior performance under routine working conditions. Virtually immune to a broad range of acids and alkalis, titanium instruments maintain their quality and their smooth surface finish when properly cleaned after each use.





TITANIUM EYE INSTRUMENTS



E10-513T



E10-043



E30-591T+



E15-660T



E30-565T



E30-667T



E10-690T

E40-100T Lieberman Eye Speculum, page 32

E10-513T Fine-Thornton Fixation Ring, page 33

E40-554T Castroviejo Eye Caliper, page 33

E10-043 Sapphire Clear Cornea Knife, page 64

E10-014 Sapphire Universal Knife 45°, page 65

E30-591T+ Inamura Capsulorhexis Forceps, page 41

E25-401T Vannas Capsulotomy Scissors, page 22

E15-656T Nagahara Phaco Chopper 60°, page 36

E15-673T Rowen Phaco Spatula, d/e, page 37

E15-660T Akahoshi Style Nucleus Sustainer, page 38

E30-565T Akahoshi Style Prechopper, page 39

E20-205 Pearce Nucleus Hydrodissector, page 88

E20-331T Bimanual Irrigating Handpiece, page 112

E20-343T Bimanual Aspirating Handpiece, page 113

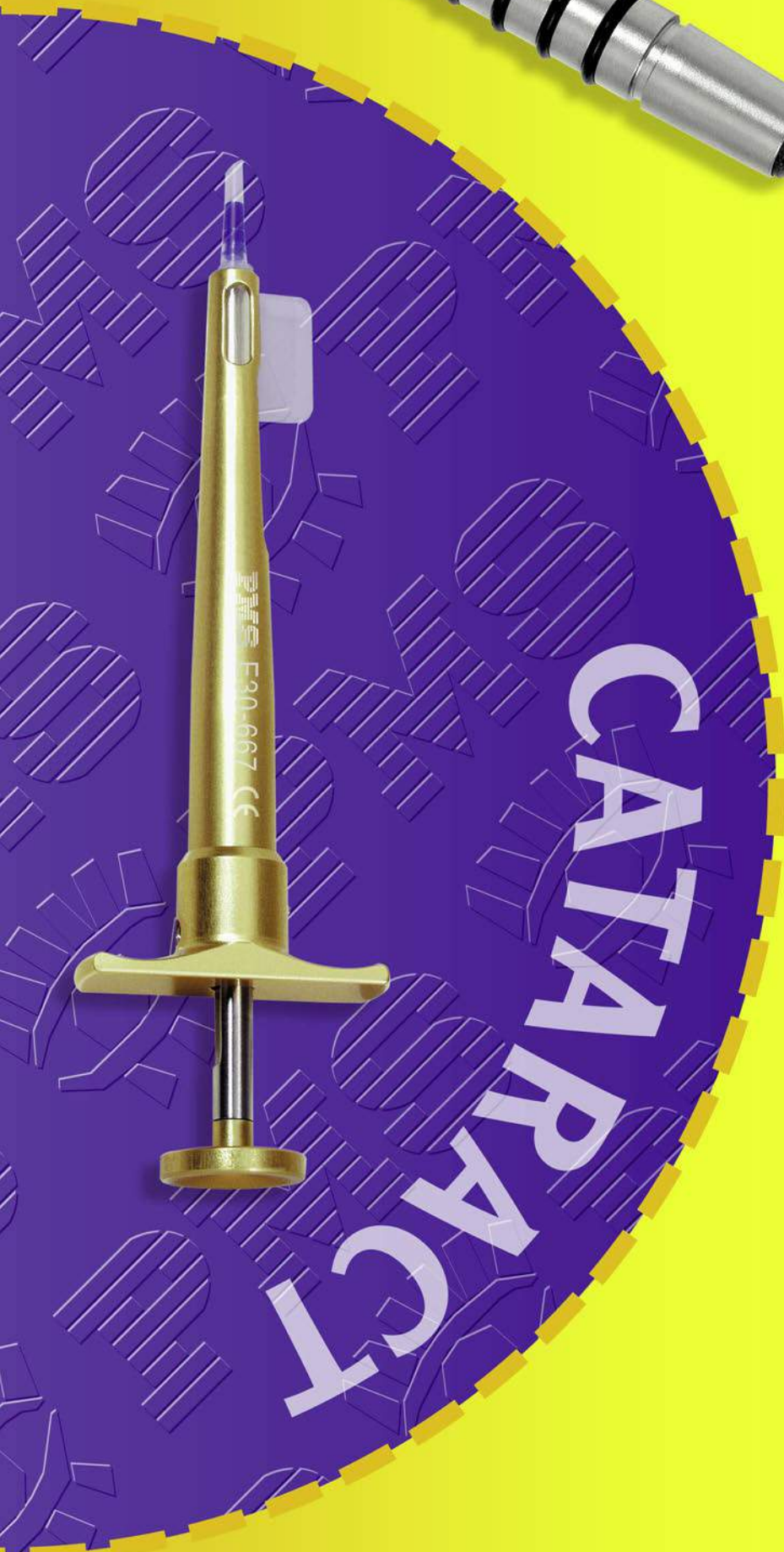
E15-501T Lester Lens Manipulator, page 35

E30-667T Seibel Foldable Lens Loader, page 42

E30-646T Buratto IOL Insertion Forceps, page 42

E10-690T Maloney Keratometer, page 33

PMS



PMS





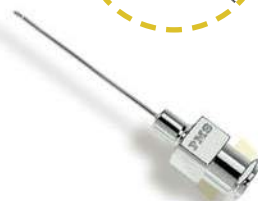
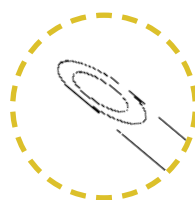
ANESTHESIA NEEDLES	52-53
EYE SPECULAE	54-55
GLOBE FIXATION RINGS	56
CALIPERS AND MARKERS	57
DISPOSABLE BLADES AND KNIVES	58
CONJUNCTIVA AND TENOTOMY SCISSORS'	59
FIXATION AND SUTURING FORCEPS	60-61
DISPOSABLE, SAPPHIRE AND DIAMOND KNIVES	62-69
DIAMOND KNIVES CARE PRODUCTS	70-71
ANTERIOR CHAMBER MAINTAINERS / IRRIGATORS	72-73
IRRIGATING CYSTOTOME CANNULAE	74
MANUAL CAPSULORHEXIS TECHNIQUES	75
CAPSULORHEXIS FORCEPS	76-77
CAPSULOTOMY SCISSORS	78-79
NUCLEUS REMOVAL INSTRUMENTS	80-81
IRRIGATION AND ASPIRATION CANNULAE	82
CORTEX REMOVAL & CAPSULE POLISHER	83-84
GAUGE CONVERSION CHART	85
CATARACT (ECCE) SET	86-87



PHACO CHOICES

- HYDRODISSECTION CANNULAE 88-89
- FIXATION RINGS & EYE SPECULAE 90-91
- DIAMOND & SAPPHIRE KNIVES 92-93
- ROTATORS/MANIPULATORS & PHACO CHOPPERS .. 94-95
- AKAHOSHI STYLE PRECHOPPERS 96-97
- CATARACT PHACO INSTRUMENT SET 98-99
- MANUAL FRACTURE INSTRUMENTS 100-101
- HELPFUL INSTRUMENTS 102-103
- TODAY'S GLAUCOMA INSTRUMENTS 104-105
- SMALL PUPIL MANAGEMENT 106-107
- POSTERIOR CAPSULE RUPTURE 108-109
- IRRIGATING & ASPIRATING SYSTEMS .. 110-115
- IRRIGATING PHACO CHOPPERS 116-117
- CLEANING CANNULATED PRODUCTS 118-119**
- MICRO INCISIONS INSTRUMENTS 120-121
- LENS IMPLANTATION INSTRUMENTS 122-131
- LENS EXPLANTATION INSTRUMENTS 132-133
- TENSION RING INJECTORS 134-135

CATARACT



**Atkinson Style
Anesthesia Needles**
23GA/0.6 mm, bevel blunt tip

E20-672 peribulbar, 22 mm

E20-674 retrobulbar, 38 mm

E20-673 retrobulbar/peribulbar, 32 mm



**Atkinson Style
Peribulbar Needles**

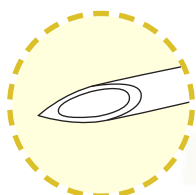
22 mm tube, bevel blunt tip,
single use, sterile (box of 10)

102-23-22 23GA/0.6 mm

102-25-22 25GA/0.5 mm

102-27-22 27GA/0.4 mm

Atkinson point needles - with single bevel 20° front open port -
are designed to push aside blood vessels rather than perforate.



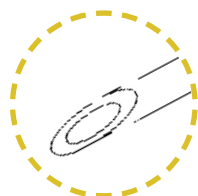
**Atkinson Style
Retrobulbar Needle**

38 mm tube, bevel blunt tip,
single use, sterile (box of 10)

101-23 23GA/0.6 mm

101-25 25GA/0.5 mm

103-25 25GA/0.5 mm, sharp point



**Atkinson Style
Retrobulbar/Peribulbar Needles**

32 mm tube, bevel blunt tip,
single use, sterile (box of 10)

102-23-32 23GA/0.6 mm

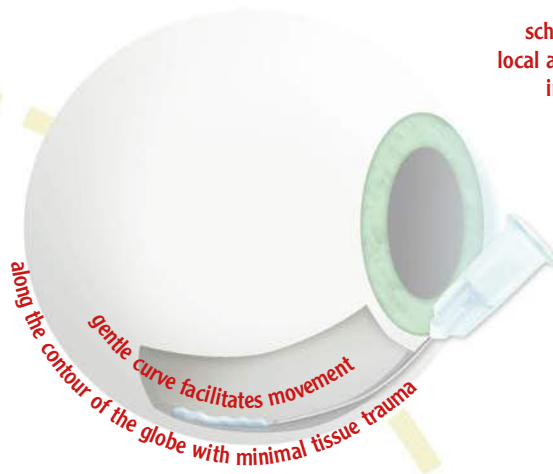
102-25-32 25GA/0.5 mm



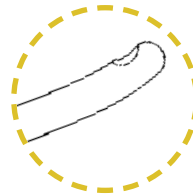
injection of local anesthetic prior to ophthalmic surgery



schematic representation of
local anesthesia solution injection
into Sub-Tenon's space

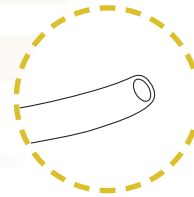


Corbin
Sub-Tenon Cannula
23GA/0.6 x 25 mm tube,
rounded tip, 0.3 mm top port
E20-683



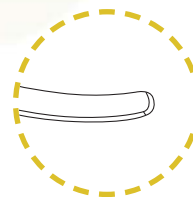
all cannulae are curved to a radius of 30 mm

Fukasaku
Sub-Tenon Cannula
23GA/0.6 x 25 mm tube,
tapered tip, front port
E20-685

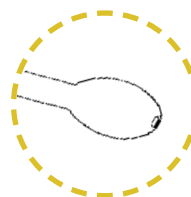


tapered and flattened tips facilitate advancement
within sub-Tenon's tissue plane

Stevens
Sub-Tenon Cannula
21GA/0.8 x 25 mm tube,
flattened tip, front port
E20-689



Troutman
Alpha-Chymotrypsin Cannula
25GA/0.5 x 27 mm tube,
olive tip, front port
E20-089





EYE SPECULAE



Barraquer Wire Speculum

E40-011 adult size

E40-012 child size

E40-013 infant size

E40-017 adult, heavy wire model
to better control eyelids

Kratz-Barraquer Wire Speculum

E40-031 adult size

E40-032 child size

E40-033 adult, heavy wire model
to better control eyelids

Barraquer Wire Speculum (new model), fenestrated rounded blades

E40-015 adult size, for nasal approach

E40-016 child size, for nasal approach

E40-018 adult size, for temporal approach

Jaffe Eyelid Retractor Set

E40-041 adult, 14 mm blade

E40-042 child, 10 mm blade
may be clamped to surgical drape
with suture or adhesives

Kratz-Barraquer Aspirating Speculum 6 ports on each blade

E40-033AM adult size

E40-033AS child size

use with syringe
or suction on low



EYE SPECULAE



Lieberman style eye speculae are an excellent choice for cataract and other anterior segment surgeries

**Lieberman
Temporal Speculum**

E40-100 adult size

E40-100S child size



Kratz style open blades allow easy access for cataract incision with phaco or I/A tips

**Lieberman
Nasal Speculum**

E40-101 adult size

E40-101S child size



**Lieberman
Temporal Speculum**

E40-102 adult size

V-wire blades help to retain the surgical drape under the eyelids



**Lieberman
Temporal Speculum**

E40-104 adult size

E40-104S child size

solid blades keep eye lashes from entering the surgical field



**Lieberman
Aspirating Speculum**
6 ports on each blade

E40-100A adult size

E40-100AS child size



to evacuate
fluid from the
surgical side

CATARACT INSTRUMENTS



Super instruments to achieve excellent fixation of the globe during construction of the Paracentesis, Phaco Incision, AK Incision, Limbal Relaxing Incision and during Lens Implantation.



Fyodorov
Phaco Fixation Ring
3/4 open swivel ring, with atraumatic concentric rings, 11.5 mm ID, 13.0 cm

E10-511T

for atraumatic fixation of the eye during phaco



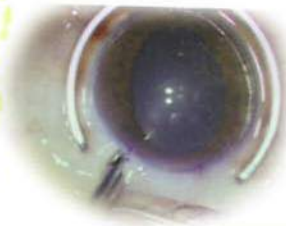
Fine-Thornton
Phaco Fixation Ring
3/4 open swivel ring, with multiple blunt teeth, 13.0 cm

E10-513 13 mm ID

for clear cornea incision

E10-516 16 mm ID

for scleral tunnel incision



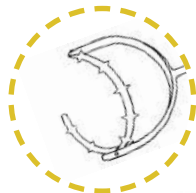
Fine-Thornton
Phaco Fixation Ring
3/4 open swivel ring, multiple blunt teeth

E10-513T 13 mm ID

for clear cornea incision

E10-516T 16 mm ID

for scleral tunnel incision



Gimbel
LASIK Stabilising Ring, 3/4 open swivel ring, blunt teeth on both sides, 13 mm ID, 13.0 cm

E10-517

for stabilizing either the right or the left eye during LASIK



most helpful for...

Castroviejo
Eye Caliper
double sided scale
E40-552 0-15 mm
E40-554 0-20 mm

...measuring white to
white of the corneal and
marking the limbal incision width

Osher
Incision Caliper
single scale reading
from 0 to 10 mm
E40-550

...internal measurement of cataract incisions

Galand
Incision Marker
pre-calibrated templates available in 3.0, 3.2, 3.5,
4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 7.5 and 8.0 mm width
E40-560+ size

...measuring cataract incisions before phaco,...

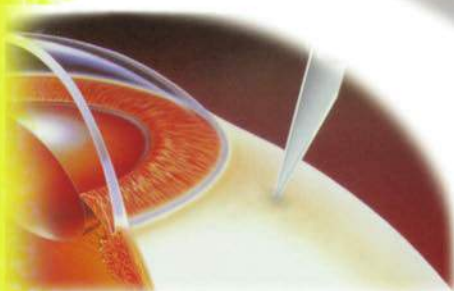
Memmen
Incision Gauge
pre-calibrated templates ranging from
2.0 to 4.0 mm width in 0.10 mm increments
E40-561+ size

...after phaco and after IOL implantation

Marking Pen
Gentian Violet Ink
sterile (box of 10)
52-100

can be used with any refractive/
cornea marking instruments

CATARACT INSTRUMENTS



Chuck Handle
(for miniature edged blades)

*E10-003K #3K, 10.0 cm

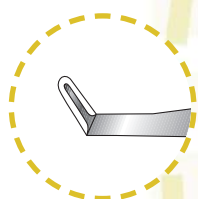
*E10-003KM #3KM, 7.5 cm



Miniature Edged Blades
sterile (pack of 10)

E10-065 #65 for stab incisions

E10-069 #69 for tunnel incisions



Lamellar Blades
#66-60, sterile (box of 6)

EL-6600

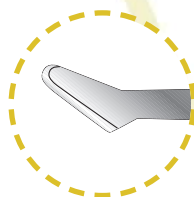
sharp all around surfaces;
ideal for undermining



Scleral Blades
#57, sterile (box of 6)

EL-5700

used for limbal incisions as well as preparing
scleral buckle tunnels in retina surgery



Scleral Knives
#57 with handle,
sterile (box of 6)

EL-6823H



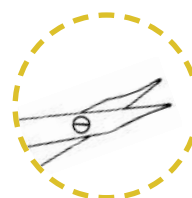
*also available in titanium, please add "T" to cat. no.



McPherson-Westcott
Conjunctiva Scissors
curved, small blades,
10.0 cm

E25-311 sharp tips

E25-331 blunt tips



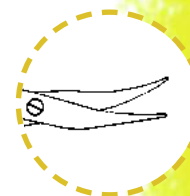
sharp tips are ideal for suture knots
and conjunctival incision, ...

Jaffe
Stitch Scissors
curved, medium blades,
sharp tips, 10.5 cm
E25-313



blunt tips for preparation and dissection of
other soft and delicate tissues, tendons, etc.

Westcott
Tenotomy Scissors
curved, medium blades,
blunt tips, 11.0 cm
E25-333



Stevens
Tenotomy Scissors
rounded blunt tips,

short model, 10.5 cm

E25-564 straight

E25-565 curved

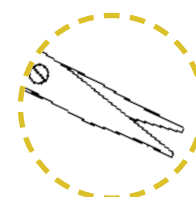
long model, 11.5 cm

E25-566 straight

E25-567 curved



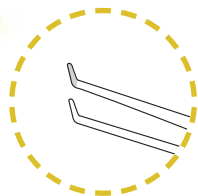
strong, stable scissors for
performing a tenotomy





CONJUNCTIVA FIXATION FORCEPS

CATARACT INSTRUMENTS

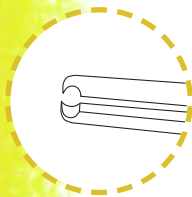


New



Akahoshi Style
Universal Micro Forceps
angled 30°, blunt 0.35 mm tips
with platform, TC textured
inner surface, 10.5 cm
E30-239T

multi purpose forceps for fixating eye by grasping the bulbar conjunctiva; picking up foldable IOLs from case, implanting PMMA lenses, and fine suture tying

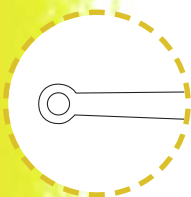


New



Koch Style
Paracentesis Fixation Forceps
grooved 0.1 mm tips, 11.0 cm
E30-240T

ideal to atraumatically hold the edge of the paracentesis during topical anesthesia procedures

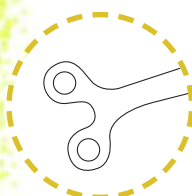


New



Fechtner Style
Conjunctiva Forceps
ring shaped jaws with hole of 0.5 mm dia.,
fine tying platform, 10.5 cm
E30-241T

these forceps are ideal for atraumatic grasping and handling of the conjunctiva and other soft tissue.



New



Solish Style
Conjunctiva Forceps
ring shaped jaws with
2 holes of 0.4 mm dia.,
tying platform, 10.5 cm
E30-242T

SUTURING FORCEPS

PMS

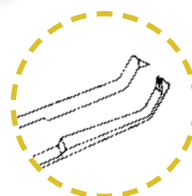


delicate, toothed forceps are
ideal for manipulation and fix-
ation of conjunctiva, limbal
area, corneal lips another
soft and delicate tissue
including tendons

Barraquer-Colibri
Corneal Suture Forceps
1x2 teeth 90°, delicate
tying platform, 7.5 cm

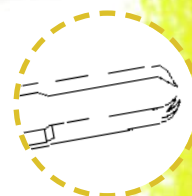
E30-061 0.12 mm

E30-063 0.30 mm



Micro (M-types)
Suture Fixation Forceps
1x2 teeth 45°, 0.12 mm
delicate tying platform,
8.5 cm

E30-412



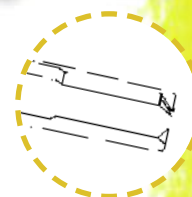
Troutman
Suturing Forceps
1x2 teeth 90°, 0.12 mm,
delicate platform, 10.0 cm

E30-438

Tying Forceps
delicate platform

E30-428 straight

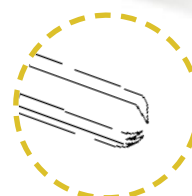
E30-429 curved



Castroviejo
Fixation Forceps
1x2 teeth 45°, 10.5 cm

E30-453 0.3 mm

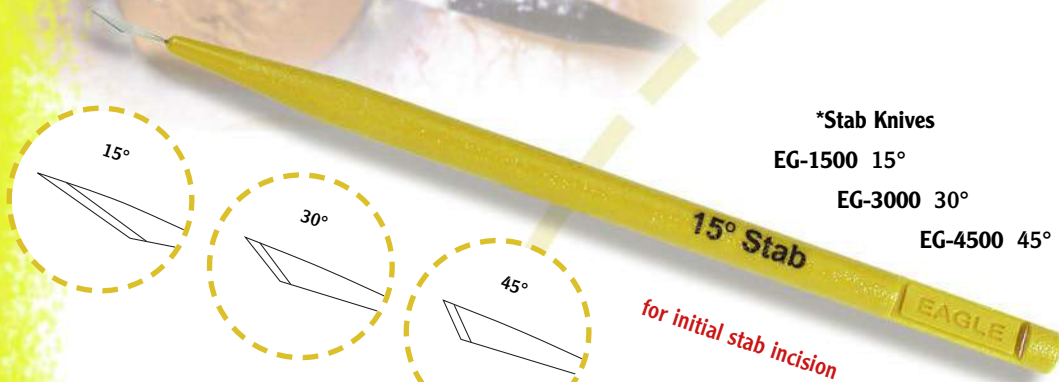
E30-455 0.5 mm



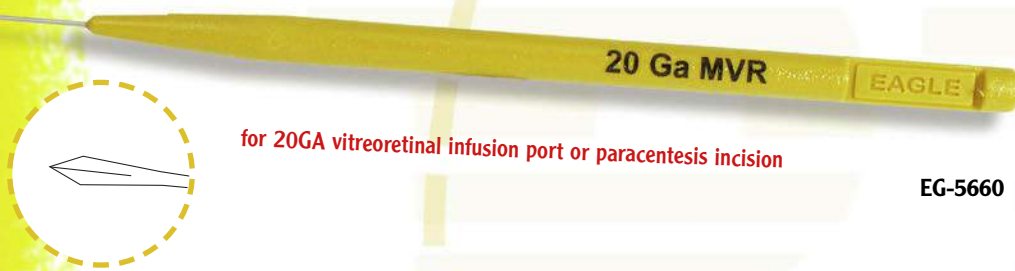
CATARACT INSTRUMENTS



CATARACT INSTRUMENTS



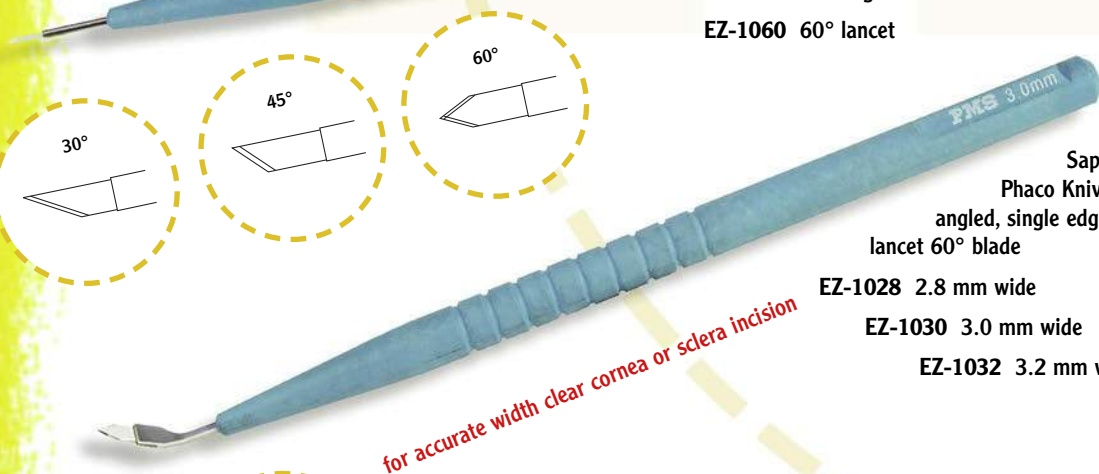
- *Stab Knives**
 EG-1500 15°
 EG-3000 30°
 EG-4500 45°



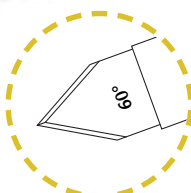
- *Stiletto MVR Knives**
 EG-5560 straight
 EG-5660 angled



- EZCut® Sapphire Eye Knives**
 straight, single edge
 blade, 1.0 mm x 0.2 mm thick
 EZ-1030 30° angle
 EZ-1045 45° angle
 EZ-1060 60° lancet



- EZCut® Sapphire Phaco Knives**
 angled, single edge,
 lancet 60° blade
 EZ-1028 2.8 mm wide
 EZ-1030 3.0 mm wide
 EZ-1032 3.2 mm wide



disposable knives, sterile, 6 per box

* Manufacturer:
 EAGLE LABS
 Rancho Cucamonga,
 California, USA



CATARACT INSTRUMENTS



***Crescent Knife**
angled 2.0 mm blade
(bevel up),
EG-9402

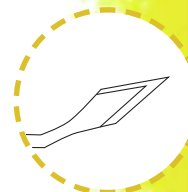
for creating a smooth scleral shelf incision



***Phaco Slit Knives**
angled blade (bevel up)
EG-4740 2.85 mm
EG-5570 3.0 mm
EG-5572 3.2 mm



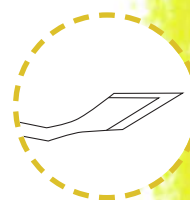
for accurate width phaco incision



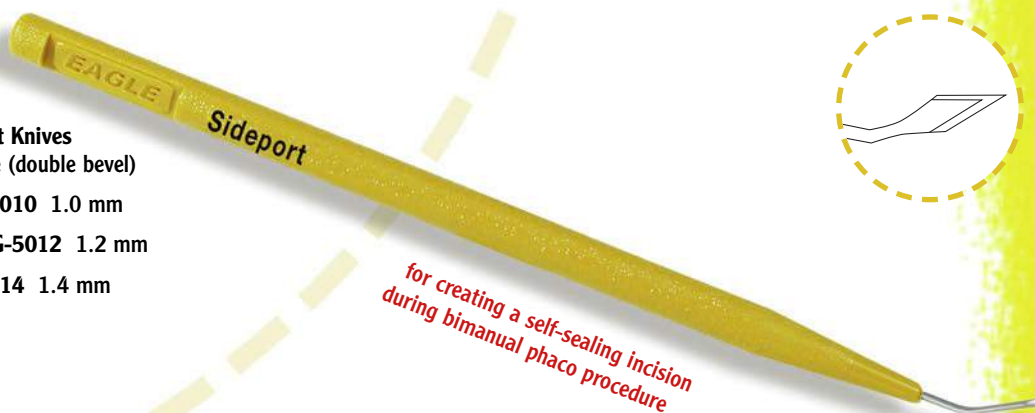
***Phaco Slit Knives**
(2.0 mm Sub)
angled blade (bevel up)
EG-1015 1.5 mm
EG-1018 1.8 mm
EG-1020 2.0 mm



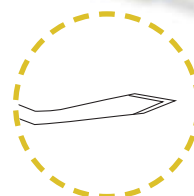
for bimanual phaco and micro cataract incision



***Sideport Knives**
angled blade (double bevel)
EG-5010 1.0 mm
EG-5012 1.2 mm
EG-5014 1.4 mm



for creating a self-sealing incision
during bimanual phaco procedure

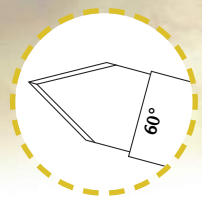


disposable knives, sterile, 6 per box



SAPPHIRE KNIVES

PMS EZCut® Sapphire Phaco Knives
- providing consistent sharpness for repeated use - are the perfect choice for those who want performance without the cost of a diamond knife.



very sharp precision cutting edges reduce trauma to the wound and recovery time following surgery

EZCut®

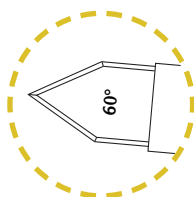
Sapphire Phaco Knives
angled, lancet 60° blade
(double edge)

E10-122 2.8 mm

E10-123 3.0 mm

E10-124 3.2 mm

for controlled
clear cornea and
sclera incisions



EZCut®

Sapphire Clear Cornea Knives
angled, keratome 60° blade (4 cutting edges)

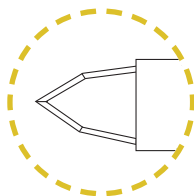
E10-142 2.8 mm

E10-143 3.0 mm

E10-144 3.2 mm

for accurate
clear cornea incisions

lightweight titanium handles have gnarling to aid secure grasping and holding during the procedure



EZCut®

Sapphire Trapezoid Knives
angled, tapered spear blade (double lancet)

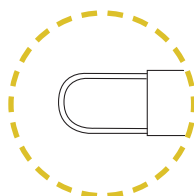
E10-152 2.1-2.9 mm

E10-153 2.35-3.2 mm

E10-154 2.5-3.4 mm

for precise and controlled phaco incisions

handles are spring action bayonet style for protection of the sapphire when not in use



EZCut®

Sapphire Crescent Knives
angled, facet-free blade (bevel up)

E10-191 1.5 mm

E10-192 2.0 mm

for scleral tunnel
incisions

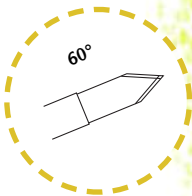
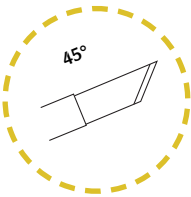
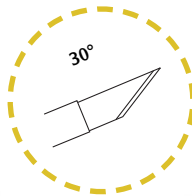
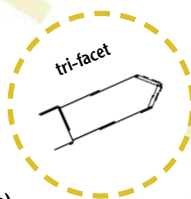
when the plunger is pushed forward the knife is ready for surgery

SAPPHIRE KNIVES

PMS



only models with width of 1.2 mm or less can be used for sideport incision



EZCut®

Sapphire Universal Knives
straight blade (double edge)
1.0 mm width x 0.2 mm thick

E10-112 20° tri-facet

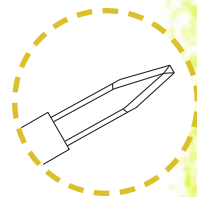
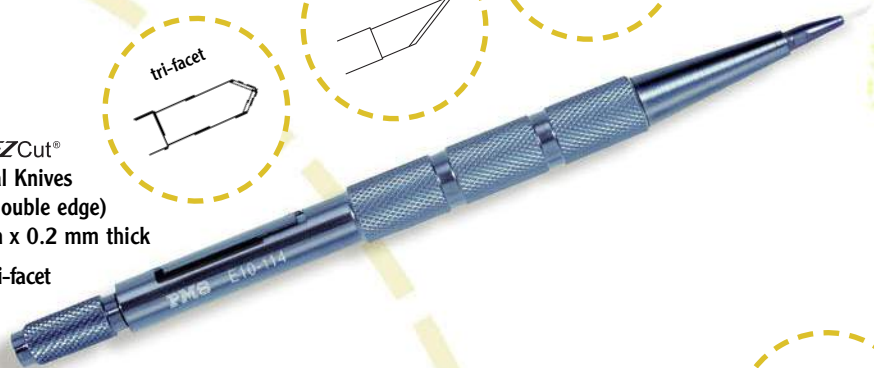
E10-113 30° angle

E10-114 45° angle

E10-116 60° lancet

E10-121 60° lancet, 1.2 mm wide

for smooth, true point micro stab incision



EZCut®

Sapphire Micro Incision Knives
angled, tapered spear shaped blade

E10-170 0.9-1.2 mm

E10-171 1.3-1.5 mm

E10-172 1.8-2.4 mm

for ultra small, precise bimanual phaco incision

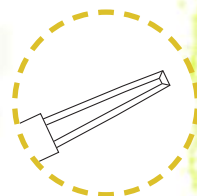


EZCut®

Sapphire Zaldivar Style Knife
angled, trapezoid shaped blade,
0.55 - 1.0 mm width,
4.5 mm long

E10-181

ideal for anterior segment procedures, initial groove,
sideport, sclera tunnel, clear cornea technique, etc.



Sterilising Case
(autoclavable) clear plastic,
for 1 sapphire knife

E45-000



supplied
without knife

CATARACT INSTRUMENTS



SAPPHIRE KNIVES - RETRACTABLE HANDLES

FEATURES AT A GLANCE:

- New lightweight, ALL-aluminum handle
- Round for perfect balance and control
 - Compatible with *EZChange*® blade holder
 - Selective, highly economical solution, too
 - Available in five colours:

New

E10-200AY handle, yellow

E10-200AR handle, red

E10-200AG handle, green

E10-200AB handle, blue

E10-200AP handle, purple



When changing the blade, place your fingers firmly on the flat part of the shaft and turn handle anti-clockwise to unscrew. Avoid touching the blade!



Do not use aggressive (alkaline) detergents or any kind of acid based products for cleaning the aluminium handle. Never use BSS for rinsing.

CATARACT INSTRUMENTS

SAPPHIRE BLADES - BLADE HOLDER

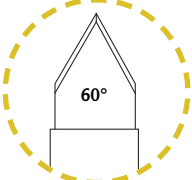
PMS



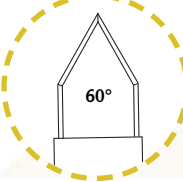
New

- Corundum Clear Gemstones; sharp similar to diamond
- All blades are computer video cut and inspected
- Blades fully mounted in stainless steel shaft

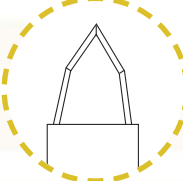


blade shapes	width in mm	removable holder with sapphire blade
 Lancet	2.8	E10-222
	3.0	E10-223
	3.2	E10-224

for controlled clear cornea and sclera incision

 Keratome	2.8	E10-242
	3.0	E10-243
	3.2	E10-244

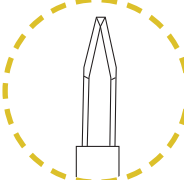
for accurate clear cornea incision

 Tapered Spear	2.5/2.9	E10-252
	2.5/3.2	E10-253
	2.5/3.4	E10-254

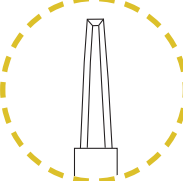
for precise phaco incision

 Crescent	1.5	E10-291
	2.0	E10-292
	2.8	E10-293

for smooth scleral shelf incision

 Trapezoid	0.9/1.2	E10-270
	1.3/1.5	E10-271
	1.8/2.4	E10-272

for ultra small bimanual phaco incision

 Zaldivar Style	0.55/1.0	E10-281

for anterior segment procedures, initial groove, side-port, sclera tunnel, clear cornea technique, etc.

Sapphire blade is fully mounted in a stainless steel shaft with thread



Choose your own handle and blade style



DIAMOND KNIVES

NOTE: Complementary sterilisation tray is included with diamond knife purchase.

EZCut®

Diamond Phaco Knives
lancet shaped 60° blade
(double edge)

E10-322 2.8 mm

E10-323 3.0 mm

E10-324 3.2 mm



for Clear Corneal and Scleral Incisions

Angled diamond knives in new titanium handle with bayonet mechanism.

EZCut®

Diamond Clear Cornea Knives
keratome shaped 60° blade
(4 cutting edges)

E10-342 2.8 mm

E10-343 3.0 mm

E10-344 3.2 mm



EZCut®

Diamond Trapezoid Knives
tapered spear shaped blade
(double lancet)

E10-352 2.0-2.3 mm

E10-353 2.6-3.0 mm

E10-354 2.8-3.2 mm

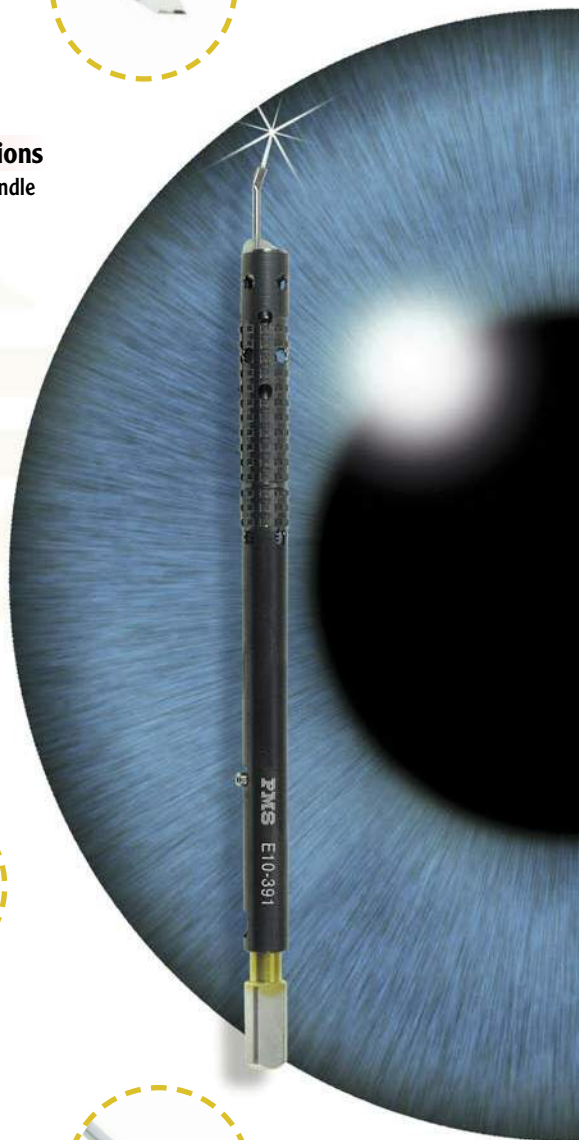
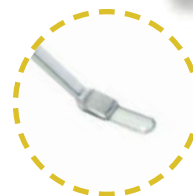


EZCut®

Diamond Tunnel Knives
crescent shaped (9 facet) blade

E10-391 1.5 mm

E10-392 2.0 mm



CATARACT INSTRUMENTS

Individual Designs and Special Mountings on Request.

DIAMOND KNIVES



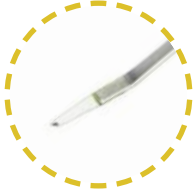
EZCut®

Diamond Micro Incision Knives
tapered spear blade (double lancet)

E10-360 0.9-1.2 mm

E10-361 1.3-1.5 mm

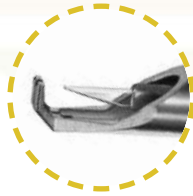
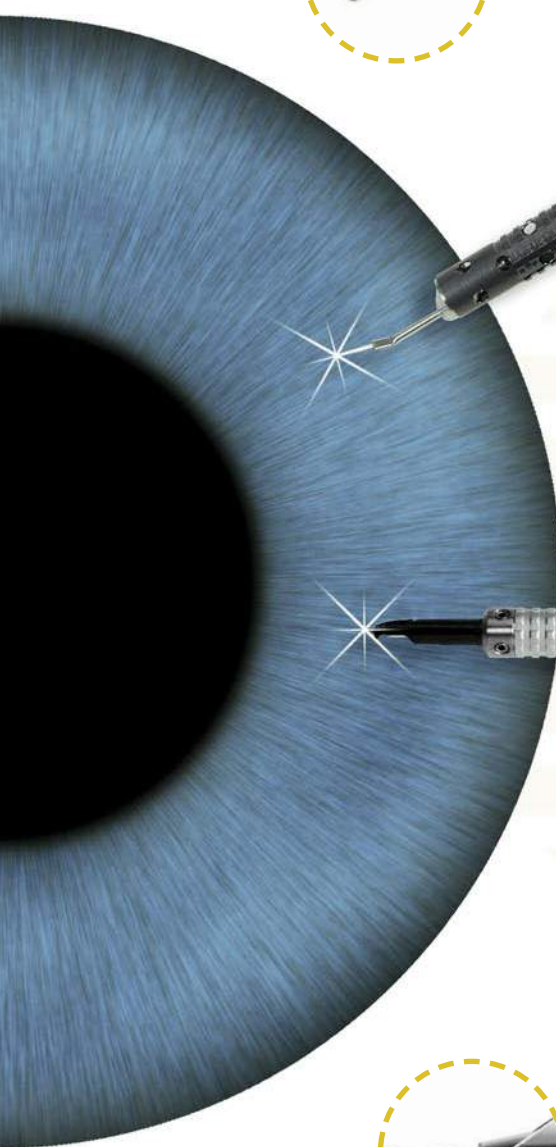
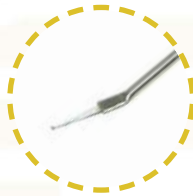
E10-362 1.8-2.0 mm



EZCut®

Diamond Zaldivar Style Knife
trapezoid shaped blade,
0.55 - 1.0 mm width,
4.5 mm long

E10-381



for Arcuate and T-Incision

Diamond Micrometer Knives are developed to complement modern surgical techniques for correction of myopia, astigmatism and hyperopia.



for Limbal Relaxing Incision (LRI)

Diamond Step Knives with single foot plate and preset blade depths are ideal to make controlled scleral incisions.

For more details please refer to page 157

Repairshop for all Types of Diamond Knives.



CARE PRODUCTS FOR DIAMOND KNIVES

CATARACT INSTRUMENTS

wet fully before use

Netcell®
Instrument Wipe
3" x 3" x 2 mm sponge,
single use, sterile (box of 20)

37-900

ideal for cleaning diamond blades,
and wiping delicate instrument tips

Netcell®
Diamond Knife Cleaning Block
single use, sterile (box of 10)

37-462

small pore construction absorbs fluids, ideal to
remove stains and debris from diamond blade

Economy
Illuminated Magnifying Loupe (pocket size)
biconvex lens 30 mm dia., 21.0 dpt./6.25X

1571

used to examine the cutting edge of diamond
knives and instrument tips prior to sterilisation

Minitainer
Sterilising Tray
autoclavable plastic (180 x 75 x 18.5 mm)
lid/base are perforated for steam penetration

E45-001 for 1 diamond knife

E45-002 for 2 diamond knives

for protecting diamond knives
during sterilisation and storage



CARE AND HANDLING TIPS FOR PMS SAPPHIRE AND DIAMOND KNIVES

WASH

Immediately after each use flush diamond blade with running water or distilled water using a syringe.

WIPE

Gently wipe the diamond blade from back to the tip with a lint-free, moistened special sponge (art. no. 37-900).

CLEAN

If the diamond blade is still not clean, use a diamond knife cleaning block (art. no. 37-462) to remove stains or debris.

ULTRA SONIC

Ultra Sonic Cleaning is not recommended. Where used, restrict to low power for 60 seconds with the blade retracted into the handle.

EXAMINE

The diamond blade should be examined under high magnification for tip and cutting edge damage prior to sterilisation and each use.

RETRACT

Fully retract the diamond blade into the handle safety position and **STORE** it in a protective tray (art. no. E45-002) for sterilisation.

STERILISE

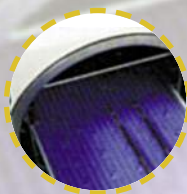
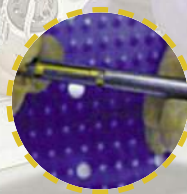
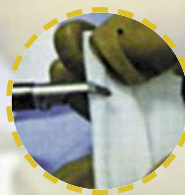
The diamond blade can be gas, flash or steam sterilised (in autoclave). The temperature should not exceed 273°F/134°C.

CLOSE

Never keep the diamond blade open while handing it over to others or when laying it down (store it).

TOUCH

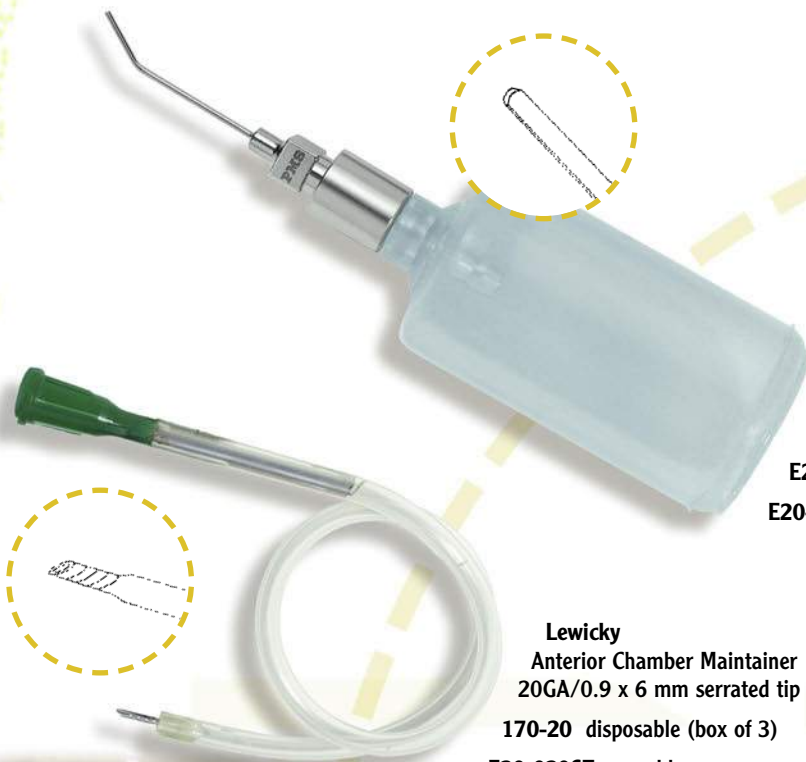
Always ensure that the diamond blade never touches any metal surface. If possible keep your diamond knife separate from other instruments.





ANTERIOR CHAMBER MAINTAINER

CATARACT INSTRUMENTS



Bishop-Harmon
AC Irrigator System
E20-001 complete
E20-002 silicone bulb
E20-003 LL adaptor
E20-004 19GA cannula

Lewicky
Anterior Chamber Maintainer
20GA/0.9 x 6 mm serrated tip
170-20 disposable (box of 3)
E20-020ST reusable

cannula tips of reusable maintainers are attached to
180 mm long silicone tubing with Luer-Lock adaptor



Heslin
Anterior Chamber Maintainer (reusable)
23GA/0.6 x 6 mm bevelled blunt tip
E20-023PT polished
E20-023TT textured

Anterior Chamber Maintainer (reusable)
23GA/0.6 x 6 mm "Flager" tip
E20-023FT

Rainin
Suturing Cannula Set (reusable)
18GA/1.2 x 6 mm blunt tip,
with suturing flange
E20-018SF

ANTERIOR CHAMBER IRRIGATORS

PMS



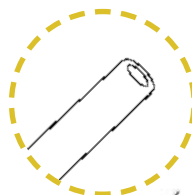
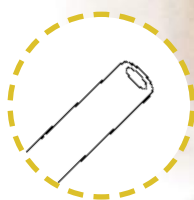
Anterior Chamber Irrigating Cannula

25 mm straight tube,
single use (box of 10)

112-25 25GA/0.5 mm

112-27 27GA/0.4 mm

112-30 30GA/0.3 mm



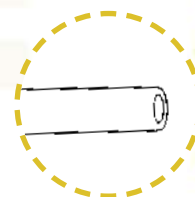
Anterior Chamber Irrigator

25 mm tube, angled 7 mm,
single use (box of 10)

110-25 25GA/0.5 mm

110-27 27GA/0.4 mm

110-30 30GA/0.3 mm



McIntyre

Anterior Chamber Cannula

15 mm straight tube - 12 mm angled tube

E20-043 30GA/0.30 mm E20-047

E20-045 26GA/0.45 mm E20-048

E20-046 23GA/0.60 mm E20-049



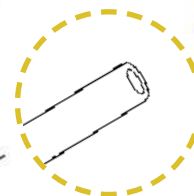
Rycroft

Air Injection Cannula

20 mm tube, angled 5 mm

E20-030 30GA/0.3 mm

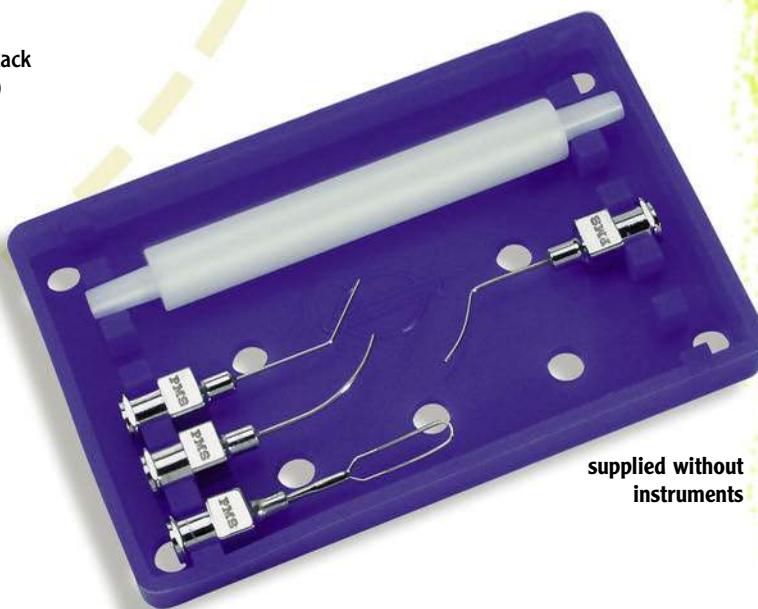
E20-031 27GA/0.4 mm



Silicone Cannula Rack
autoclavable, (85x55x8 mm)

E45-085

for secure positioning of
conventional cannulae
and handpieces



supplied without
instruments

CATARACT INSTRUMENTS



DISPOSABLE IRRIGATING CYSTOTOMES

CATARACT INSTRUMENTS



1 ml syringe provides the optimum hydraulics and feel; larger syringes can produce excessive flow with only light pressure of the plunger

Irrigating Cystotome, straight

120-25S 25GA/0.5 x 16 mm

120-27S 27GA/0.4 x 13 mm

120-30S 30GA/0.3 x 19 mm

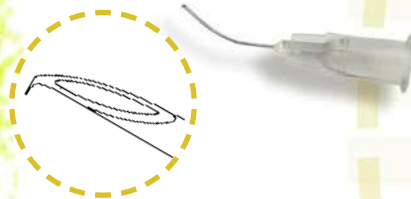
to perform a can-opener technique

All Glass Syringe
Luer-Lock cone

E20-801 1 ml

E20-802 2 ml

provides smooth control of hydrodissection, hydrolineation and manipulation of the nucleus



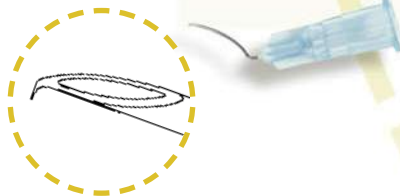
Joyce

Irrigating Cystotome, curved

220-25 25GA/0.5 x 16 mm

220-27 27GA/0.4 x 13 mm

for intercapsular/endocapsular techniques



Irrigating Cystotome, formed

120-25F-12 25GA/0.5 x 16 mm

120-27F-12 27GA/0.4 x 13 mm

for direct puncture capsulorhexis



Irrigating Cystotome, angled

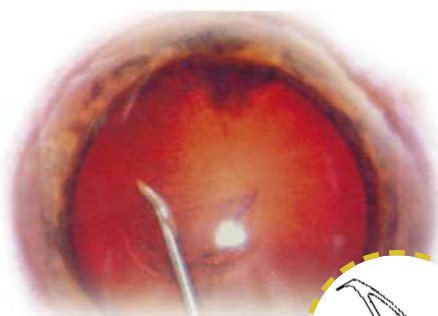
123-25 25GA/0.5 x 16 mm

123-27 27GA/0.4 x 13 mm

for CCC techniques

disposable cannulae, sterile, 10 per box

Manual Capsulorhexis remains the favourite standard procedure as it offers greater resistance to capsule tearing and also reveals a smooth regular edge.



Capsulorhexis in progress using a cystotome cannula



Direct Puncture Capsulorhexis

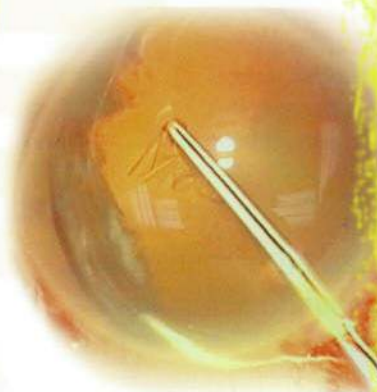
A simple technique is to use a 27 gauge or 30 gauge bent cystotome and directly puncture the clear cornea to create a capsulorhexis without a groove or stab incision. The technique offers savings in instruments and viscoelastics and is ideally suited for bimanual micro incision phaco surgery. For more details: M.Spencer, MD, 1179 Seafeld Crescent, Nanaimo, BC V9S4S1, Canada, E-mail: martin.spencer@shaw.ca



Anterior capsule is torn to complete a circular tear

Continuous Curvilinear Capsulorhexis (with cystotome cannula)

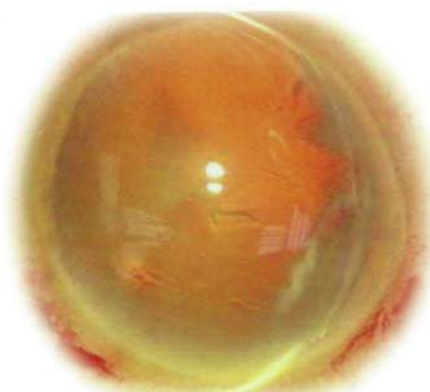
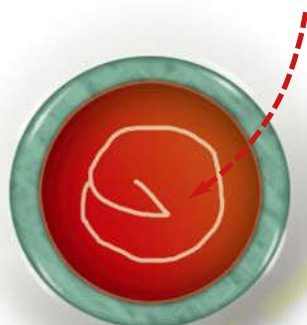
Initiation of a 5 to 6.5 mm continuous curvilinear capsulorhexis (CCC) is performed with a 27 gauge or 30 gauge bent needle. The cystotome is introduced through the side port and creates the first puncture on the center of the anterior capsule and then creates the anterior capsular flap. The anterior capsule is torn in a curved fashion by pushing or pulling the flap to create an optimal circular opening.



Capsular flap grasped with capsulorhexis forceps

Continuous Curvilinear Capsulorhexis (with forceps)

The tips of a capsulorhexis forceps are used to puncture the anterior capsule. A flap is created by grasping the inferior end of the puncture and lifting it anteriorly. The edge of the flap is grasped and then re-grasped in a curved fashion creating a circular tear. **Ideally, the puncture site should always be in the central "safe" area of the anterior lens capsule.**



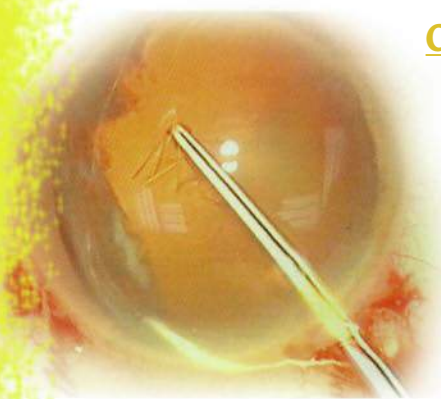
Capsulorhexis shown with an optimal circular opening



CAPSULOREXIS FORCEPS

"Always keep in mind"

a well defined capsulotomy is of supreme importance. An irregular capsulotomy will create difficulties throughout the remainder of the procedure.



Ultrata
Capsulorhexis Forceps
angled 11 mm shanks,
10.5 cm

E30-581+

TIP DESIGNS



...grip, lift and pull



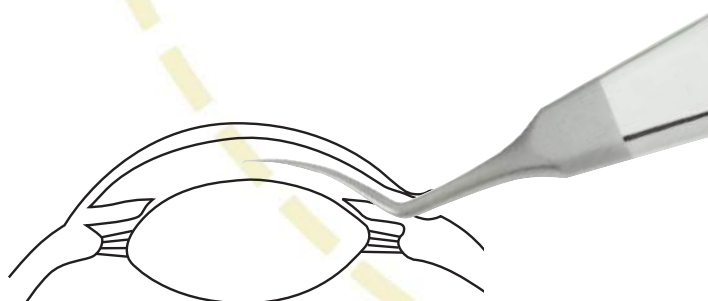
...penetrate and tear

triangular jaws with delicate platforms
and ultra fine grasping tips are ideal to...



Masket
Capsulorhexis Forceps
vaulted 11 mm shanks,
10.5 cm

E30-589+



vaulted shaft forceps allow to perform the capsulorhexis
from a more posterior incision without gaping the wound

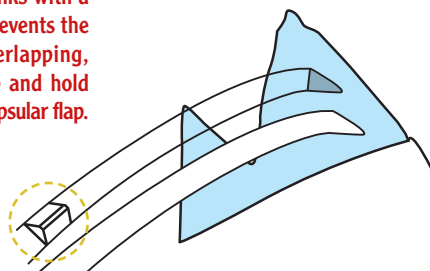
*when ordering please specify tip design: BL=blunt, SH=sharp

CAPSULOREXIS FORCEPS

PMS



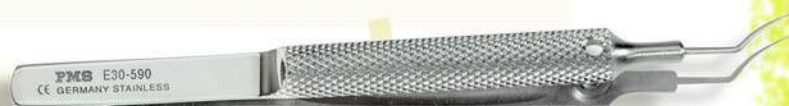
Featuring very thin, angled and vaulted shanks with a **calibrated heel stop**. This design prevents the ultra fine tips from overlapping, tough enough to grip and hold the edge of the capsular flap.



Utrata
Capsulorhexis Forceps
angled 11 mm shanks,
10.5 cm
E30-583+



Masket
Capsulorhexis Forceps
vaulted 11 mm shanks,
10.5 cm
E30-590+



Inamura Style
Capsulorhexis Forceps
vaulted 13 mm shanks,
ultra fine tips, 12.0 cm

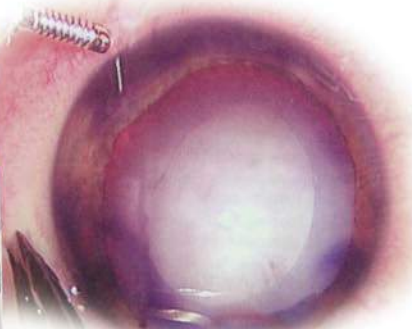
E30-591+

ideal for CCC during
micro incision surgery



Oftalblu
Trypan blue 0.1 %
-sodium chloride- purified water
does not contain preservatives
supplied in 1 ml bottle, sterile packaged

sterile intraocular solution for
anterior capsule staining
during cataract operati-
on

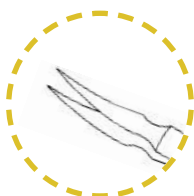


A CCC is performed with the aid of
trypan blue and an ACM inserted
through the paracentesis.

CATARACT INSTRUMENTS



ideal for cutting the anterior capsule, ...

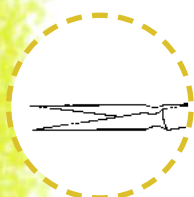


Vannas
Capsulotomy Scissors
5 mm blades, sharp tips, 8.2 cm

E25-400 straight

E25-401 curved

E25-405 angled

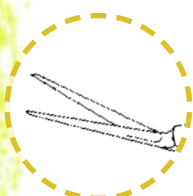


Gills-Vannas
Capsulotomy Scissors
7 mm blades, sharp tips, 8.2 cm

E25-410 straight

***E25-411** curved

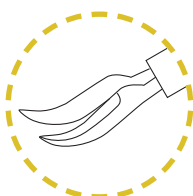
E25-415 angled



Ong
Capsulotomy Scissors
angled 9 mm blades, 8.5 cm

E25-440 blunt tips

E25-442 sharp tips



EZChange® Side Port Capsulotomy Scissors
removable tips with 20GA/0.9 x 30 mm curved tube,
2 mm sharp blades, 15.2 cm

E25-460 straight blade

E25-461 curved left

E25-462 curved right

ideal for cutting capsulorhexis
edge through a paracentesis



removable scissors tips
(E25-460R, E25-461R & E25-462R)
and titanium squeeze handle (E25-600T)
can be ordered separately

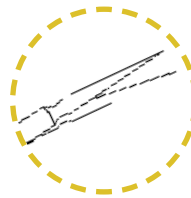
*also available on titanium handle, please add "T" to cat. no.

CAPSULOTOMY SCISSORS

PMB



snips capsule tags, iris, cornea and membranes



Gills-Welsh
Capsulotomy Scissors
very thin 10 mm blades,
sharp tips, 8.5 cm

E25-430 straight

E25-431 curved



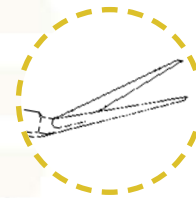
Uthoff-Vannas
Capsulotomy Scissors
very thin 10 mm blades,
strong curve, blunt tips,
8.2 cm

E25-433



Stern-Gills
Capsulotomy Scissors
very thin 10 mm blades,
angled up, sharp tips,
8.5 cm

*E25-435



Janach 4223 Style
Micro Capsulotomy Scissors
very delicate 7 mm blades,
lightly curved, 10.5 cm

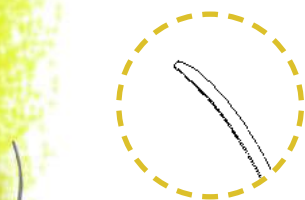
E25-451 blunt tips

E25-453 sharp tips



*also available on round titanium handle, please add "T" to cat. no.

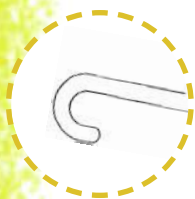
CATARACT INSTRUMENTS



Barraquer
Iris Repositor
vaulted 12 x 0.5 mm
rounded blade, 12.0 cm

E40-662

ideal for repositioning - tucks,
pushes, retracts and retains
- the iris during ECCE



Bonn
Micro Iris Hook
delicate 0.3 mm blunt tip, 12.0 cm

E15-602 straight

E15-603 angled

used to retract the iris
and anterior capsule, supports nucleus delivery



Barrett
Nucleus Rotator/Manipulator
angled 90° "mushroom style" tip, 11.5 cm

E15-466

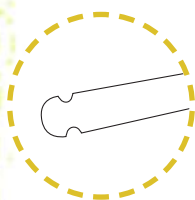
used to control, manipulate and
divide either soft or hard nucleus



Koch II
Nucleus Spatula
light curved "duckbill style" tip with notches, 11.5 cm

E15-418

placed under the nucleus
to control and support easy
delivery into anterior chamber



Jaffe-Bechert
Nucleus Rotator
angled 9 mm, blunt forked tip, 11.5 cm

E15-423

used to impale,
lift and remove
the nucleus into the
anterior chamber



also available on coloured aluminium handles, see page 95, 107 and 131

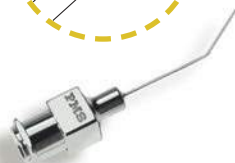
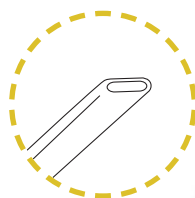


Rainin
Irrigating Cannula
20 mm tube, angled 7 mm
horizontal flattened tip

E20-033 30GA/0.3 mm

E20-034 27GA/0.4 mm

used to create a separation plane between the
nucleus and posterior cortical position of the lens



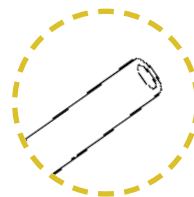
Gill
Cortex Aspiring Cannula
25GA/0.5 x 20 mm tube,
angled 5-9 mm round tip:

E20-164 5 mm

E20-167 7 mm

E20-169 9 mm

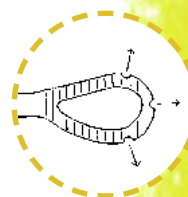
used to remove the anterior cortex and
epinucleus through a side port incision



Sheets
Irrigating Vectis
23GA/0.6 x 35 mm tube,
finely serrated 6x9 mm loop,
with 3 irrigating ports

E20-231

used to effectively remove
- irrigate, separate and lift out -
the lens nucleus and large cortical debris



Irrigating Vectis
25GA/0.5 x 35 mm tube,
with 0.3 front opening port,
single use, sterile (box of 10)

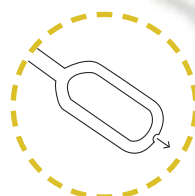
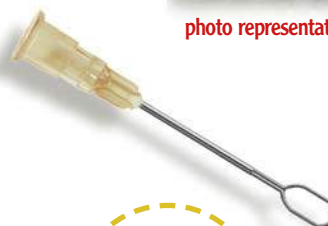
140-25-1 1 open port

140-25-2 2 open ports

140-25-3 3 open ports



photo representation of lens nucleus removal





IRRIGATION AND ASPIRATION CANNULAE



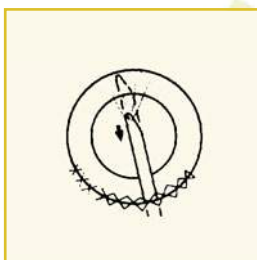
Simcoe (Reusable)
Double I and A Cannula
23/23GA x 15 mm tube,
0.3 mm aspirating port with
silicone tubing and LL adaptor

E20-300 original model

E20-301 reverse model



Manual irrigation and
aspiration of lens cortex.



Inferior cortex approached
via superior incision.



Superior cortex approached
via inferior stab wound.



Vacuum cleaning of capsule
with posterior capsule polishers.



Simcoe (Disposable)
Double I and A Cannula
23/23GA x 15 mm tube,
0.4 mm aspirating port with
flexible tubing and adaptor,
sterile (box of 6)

150-23 original model

150-23R reverse model

Aspirating Syringe (Disposable)
with spring and LL cone,
sterile (box of 10)

300-03 3 ml

300-05 5 ml



aspirating syringes
provide smooth, one-handed
aspiration when plunger is compressed
against spring device and gradually released

CORTEX REMOVAL CANNULAE

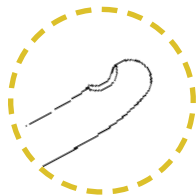


CATARACT INSTRUMENTS

Simcoe (Reusable)
Cortex Extractor Cannula
23GA/0.6 mm tube,
0.3 mm top port

E20-151 13 mm

E20-152 21 mm



Simcoe (Disposable)
Cortex Extractor Cannula
22 mm tube, 0.3 mm top port,
single use, sterile (box of 10)

108-23 23GA/0.6 mm

108-25 25GA/0.5 mm

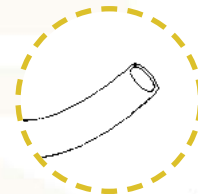


curved cannulae are very popular for aspirating
difficult 12 o'clock cortex through a paracentesis

Charleux (Reusable)
Cortex Aspirating Cannula
23 GA/0.6 mm tube,
0.35 mm front port

E20-153 13 mm

E20-154 21 mm



McIntyre
Handpiece
(autoclavable) Teflon

E20-880 for irrigating
male/female Luer slips, 6.8 cm

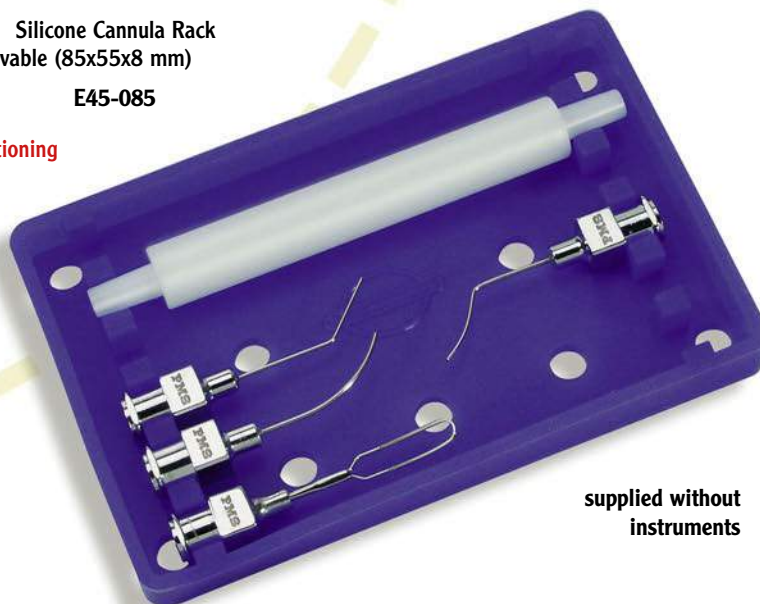
E20-881 for aspirating
male/male Luer slips, 7.5 cm



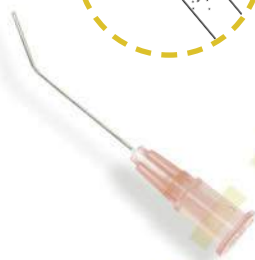
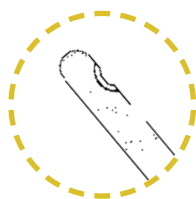
Silicone Cannula Rack
autoclavable (85x55x8 mm)

E45-085

for safe and selective positioning
of conventional cannulae
and handpieces

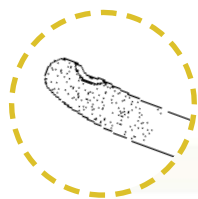


supplied without
instruments

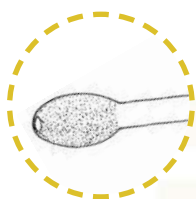


Kratz
Capsule Polisher
25 mm tube, angled 8 mm,
rough tip, 0.3 mm top port
125-21 21GA/0.80 mm
125-24 24GA/0.55 mm

sandblasted and roughened tips allow controlled
polishing of posterior capsule, scraping and aspiration
of lens epithelial cells from the capsular bag



Simcoe
Capsule Polisher & Cortex Extractor
23GA/0.6 mm curved tube,
sandblasted tip, top port
E20-141 13 mm
E20-142 21 mm



Jensen-(Lu)
Posterior Capsule Polisher
23GA/0.6 x 25 mm curved tube,
roughened olive tip with front port
E20-145 reusable
124-23 disposable



Capsule Polisher
25 mm tube, angled 10 mm,
roughened olive tip, front port
126-23 23GA/0.6 mm
126-25 25GA/0.5 mm

disposable cannulae, sterile, 10 per box



Natural (Clear)
30GA/0.30 mm, ID 0.15 mm
(not ISO colour coded)

Grey
27GA/0.40 mm, ID 0.20 mm

Brown
26GA/0.45 mm, ID 0.25 mm

Orange
25GA/0.50 mm, ID 0.25 mm

Purple
24GA/0.55 mm, ID 0.30 mm

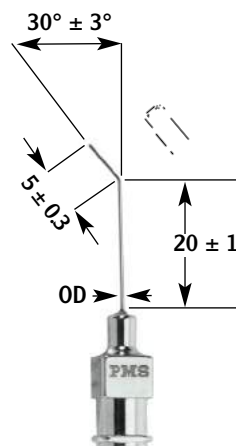
Blue
23GA/0.60 mm, ID 0.33 mm

Black
22GA/0.70 mm, ID 0.41 mm

Green
21GA/0.80 mm, ID 0.51 mm

Yellow
20GA/0.90 mm, ID 0.60 mm

Cream
19GA/1.10 mm, ID 0.70 mm



Rycroft
Air Injection Cannulae
E20-030 30GA/0.30 mm
E20-027 27GA/0.40 mm

CATARACT INSTRUMENTS



CATARACT INSTRUMENTS



E40-011

E40-011 Barraquer Speculum, page 54

E20-001 Bishop-Harmon Irrigator, page 72

E40-554 Castroviejo Eye Caliper, page 57

E35-010 Blade Breaker and Holder, page 18

E35-001 Razor Blade (box of 10), page 18

E25-050 Castroviejo Scissors, page 141

E25-051 Castroviejo Scissors, page 141

E25-200 Barraquer Iris Scissors, page 22

E25-315 Westcott Stitch Scissors, page 22

E25-334 Westcott Tenotomy Scissors, page 22

E25-440 Ong Capsulotomy Scissors, page 78

E30-051 Barraquer Corneal Forceps, page 23

E30-106 Bishop-Harmon Forceps, page 23

E30-431 Castroviejo Suture Forceps, page 24

E30-460 McPherson Tying Forceps, page 24

E30-463 Kelman-McPherson Forceps, page 124

E30-581+ Utrata Capsulorhexis Forceps, page 76

E30-623 Blaydes Lens Forceps, page 124

E15-553 Sinsky IOL Manipulator, page 21

E15-565 Kuglen Hook/Manipulator, page 21

E40-662 Barraquer Iris Repositor, page 80

E20-020ST Lewicky A/C Maintainer, page 72

E20-030 Air Injection Cannula, page 73

E20-231 Sheets Irrigating Vectis, page 81

E20-300 Simcoe I/A Cannula, page 82

E20-145 Jensen Capsule Polisher, page 84

E35-132 Castroviejo Needle Holder, page 25

E35-231 Micro Needle Holder, page 25



E25-200



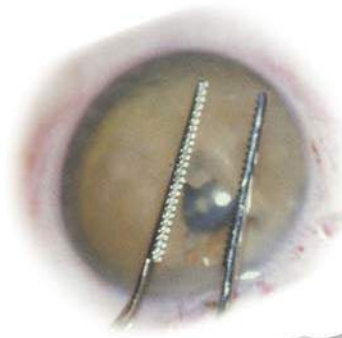
E30-460



E30-623



E20-300



FOR MANUAL PHACO FRACTURE ADD

E15-432T Nucleus Trisector, angled, page 100

E15-442T Nucleus Cutting Platform, page 100

E30-562T Nucleus Splitter Forceps, page 101

E30-567 Nucleus Fragment Forceps, page 101



E30-567

FOR STERILE FIELD PREPARATION ADD

E25-556 Knapp Utility Scissors, page 16

E30-934 Dieffenbach Serrefine, page 16

E30-902 Halstead Artery Forceps, page 16

E30-965 Baby Jones Towel Clamp, page 16



E25-556



E30-934

FOR FLUID DISTRIBUTION ADD

E20-805 All Glass Syringe, page 20

300-03SP Disposable Syringe, page 89

E20-880 Irrigating Handpiece, page 83

E20-881 Aspirating Handpiece, page 83



300-03SP

MISCELLANEOUS PRODUCTS ADD

30601 Eye Spears, page 27

E45-113 Sterilising Tray

(see section)



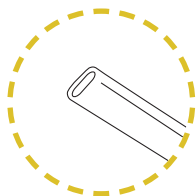
E45-113



Helsinki
Nucleus Hydrodissector
27GA/0.4 x 20 mm tube
with horizontal flattened tip

E20-201 reusable

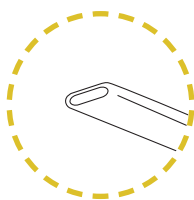
118-27 disposable



Sautter
Nucleus Hydrodissector
27GA/0.4 x 20 mm tube
with vertical flattened tip

E20-203 reusable

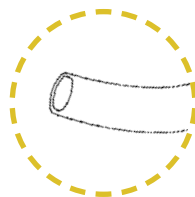
118-27S disposable



Pearce
Nucleus Hydrodissector
25GA/0.5 x 20 mm tube,
angled 7 mm flattened tip

E20-205

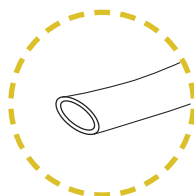
Flattened tip cannulae allow for smooth insertion beneath the capsulorhexis edge. Fluid is distributed in a fan-like effect all around the capsular bag for effective hydrodissection.



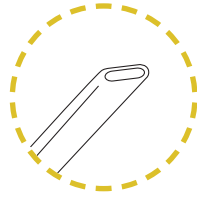
Kellan
Hydrodissection/Hydroelineation Cannula
25GA/0.5 x 20 mm curved tube

E20-211 flattened blunt tip
for hydrodissection

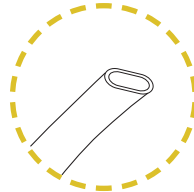
E20-213 bevelled blunt tip
for hydroelineation



disposable cannulae, sterile, 10 per box

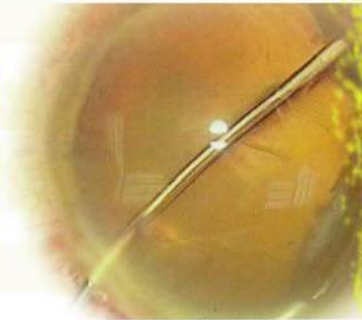


Hydrodissection Cannula
25 mm tube, angled 7 mm flat tip
113-25 25GA/0.5 mm
113-27 27GA/0.4 mm

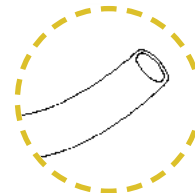


Nichamin
Nucleus Hydrodissector
25 mm tube, formed 12 mm flat tip
113-25F-12 25GA/0.5 mm
113-27F-12 27GA/0.4 mm

BSS or viscoelastic material is injected slowly and continuously until the "wave" of dissection is visible on the posterior capsule. Injection of the mentioned solutions are continued until luxation of the nucleus begins.

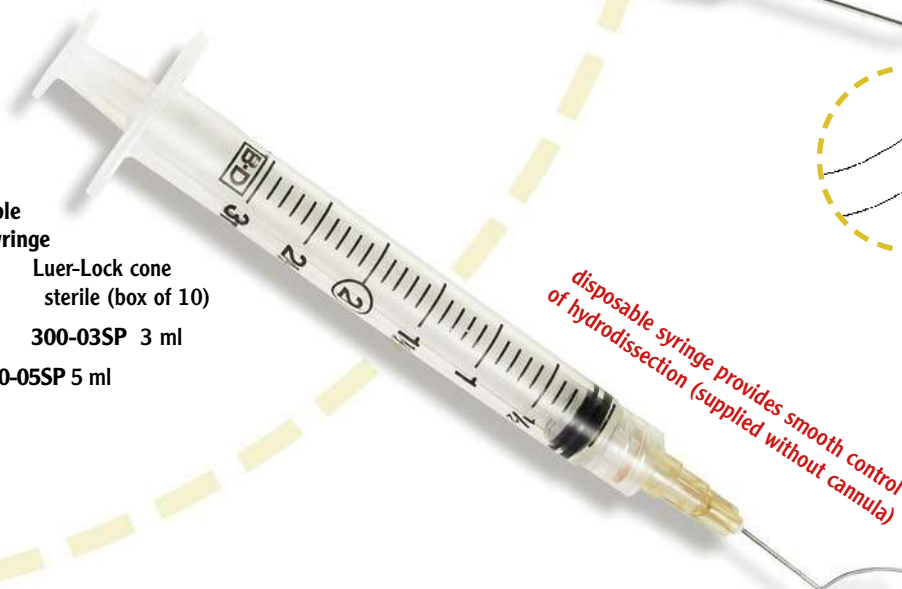


Tübingen
Hydrodissection Cannula
25 mm tube, curved round tip
313-27 27GA/0.4 mm
313-30 30GA/0.3 mm



Disposable Syringe
Luer-Lock cone
sterile (box of 10)
300-03SP 3 ml
300-05SP 5 ml

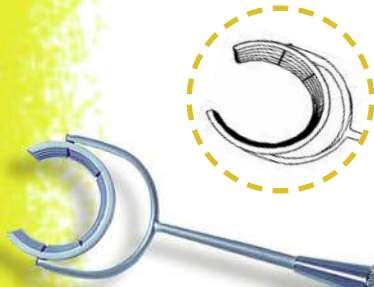
disposable syringe provides smooth control of hydrodissection (supplied without cannula)



disposable cannulae, sterile, 10 per box



super
instruments to
achieve excellent fixation
of the globe during construction of
the Paracentesis, Phaco Incision, AK
Incision, Limbal Relaxing Incision
and during Lens Implantation



Fyodorov
Phaco Fixation Ring
3/4 open swivel ring, with
atraumatic concentric
rings, 11.5 mm ID,
13.0 cm

E10-511T

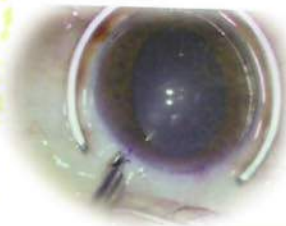
for atraumatic fixation of the eye during phaco



Fine-Thornton
Phaco Fixation Ring
3/4 open swivel ring, with
multiple blunt teeth,
13.0 cm

E10-513 13 mm ID
for clear cornea incision

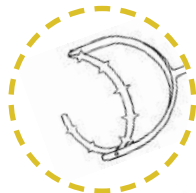
E10-516 16 mm ID
for scleral tunnel incision



Fine-Thornton
Phaco Fixation Ring
3/4 open swivel ring,
multiple, blunt teeth

E10-513T 13 mm ID
for clear cornea incision

E10-516T 16 mm ID
for scleral tunnel incision



Gimbel
LASIK Stabilising
Ring, 3/4 open swivel
ring, blunt teeth on both sides,
13 mm ID, 13.0 cm

E10-517

for stabilizing either the
right or the left eye
during LASIK

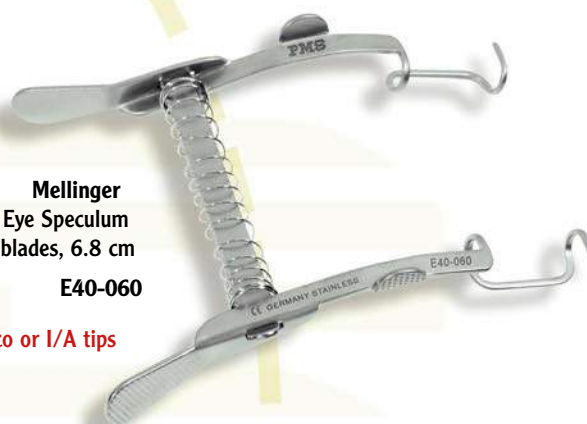


Mellinger
Universal Eye Speculum
self-retaining, fenestrated blades
E40-056 adult size, 6.8 cm
E40-057 child size, 5.5 cm



Mellinger
Phaco Eye Speculum
self-retaining, open blades, 6.8 cm
E40-060

for use with Phaco or I/A tips



these speculae provide unobstructed access to the globe
during phaco and other eye surgical procedures

Kershner Style
Reversible Eye Speculum
fenestrated blades, 7.7 cm
E40-106



can be used either on the
nasal or temporal side

Kershner Style
Reversible Eye Speculum
thin solid blades, 7.7 cm
E40-105





New

CATARACT INSTRUMENTS

EZCut®

Diamond Phaco Knives
lancet shaped 60° blade
(double edge)

E10-322 2.8 mm

E10-323 3.0 mm

E10-324 3.2 mm



for Clear Corneal and Scleral Incisions

Angled diamond knives in new titanium handle,
spring action bayonet style.



EZCut®

Diamond Clear Cornea Knives
keratome shaped 60° blade
(4 cutting edges)

E10-342 2.8 mm

E10-343 3.0 mm

E10-344 3.2 mm



EZCut®

Diamond Trapezoid Knives
taped spear shaped blade
(double lancet)

E10-352 2.0-2.3 mm

E10-353 2.6-3.0 mm

E10-354 2.8-3.2 mm



EZCut®

Diamond Tunnel Knives
crescent shaped (9 facet) blade

E10-391 1.5 mm

E10-392 2.0 mm



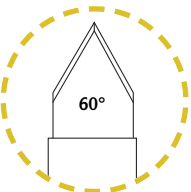
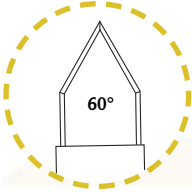
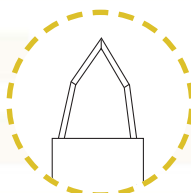
Individual Designs and Special Mountings on Request.



New

**EXCELLENT BACK UP for
expensive diamond knives**



blade shapes	width in mm	removable holder with sapphire blade	
	2.8	E10-2222	
	3.0	E10-223	
	3.2	E10-224	
	2.8	E10-242	
	3.0	E10-243	
	3.2	E10-244	
	2.5/2.9	E10-252	
	2.5/3.2	E10-253	
	2.5/3.4	E10-254	
	1.5	E10-291	
	2.0	E10-292	
	2.8	E10-293	

Sapphire blade is fully
mounted in
a stainless
steel shaft with thread

Coloured handles for
above sapphire blades
are shown on page 66.
When ordering, specify
desired handle and blade.



**EZWash®
Sterilising Tray
E45-113**

**excellent for safe positioning
of sapphire and diamond knives**

CATARACT INSTRUMENTS



we have shown all Nucleus Manipulators,
Phaco Choppers/Splitters and Spatulae
in this catalogue on ...



...stainless steel handles with stainless steel tips

...titanium handles with stainless steel tips

New

and now PMS offers ...

... colour coded ALL-aluminium handles for a series of EZChange® removable
instrument tips from the most popular sideport instruments for Phaco Surgery



FEATURES AT A GLANCE:

- Lightweight, aluminium handle, 9.0 cm
- Optimal round handle for optimal balance and perfect control
- Colour coded for easy identification
- Handles and tips are sold separately
- Available in five colours:

Product code for handles only

E15-100 AY yellow

E15-100 AR red

E15-100 AG green

E15-100 AB blue

E15-100 AP purple



Do not use acid or alkali detergents or any kind
of abrasives for cleaning the aluminium handle.
Never use balanced salt solution for rinsing.



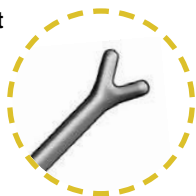
CATARACT INSTRUMENTS



Fukasaku
Phaco Splitter and Iris Pusher
E15-653R



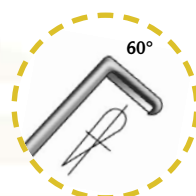
Rosen
Phaco Splitter
E15-655R



Jaffe-Bechert
Nucleus Rotator
E15-423R



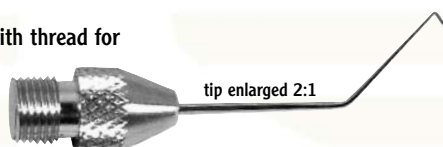
Drysdale
Nucleus Manipulator
E15-465R



Nagahara
Phaco
Chopper

E15-656R 60° cutting edge
E15-659R 90° cutting edge

instrument tip with thread for
absolute secure
locking; shaft
and tips are
from one-piece stainless steel



Koch
Phaco
Chopper
E15-657R



Chang
Nucleus Manipulator
E15-464R



Barrett
Nucleus Rotator/
Manipulator
E15-466R

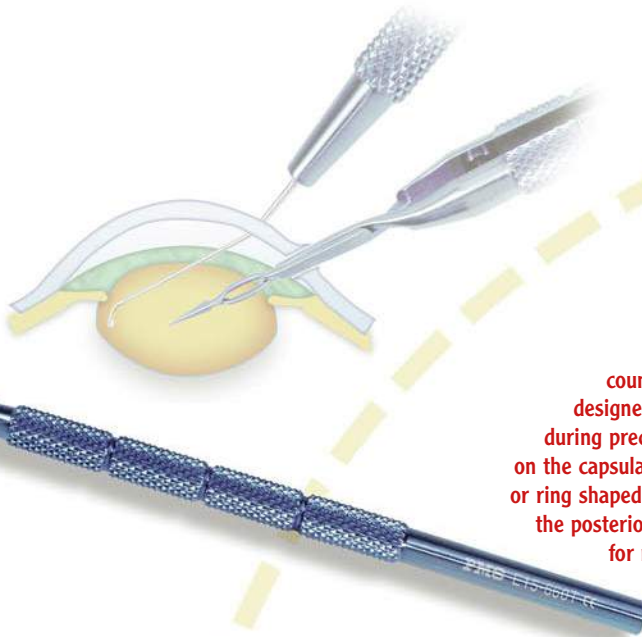
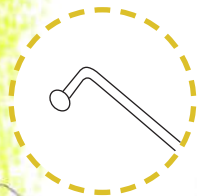


Seibel
Phaco Chopper
E15-669R



"Connor Wand"
Nucleus Manipulator
E15-467R

for detailed product description, please see page 34, 36 and 80



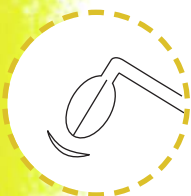
N u c l e u s
Sustainers are ideal to use with the Akahoshi Style Prechopper series for the counter prechop technique. They are designed to support the harder nucleus during prechopping. This will reduce stress on the capsular bag and zonules. The ball-like or ring shaped tips offer optimal protection of the posterior capsule, and can also be used for manipulating the iris, nucleus and IOL's, etc.

Nucleus Sustainer

0.4 mm microball tip, angled 1.5 mm, 12.0 cm

E15-660T

helps to reduce the stress on the capsular bag and zonules

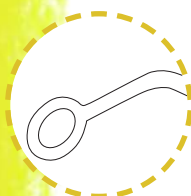


Nucleus Sustainer

olive tip, angled 1.9 mm, 12.0 cm

E15-661T

for stable nuclear support during prechopping



Nucleus Sustainer
1.0 mm dia ring, angled 2.5 mm, 12.0 cm

E15-662T

for maximum protection of the posterior capsule

NOTE: Stainless steel shafts and tips



**Nucleus Splitter/
Completer**

1.5 mm dia. ring shaped jaws, 12.2 cm

E30-572T

the latest development,
suitable for all prechopping
techniques



schematic representation of the Akahoshi Style (vertical prechop) technique fig. 1 to 4

Prechopper
Forceps are designed to crack the nucleus into four or more fragments in the capsular bag. The shanks of the forceps open to a maximum of 1.8 mm at the incision area while the tips open to 2.8 mm. The tip of the forceps has a sharp point that initially penetrates the nucleus. When squeezing the round body handle the tips open to crack and split the nucleus. Ultrasound time can be reduced by 50 %.

Universal Prechopper
paddle style jaws,
sharp tips, 12.2 cm
E30-564T straight
E30-565T angled
for medium to hard nucleus

1. Penetrate nucleus

2. Split nucleus in two

Sharp Prechopper
triangular style jaws,
sharp pointed tips, 12.2 cm

E30-566T straight
E30-567T angled

for hard nucleus, sharp pointed tips are used to insert into the dense nucleus, and performing initial prechopping

3. Rotate each half 90°

Karate Prechopper
paddle style TC jaws,
angular sharp edge on top,
blunt edge on the bottom, 12.2 cm

E30-568T

for vertical prechop of soft to medium nucleus

Hybrid Prechopper
hooked jaws with
sharp angular edge,
12.2 cm

E30-569T

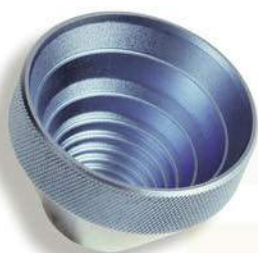
for initial split and prechopping nucleus (grades 1-4)

4. Split the halves into quarters

Tip drawings of forceps are shown on page 38 and 39



E40-100



E10-690T



E25-435



E30-581+



E30-661

E42-113 CATARACT PHACO SET
complete, consisting of one each:

E20-001 Bishop-Harmon Irrigator, page 72

E40-100 Lieberman Eye Speculum, page 55

E10-513 Phaco 3/4 Fixation Ring, page 56

E10-690T Maloney Keratometer, page 33

E40-554 Castroviejo Eye Caliper, page 57

E10-123 Sapphire Phaco Knife, page 64

E10-113 Sapphire Universal Knife, page 65

E25-333 Westcott Tenotomy Scissors, page 59

E25-400 Vannas Capsulotomy Scissors, page 78

E25-435 Stern-Gills Capsulotomy Scissors, page 79

E30-051 Barraquer Colibri Forceps, page 23

E30-110 Delicate Dressing Forceps, page 23

E30-431 Castroviejo Suture Forceps, page 24

E30-463 Kelman-McPherson Forceps, page 122

E30-581+ Utrata Capsulorhexis Forceps, page 76

E30-661 Livernois Soft IOL Folder, page 123

E30-663 Ernest-McDonald IOL Inserter, page 125

E15-423 Jaffe-Bechert Nucleus Rotator, page 21

E15-501 Lester Lens Pusher, angled, page 21

E15-565 Kuglen Hook/Manipulator, page 21

E15-656 Nagahara Phaco Chopper, page 21

E20-030 Air Injection Cannula, page 73

E20-151 Simcoe Cortex Extractor, page 83

E20-205 Pearce Hydrodissector, page 88

E20-300 Simcoe I/A Cannula, page 82

E35-231 Barraquer Needle Holder, page 25



E20-441

FOR BIMANUAL CORTICAL CLEAN UP

E20-441 Irrigating Handpiece, page 112

E20-452 Aspirating Handpiece, page 113

FOR COUNTER PRECHOPPING TECHNIQUE

E15-662T Akahoshi Nucleus Sustainer, page 96

E30-566T Akahoshi Sharp Prechopper, page 97

FOR MICRO INCISION CATARACT SURGERY

E10-170 Sapphire Micro Incision Knife, page 120

E25-623S Alio Micro Incision Scissors, page 121

E30-623S Micro Capsulorhexis Forceps, page 121

FOR FOLDABLE LENS IMPLANTATION

LP604240M Viscoject® Cartridge, page 126

E30-651 EZJect® Lens Injector, page 126

FOR SMALL PUPIL MANAGEMENT

E15-573 Pupil Dilator, page 106

IRIS-1000 Iris Retractor, page 107

MISCELLANEOUS PRODUCTS

30601 Eye Spears, page 27

Sterilising Trays (see section)

E30-566T

E30-623S

E30-651

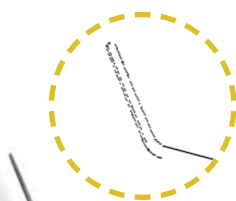
E15-573

30601



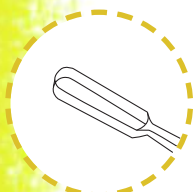
PHACO CHOICES - MANUAL FRACTURE INSTRUMENTS

The KANSAS-ALFONSO instruments for manual phaco fracture techniques offer several important benefits.



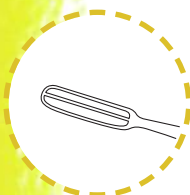
Kansas-Alfonso
Nucleus Bisector
angled 10 mm blade,
sharp cutting edge on
the vertical plane,
11.0 cm
E15-431T

used to split the nucleus in two parts



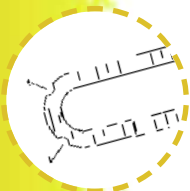
Kansas-Alfonso
Universal Nucleus Trisector
angled semicircular blade with
sharp cutting edges, 11.0 cm
E15-432T 1.5 mm wide
E15-433T 2.5 mm wide

used to divide the nucleus in three parts



Kansas-Alfonso
Universal Cutting Platform
angled 10 mm solid blade, 11.0 cm
E15-442T 2 mm wide
for use with E15-432T
E15-443T 3 mm wide
for use with E15-433T

used to slide under the nucleus and act as a
cutting platform for Bisector and Trisector



Alfonso-Hoffmann
Irrigating Nucleus Fragment Cannula
25GA/0.5 mm loop with fine
serrations, two front ports
E20-242 2 mm wide
E20-243 3 mm wide

ideal to remove nuclear fragments

McIntyre
Irrigating Handpiece, titanium,
male/female Luer fittings
E20-882T

- It can be performed through a small incision, thereby resulting in minimum astigmatism and rapid recovery.
- It functions well with hard and soft nucleus.
- It requires low investment in instrumentation.
- It provides a very good backup when complications arise and Phacoemulsification must be discontinued.
- Also important, it requires no sutures and stitches.



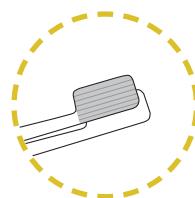
CATARACT INSTRUMENTS

Salz
Nucleus Cracking Forceps
cross-action shanks with finely
serrated paddle style tips, 7.5 cm

E30-562T 1.1 x 2.5 mm tips

E30-563T 1.7 x 2.8 mm tips

used to crack the nucleus through
an incision size as small as 2.5 mm



Kansas
Nucleus Removal Forceps
angled 10 mm jaws with extra delicate
multiple teeth, 10.5 cm

E30-567TK titanium

E30-567 stainless steel

used to remove nuclear
fragments and large cortical debris



Alfonso
Nucleus Fragment Forceps
angled 10 mm jaws, 2 short rows
of delicate interlocking teeth,
10.5 cm

E30-567TA

used to extract nuclear fragments

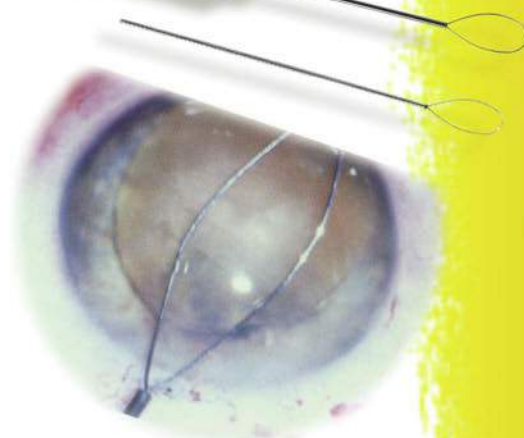


Keener
Lens Nucleus Divider
with set of snare wire

E15-450

E15-452 replacement
snare wire (set of 2)

used to divide the nucleus
in two or more segments





A combination of the E20-020ST Lewicky Chamber Maintainer and E20-152 Simcoe Cortex Aspiring Cannula can be used to remove the anterior cortex and epinucleus through a side port incision at 11 and 2 o'clock.

A E20-055 cannula is used to inject viscoelastic, which is mandatory in MIC surgery to protect the endothelium from being touched by the relatively large nuclear fragments.

E20-033 and E20-034 Rainin Irrigating Cannulae are ideal to create a separation plane between the nucleus and the posterior cortical position of the lens.

After hydrodissection, the anterior pole of the nucleus is partially prolapsed into the anterior chamber using a E15-565 Kuglen Hook.

Irrigating Vectis
27GA/0.4 mm x 30 mm tube,
3 mm wide loop with 0.3 mm port,
single use, sterile (box of 10)

140-27-1

designed for small incision surgery;
ideal to remove nuclear fragments

Cortex Aspiring Cannulae
26GA/0.45 mm x 20 mm tube,
angled 5 mm J-shaped tip, front port

E20-064 straight

E20-065 angled left

E20-066 angled right

ideal for retracting the iris, and
aspirate the cortex between
10 and 2 o'clock



You can also use other surgical techniques and instrumentation.



EZFit®
Irrigation Cannula with
female/male LL connector and
21GA/0.8 x 21mm curved tube,
smooth tip, dual 0.4 mm side ports
E20-431EF

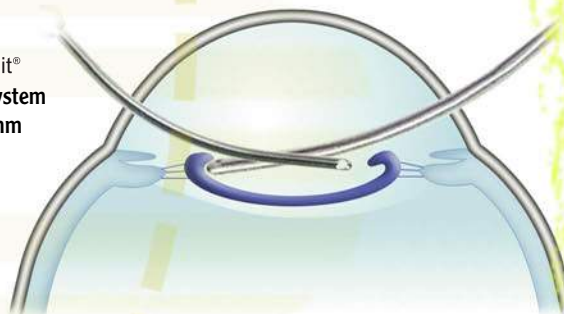
cannulae and connectors have coloured rings:
BLUE stands for irrigation - **RED** for aspiration

EZFit®
Cortex Aspiring Cannula with male/male Luer connector
21GA/0.8x21mm curved tube with 0.4 mm top open port
E20-432EF smooth tip
E20-433EF rough tip

21GA/0.8 curved tip facilitates cortex clean up; when used with
irrigating handpiece, complete 360° removal of cortex is possible

EZFit®
Bimanual I/A Cortex Removal System
consisting of 1 piece each 21GA/0.8 mm
Irrigating cannula, dual 0.4 mm side ports,
Aspirating cannula, single 0.4 mm top port
E20-434EF system with smooth aspirating tip
E20-435EF system with rough aspirating tip

can be attached to an I.V. Line, on a syringe or on an
irrigation handpiece while maintaining the chamber



Bimanual I/A Cortex Removal System

*192-23

IRRIGATION 21GA x 1" (25mm)
TWO .4mm PORTS WITH FEMALE CONNECTOR

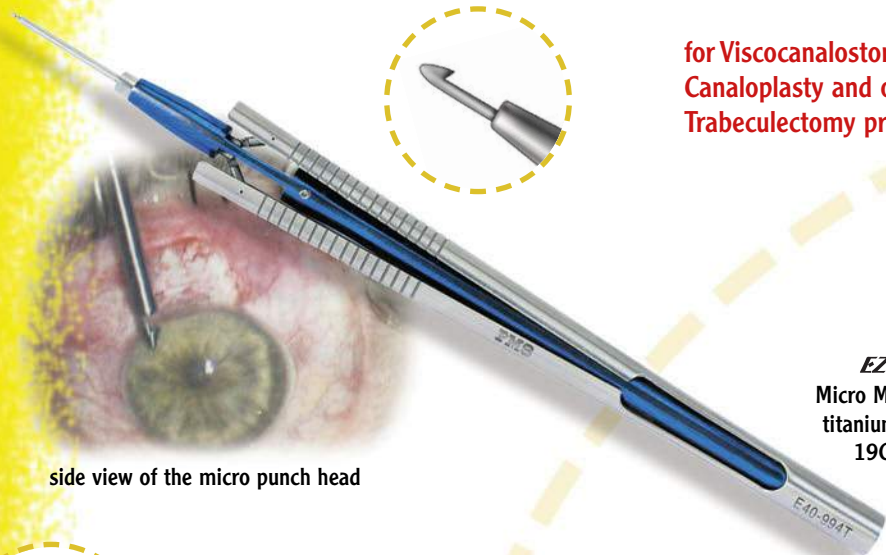


ASPIRATION 23GA x 1" (25mm)
ONE .4mm PORT .5mm FROM TIP
WITH MALE CONNECTOR

MALE AND FEMALE CONNECTORS ARE COMPATIBLE WITH I/A AND PHACO SYSTEMS. ALLOWS CORTEX
REMOVAL THROUGH PARACENTESIS OR PHACO INCISION WHILE MAINTAINING THE CHAMBER WITH IRRIGATION.

* Manufacturer:
EAGLE LABS
Rancho Cucamonga,
California, USA

*disposable products, sterile, 10 per box



side view of the micro punch head

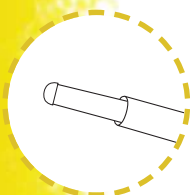
for Viscocanalostomy,
Canaloplasty and other
Trabeculectomy procedures

EZCut®

Micro Membrane Punch
titanium "direct action" handle,
19GA/1.1 x 15 mm straight shaft,
micro 0.75 mm dia. head with
0.5 mm deep bite, 13.0 cm

E40-994T

for primary trabeculectomy without iridectomy; best to
use after phaco having filled the chamber with viscoelastic



EZCut®

Kelly Decemet's Membrane Punch
micro 1.1 mm dia. head with
0.75 mm deep bite, 13.0 cm

E40-992T titanium handle

E40-992 all stainless steel

for easy insertion through small incisions



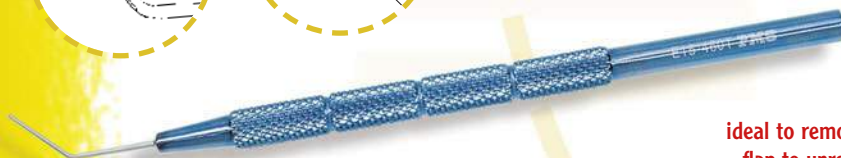
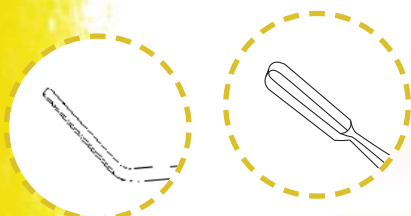
USC Scleral Shaver
angled 10 mm sharp blade, single cutting edge, 11.0 cm

E15-221T

USC Scleral Planer
angled 10 x 1 mm wide blade,
dual cutting edges, 11.0 cm

E15-222T

ideal to remove layers of sclera on the base of the second
flap to unroof Schlemm's Canal in a non-invasive manner

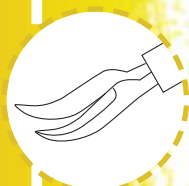


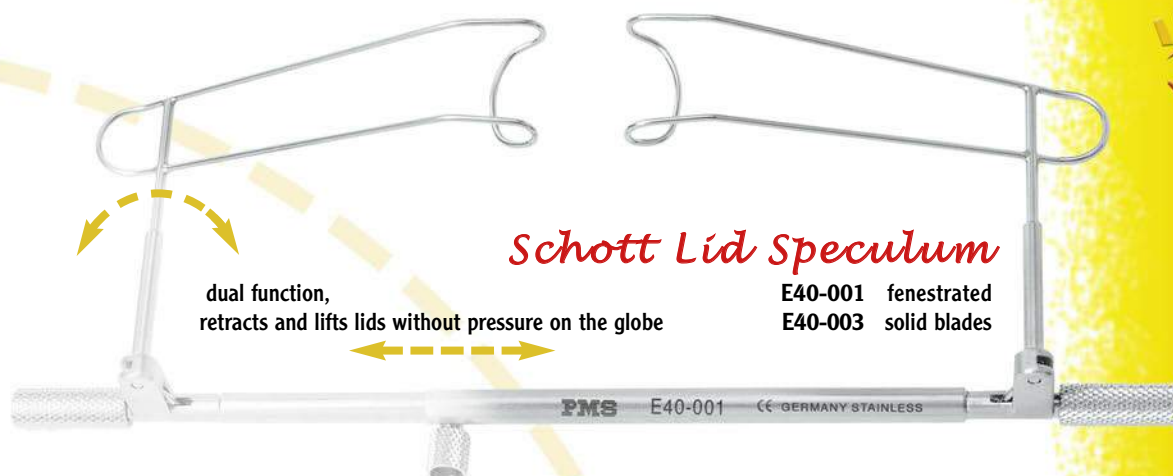
Nishi Style

Schlemm's Canal Scissors
removable tip, 20GA/0.9 x 25mm curved tube,
thin curved blades, 14.5 cm

E25-621N

for cutting scleral tissue
adhering to Schlemm's canal





Schott Lid Speculum

dual function,
retracts and lifts lids without pressure on the globe

E40-001 fenestrated
E40-003 solid blades

Diamond 7-Step Knife

retractable, tapered spear shaped blade (1 mm wide), steps:
0.15, 0.2, 0.25, 0.37, 0.4, 0.5 and 4.0 mm fully extended

E10-367

to create the initial and second flap of the USC procedure
when the micrometer is set at 0.3 mm

Luntz-Dodick Punch

bullet shaped head for easy entry into the scleral tunnel,
rotatable tip can be preset to cut in one of four directions

E40-995 all stainless steel

E40-995T on titanium handle

Retrograde cutting edge is ideal to engage the scleral lip at the
base of the tunnel and cuts 0.5 mm bites of tissue for small and
large trabeculectomies.



image of punch head
in cutting position

E42-114 PHACO-TRABECULECTOMY SET

Consisting of E40-001, E10-367, E40-995
and one each of the following instruments:

E40-554 Castroviejo Eye Caliper, page 57

E25-200 Barraquer Iris Scissors, page 22

E25-333 Westcott Tenotomy Scissors, page 59

E30-051 Barraquer Colibri Forceps, page 23

E30-241T Fechtner Conjunctiva Forceps, page 60

E35-251T Barraquer Micro Needle Holder, page 46

EG-1020 Phaco Slit Knife (Sub 2.0 mm), page 63

EG-9402 Crescent Style Tunnel Knife, page 63

30601 Sugi® Disposable Eye Spears, page 27

14-5006 Intraocular Cautery Pencil, see VR section

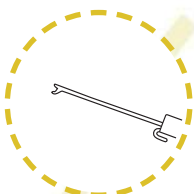
14-5004 Cautery Pencil, see MVR section

E45-321 EZLoad® Sterilisation Container

E45-111 EZWash® Sterilising Tray



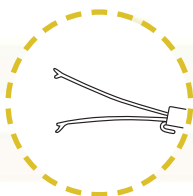
Beehler Style Small Pupil Dilators



for micro incision

20GA/0.9 mm straight tube,
1 finger for 2 points dilation

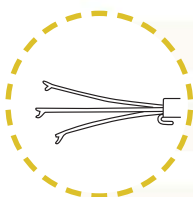
E15-571



for small incision

18GA/1.2 mm straight tube
2 fingers for 3 points dilation

E15-572



for 3 mm incision

16GA/1.6 mm curved tube,
3 fingers for 4 points dilation

E15-573

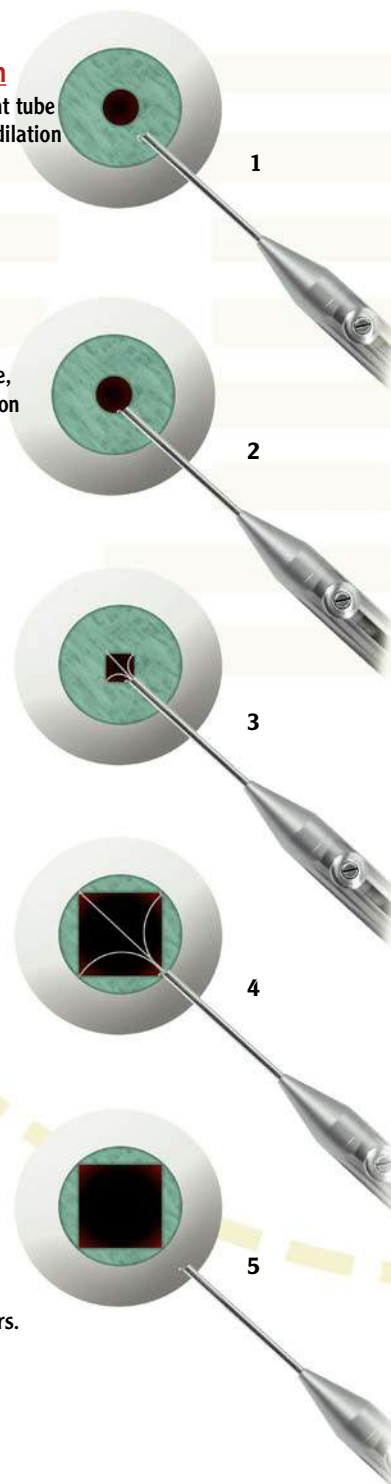
NOTE:

This instrument is ineffective on an eye which has not been properly medicated preoperatively.

The Beehler Style Pupil Dilators enlarge small pupils to 6-7 mm without additional incision:

1. Tubular shaft fits easily through a side port or standard phaco incision.
2. After entering, the instrument is turned 90° and the external micro hook is engaging the 12 o'clock pupil margin.
3. A simple -thumb controlled- activation of three microfingers results in a 4 points symmetrical and simultaneous dilatation.
4. The pupil is gently dilated to the limbus.
5. The tip is then removed, leaving a widely dilated pupil for the remainder of the case.

Not only is the instrument easy to use, but it's atraumatic pupil dilatation eliminates the need for costly and time consuming disposable iris retractors.





IrisMate® Translimbal Iris Retractors

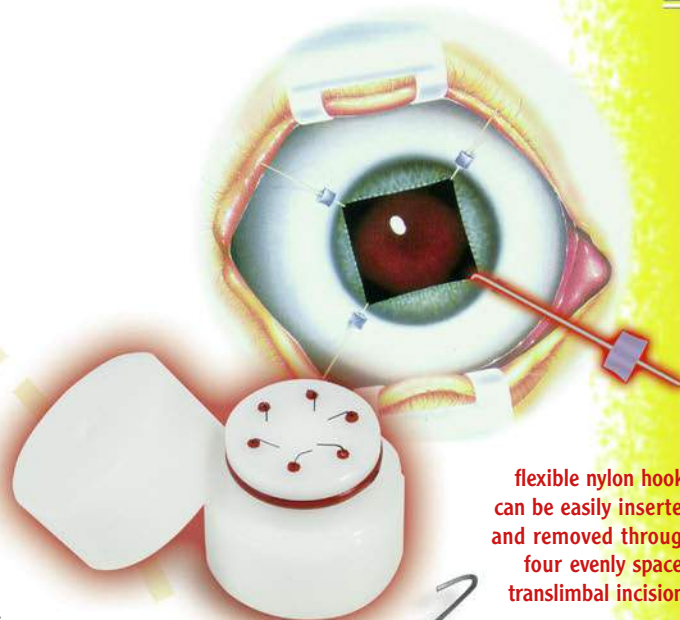
*IRIS-1000 reusable (6 pcs) in autoclavable case

**IRIS-2000 disposable (5 pcs) in plastic tray

- Ideal for temporary iris dilation.
- Safely used in Aphakic, Pseudophakic and Phakic eyes.
- Works through 0.3 mm - 0.5 mm self sealing incision.
- Specially designed silicone cinch provides superior grip.
- Nylon hook retracts iris with minimal damage to the tissue.
- Cinch is colour coded for easier viewing under microscope.

* Manufacturer:
Howard Instruments, Inc.
Tuscaloosa, AL
USA

** Manufacturer:
Biotech Vision Care Ltd.
Khatraj, Gandhinagar
India



flexible nylon hooks
can be easily inserted
and removed through
four evenly spaced
translimbal incisions

all **MEDICAL GRADE** materials

Video available

Iridectomy Instruments for

MICS work well for the removal of fibrotic
synechia and the creation of micro cuts in the iris

EZChange®

Zaldivar Style Iridectomy Scissors
removable tip, 20GA/0.9 x 30 mm straight shaft,
curved 2.0 mm sharp blades, 15.0 cm

E25-620Z

EZChange®

Utrata Style

Micro Iridectomy Forceps
removable tip, 20GA/0.9 x 30 mm
curved shaft, fine grasping tips with
0.5 mm platforms, 15.0 cm

E30-621U



CATARACT INSTRUMENTS



PHACO CHOICES - POSTERIOR CAPSULE RUPTURE

Posterior capsular rupture is a common intraoperative complication that can arise at any stage of phaco surgery. Despite advanced equipment and technology, it is difficult to prevent.

With the PMS Emergency Kit #E42-115 you can easily convert to an ECCE and perform a vitrectomy.

**Gross
Sub-Tenon Cannula**
21GA/0.8 mm gently
curved tube, flattened tip

E20-687

for injection of local anesthesia agent

Infusion Cannula
23GA/0.65 mm angled tip attached
to silicone tubing with LL adaptor

E20-023AT

to maintain a stable anterior chamber

Irrigating Lens Loop
25GA/0.5 mm x 3 mm wide loop with
fine serrations, two front opening ports

E20-242

ideal to remove nuclear fragments

Bimanual Irrigation Handpiece
21GA/0.8 mm x 17 mm cannula,
smooth tip, two 0.5 mm side ports

E20-441

for bimanual cortical clean up

Bimanual Aspiration Handpiece
21GA/0.8 mm x 17 mm cannula,
rough tip, single 0.3 mm top port

E20-452

**Castroviejo
Universal Corneal Scissors**
curved blunt blades, 10.0 cm

E25-013

for enlarging phaco
incision



You can also use other surgical techniques and instrumentation.

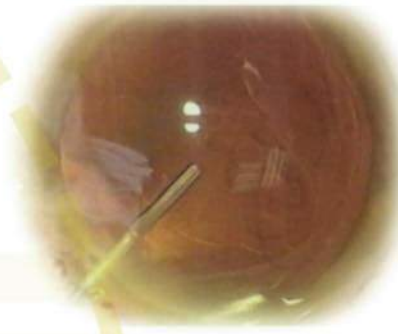
Capsular Rupture

If a capsular tear does occur several steps can help minimize vitreous loss.



Viscoelastic Injection

A closed chamber system should be maintained by injecting viscoelastic before withdrawing the phaco tip. This helps to tamponade the vitreous backwards.



Cortical Removal

Cortical removal should then be performed with either low infusion or by a dry technique filling the chamber with viscoelastic fluids using conventional cannulae (Simcoe Aspirator E20-151).



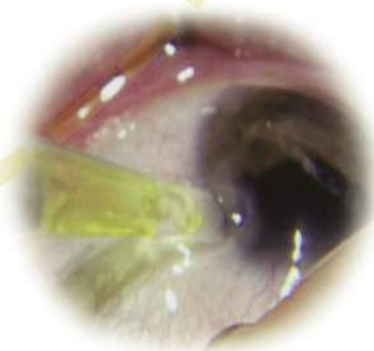
Bimanual Vitrectomy

If the hyaloid face is broken and vitreous presents through the rupture a routine 2-port mechanised vitrectomy using low flow and low vacuum rates is performed. The tear can then be easily converted into a round and stable opening.



IOL Implantation

The IOL can then be safely placed into the bag. A 6 mm optic acrylic lens should be used when implanting in the capsular bag as it unfolds slowly, thus causing less stress on the posterior capsule.



You can also use other surgical techniques and instrumentation.



The PMS **EZLock®** I/A Tip System

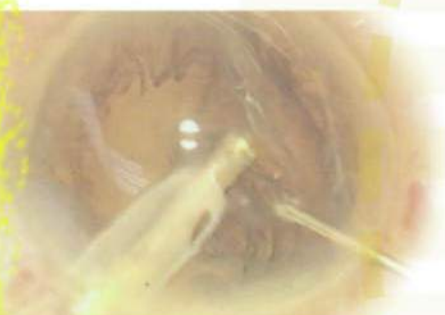
for easy and effective cortex removal



EZLock®
I/A Handpiece
ergonomically handle with
male/female Luer slip fittings,
compatible with all I/A and phaco systems
E20-400EL



EZLock®
I/A Tip straight
E20-401EL 0.35 mm port for standard aspiration procedures
E20-402EL 0.5 mm port for removal of viscoelastic substances



aspiration of epinucleus with E20-403S I/A tip

EZLock®
Aspirating Tips without
silicone irrigation sleeve
E20-403ELS straight
E20-403ELA angled 45°

provides tight seal around wound
and anterior chamber stability



EZLock®
Silicone Irrigation Sleeve
non-sterile (pack of 5)
E20-403ELI



EZLock®
I/A Tip curved
E20-404EL
for initial
cortex removal

MONOMANUAL INTERCHANGEABLE I/A TIP SYSTEM...



...makes the monomanual technique convenient and effective.

EZLock® mechanism allows quick exchange of the various tips and guarantees safe positioning during surgery.

PMS **EZLock®**

removable I/A tips have
16GA (1.6 mm OD) irrigation
tube with 0.9 mm dual side ports
and 21GA (0.8 mm OD) inner cannula
with 0.35 mm aspirating port. Other sizes
also available on request.

EZLock®
I/A Tip angled 45°

E20-405EL

for peripheral cortex removal



removal of peripheral cortex



EZLock®
I/A Tip angled 90°

E20-406EL

for peripheral and superior cortex removal



O-Ring Replacement Set
for **EZLock®** I/A tips
5 each rings 2x1, 3x1
and 5x1 mm, (pkg/15)

E20-410



EZFit®
Luer-Lock Adaptor
female/male fittings
E20-420EF



EZFit®
Luer Adaptor
2 x male fittings
E20-421EF reusable

191-01 disposable (box of 50)



adaptors to fit any conventional
cannulae (reusable and disposable)

male and female connectors are
compatible with I/A and
phaco systems

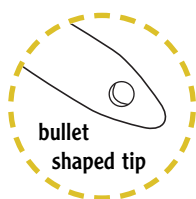
EZFit®
Luer-Lock Adaptor
2 x female connectors
E20-422EF



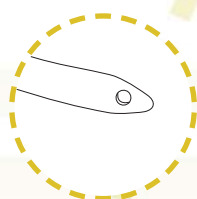
CATARACT INSTRUMENTS



IRRIGATION



"For effective cortex management". This system is used by many phaco surgeons for bimanual irrigation and aspiration of residual cortex after phaco and removal of the nucleus.



EZFlo®

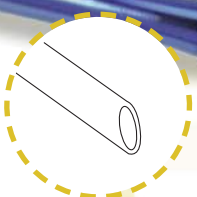
Irrigation Handpiece

21GA/0.8 x 17 mm round cannula,
dual 0.5 mm side open ports

E20-441 smooth tip

E20-442 rough tip

bullet shaped tip for easy entry through 1.2 mm paracentesis



EZFlo®

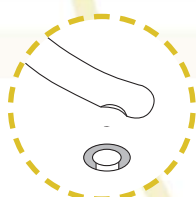
Irrigation Handpiece

20GA/0.9 x 17 mm round cannula

E20-446 0.6 mm front port

E20-447 dual 0.65 mm side ports

20GA cannulae with large ports for maximum irrigation



EZFlo®

Irrigation Handpiece

0.55 x 0.95 x 17 mm elliptical cannula,
smooth tip with 0.55 mm anterior port

E20-445

oval, smooth tip for improved wound seal



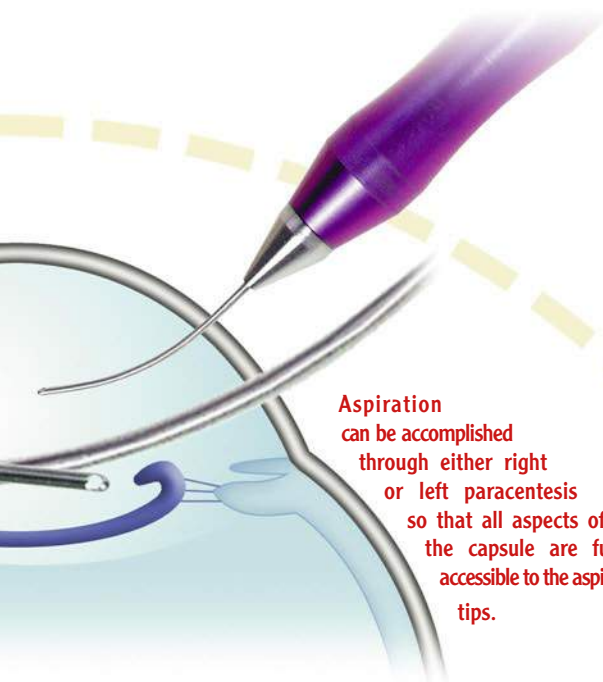
EZFlo®

Irrigation Handpiece

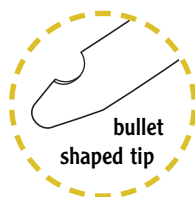
male/female Luer fittings

E20-440

for standard reusable and
disposable cannulae

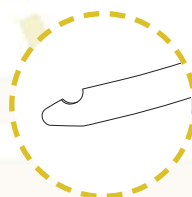


Aspiration
can be accomplished
through either right
or left paracentesis
so that all aspects of
the capsule are fully
accessible to the aspirating
tips.



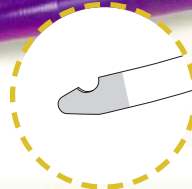
ASPIRATION

EZFlo®
Aspiration Handpiece
21GA/0.8 x 17 mm round cannula
0.3 mm top open port
E20-451 smooth tip
E20-452 rough tip



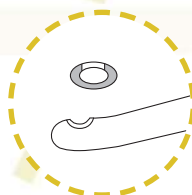
for standard aspiration procedures

EZFlo®
Aspiration Handpiece
21GA/0.8 x 17 mm round cannula,
0.4 mm top open port
E20-453 smooth tip
E20-454 rough tip



for aspiration and capsule polishing

EZFlo®
Aspiration Handpiece
0.55 x 0.95 x 17 mm elliptical cannula,
smooth tip, 0.3 mm top open port
E20-455



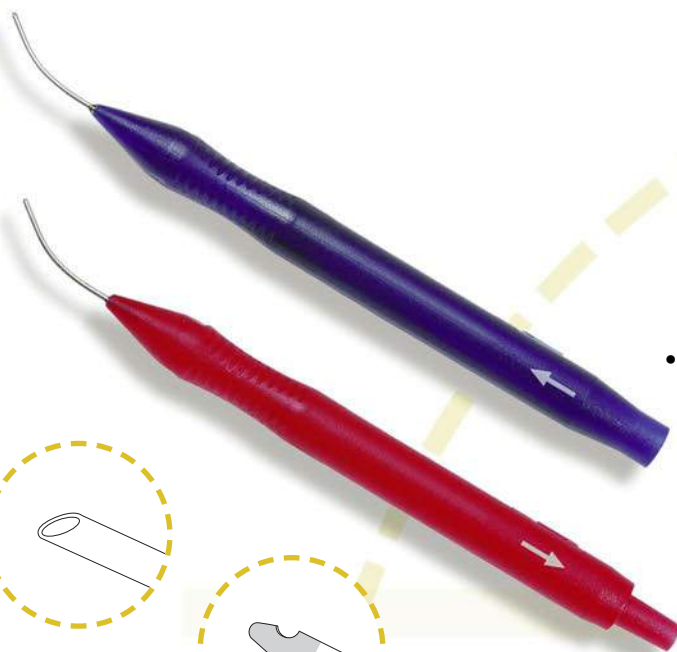
for easy glide through side port incision

EZFlo®
Aspiration Handpiece
male/male Luer fittings
E20-450



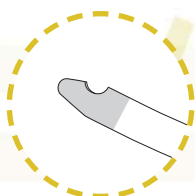
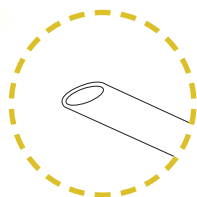
for standard reusable and
disposable cannulae

CATARACT INSTRUMENTS

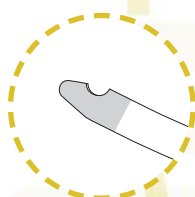
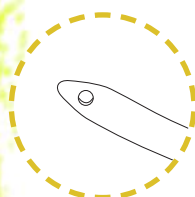


FEATURES AT A GLANCE

- Single use, sterile product.
- No risk of cross contamination.
- Lightweight, colour coded handles.
- Bullet shaped tip for easy tunnel insertion.
- Irrigation front open port or dual side ports.
- Aspiration port of 0.35 mm diameter.
- Roughened tip for capsule polishing.



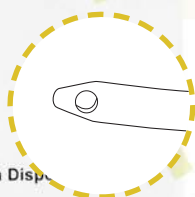
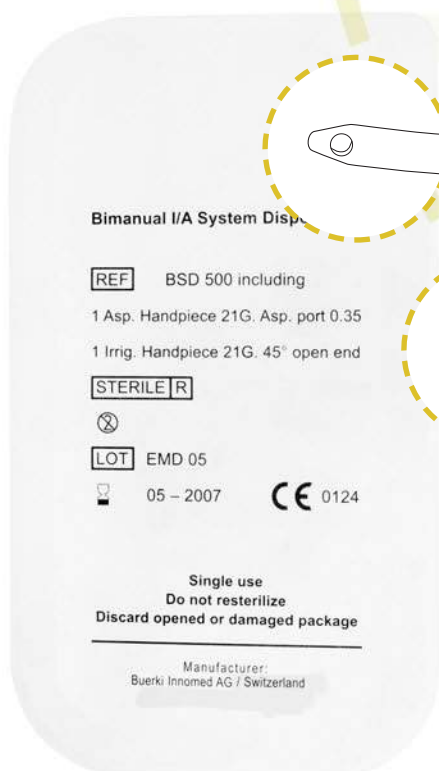
Bimanual I/A System 21GA/0.8 mm complete, consisting of 1 piece each:
Irrigating handle, 45° front open port
Aspirating handle, 0.35 mm top open port
BSD 500 system with rough aspirating tip



Bimanual I/A System 21GA/0.8 mm complete, consisting of 1 piece each:
Irrigating handle, dual 0.45 mm side ports,
Aspirating handle, 0.35 mm top open port

BSD 510 system with rough aspirating tip

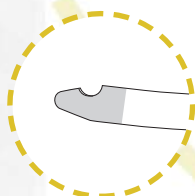
BSD 515 system with smooth aspirating tip



Bimanual I/A System 20GA/0.9 mm complete, consisting of 1 piece each:
Irrigating handle, dual 0.65 mm side ports,
Aspirating handle, 0.35 mm top open port

BSD 560 system with rough aspirating tip

BSD 565 system with smooth aspirating tip



disposable products, sterile, 10 per box

FEATURES AT A GLANCE

- Reusable, xchangeable system
- Easy to clean; handles and tips can be cleaned separately. • EZLock® concept; I/A tips are secured by locking ring.
- Ergonomically designed titanium handpiece.
- Colour coded handpieces and removable tips.

While the irrigation instrument is used as an active rinsing cannula...

EZLock®
Irrigation Handpiece
titanium, 9.0 cm
E20-460

EZLock®
Irrigation Cannula Tips
for use with handle E20-460
21GA/0.8 mm curved tube, dual 0.5 mm side ports
E20-461 smooth tip
E20-462 rough tip

EZLock®
Irrigating Chopper Tip
for use with handle E20-460
20GA/0.9 mm curved tube, 0.5 mm front open port
E20-483R

EZLock®
Aspiration Handpiece
titanium, 9.0 cm
E20-470

EZLock®
Aspiration Cannula Tips
for use with handle E20-470,
21GA/0.8 mm tube, 0.3 mm top port
E20-471 smooth tip
E20-472 rough tip

...aspiration can be performed in the safe central area of the capsule.

CATARACT INSTRUMENTS



**Your favourite Phaco Chopper
is now available with irrigation!**

stainless steel tips are
welded for extra
durability...



EZFlo®
Nichamin Irrigating Chopper
“Quick Chop”, wedge shaped tip

EZFlo®
Rosen Irrigating Chopper
wedge shaped tip, blunt front end

titanium handle with
stainless steel tip and shaft,
female Luer connector,
9.0 cm

EZFlo®
Nagahara Irrigating Chopper
0.5 mm front open port
wedge shaped tip, 60° or 90° cutting edge

EZFlo®
Nagahara Irrigating Chopper
dual 0.5 mm side ports
wedge shaped tip, 60° or 90° cutting edge

Aspirating handpieces are ideal for maintaining the
fluidic balance in the anterior chamber when used
with irrigating phaco choppers and while aspirating
residual cortex

EZFlo®
Aspirating Handpieces
curved 17 mm round cannula,
smooth tip, 0.35 mm top port

E20-450S20 20GA/0.9 mm
E20-450S18 18GA/1.2 mm

The PMS range of **EZFlo®** standard 20GA and 18GA Irrigating Choppers caters to all types of nucleus and various dividing techniques with tips that are sharp or blunt. Tips with cutting edges for sweeping or backward action, etc.

Product No.	Description	GA	OD (mm)	ID (mm)	Port diameter (mm)	Flow rate*
E20-483	Nichamin, front port	20	≠0.9 mm	≠0.5 mm	1 x Ø 0.5 mm	52/min
E20-485	Rosen, front port	20	≠0.9 mm	≠0.5 mm	1 x Ø 0.5 mm	52/min
E20-486	Nagahara 60°, front port	20	≠0.9 mm	≠0.5 mm	1 x Ø 0.5 mm	55/min
E20-487	Nagahara 60°, dual side ports	20	≠0.9 mm	≠0.5 mm	2 x Ø 0.5 mm	50/min
E20-489	Nagahara 90°, front port	20	≠0.9 mm	≠0.5 mm	1 x Ø 0.5 mm	55/min
E20-493	Nichamin, front port	18	≠0.12 mm	≠0.8 mm	1 x Ø 0.8 mm	75/min
E20-495	Rosen, front port	18	≠0.12 mm	≠0.8 mm	1 x Ø 0.8 mm	75/min
E20-496	Nagahara 60°, front port	18	≠0.12 mm	≠0.8 mm	1 x Ø 0.8 mm	75/min
E20-497	Nagahara 60°, dual side ports	18	≠0.12 mm	≠0.8 mm	2 x Ø 0.8 mm	70/min

*Flow Rate Test Conditions:

One litre head of water, gravity fed over a vertical distance of one meter through an irrigation line (Ø 2.5 mm) *These values are estimates only. It is recommended that the surgeon derives his/her own values based on individual clinical experience (positioning of the BSS bottle height).



FEATURES AT A GLANCE:

- All required instruments in one kit, saves time and costs.
- Elliptical shaped tips provide a better fit to the incision.
 - Less fluid leakage, better anterior chamber stability.
 - Lightweight, titanium handpiece, colour coded: blue for irrigation and magenta for aspiration.
 - Standard male/female Luer slip connectors.
 - Compatible with I/A and Phaco systems.
 - Works between 1.2-1.5 mm incision.

**the KEY to successful bimanual
ultra-small incision phaco surgery**

A. Gomes
Irrigating Phaco Chopper
20GA/0.9 mm oval cannula,
flat tip with front open port
E20-484

A. Gomes
Aspirating Handpiece
21GA/0.8 mm oval cannula,
flat tip with front open port
E20-457

A. Gomes
Phaco Needle Tip 30°
20GA/0.9 mm oval needle,
inclusive plastic wrench key
PTO 1050/A

A. Gomes
USICS Kit
(supplied in autoclavable case)
complete, consisting of one each:
E20-484, E20-457, PTO 1050/A
E42-119



tip enlarged 2:1

for use with
AMO Sovereign
B&L Millenium
Fritz Ruck Pentasys

Video available



CLEANING AND MAINTENANCE

- Monomanual I/A System
- Bimanual I/A System
- Irrigation Choppers

The above I/A Handpiece systems and Irrigation Choppers are reusable products supplied Non-Sterile. To insure patient safety, handle the instruments carefully and protect from damage. Do not use if damaged in any manner. Do not attempt to alter or repair. Wash, flush, rinse, dry and sterilise prior to initial use & each subsequent use. Assure free flow of rinse solution through instrument.

NOTE!

Improper or inadequate cleaning may result in particles adhering to the instrument and exfoliation into the surgical field. In addition, the function and life expectancy may become compromised.

CLEANING

Before First Use:

Immerse in an alkaline solution/pH >10 at 20°C during 15 min. Afterwards, rinse thoroughly with purified or distilled water.

During Use:

Immerse I/A Tip and Irrigation Chopper in sterile distilled water, which will help to prevent blood, tissue or saline (BSS) to dry on instruments.

After Use:

Irrigation Handpieces & Choppers

1. Fill distilled water in a 10 cc syringe.
2. Attach syringe to the irrigation connector.
3. Expel water and repeat this step.

Aspiration Handpieces

1. Connect the cleaning adaptor E20-422 to a disposable or reusable 10 cc syringe.
2. Attach syringe to the aspiration connector
3. Draw distilled water through the aspiration connector into the syringe.
4. Disconnect the syringe and expel water
5. Connect syringe and repeat step 3-4.



Cleaning Adaptor
2 x Luer-Lock female
E20-422

STERILISATION (IS NOT CLEANING)

- Monomaneual I/A System
 - Bimanual I/A System
 - Irrigation Choppers

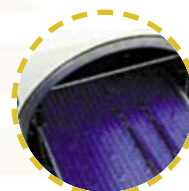
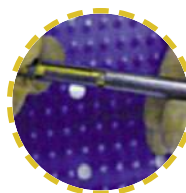
Above products are sold Non-Sterile and must be cleaned and sterilised before the first use!

Hospital approved procedure for handling, cleaning and sterilising must be followed.

Before sterilisation the instrument should be inspected for cleanliness and functionality.

Store instruments in a protective tray for selective positioning and sterilisation.

As a suitable sterilisation process we recommend steam sterilisation in autoclave at 273°F/134°C.



POINTS TO REMEMBER

Do not allow blood, tissue or saline (BSS) to dry on instruments.

NEVER USE SALINE (BSS) FOR RINSING INSTRUMENTS

Always use demineralised or distilled water for final rinsing.

NOTE: The processing of the instruments remains exclusively your responsibility.





20GA/0.9 mm

standard instruments are ideal to fit through a 1.4 mm paracentesis.

Sapphire
Micro Incision Knives
angled, 10 facet blade

E10-170 0.9-1.2 mm

E10-171 1.3-1.5 mm

E10-172 1.8-2.4 mm

for bimanual phaco
procedures and micro
cataract surgery

Beehler Style
Small Incision Pupil Dilator
18GA/1.2 mm straight tube with external micro hook

*E15-572 2 fingers for 3 points dilation

simple and safe
method for
pupil dilation

EZChange®

Zaldivar Style Iridectomy Scissors
removable tip, 20GA/0.9 x 30 mm straight shaft,
curved 2 mm sharp blades, 15.0 cm

E25-620Z

ideal to perform iridectomy

EZChange®

Utrata Style Iridectomy Forceps
removable tip, 20GA/0.9 x 30 mm
curved shaft, fine grasping tips with
0.5 mm platforms, 15.0 cm

E30-621U

ideal for easy
pick up of
the iris and
fibrotic synechia

EZChange®

Kershner Style Micro Capsulorhexis/
Iridectomy Forceps, removable tip,
23GA/0.6x22 mm curved shaft,
fine grasping tips, 15.0 cm

E30-623K

* for further details please refer to page 106



23GA/0.65 mm

micro instruments are ideal for easy passage through a very small paracentesis.



Alio
Micro Iridectomy Scissors
23GA/0.6 x 26 mm curved shaft,
straight cutting blades, 14.0 cm
E25-623S

Ultra micro shafts for insertion through a 1.0 mm incision.

ideal for cutting
synechia, per-
forming small
pupil iridotomies and enlargement of the capsular bag



Alio II
Micro Capsulorhexis/Iridectomy Forceps
23GA/0.6 x 22 mm curved shaft,
very fine grasping tips,
14.0 cm
***E30-623S**

Curved shafts for a more comfortable approach.

ideal for easy pick up of the iris, for creating and grasping the capsular tag and performing the capsulorhexis in one maneuver

Fine-Ikeda
Micro Capsulorhexis Forceps
23GA/0.6 x 17 mm curved shaft, extra fine tips, 14.0 cm
***E30-624S**

short shaft allows
for easy working in
the sub-incisional area



Ikeda II
Micro Capsulorhexis Forceps
23GA/0.6 x 26 mm curved shaft,
micro jaws with 0.25 mm tips, 14.0 cm
***E30-625S**

for secure grip
of the anterior
capsule in the
presence of viscoelastics

Recessed jaws for improved sub-incision flap purchase.



CATARACT INSTRUMENTS

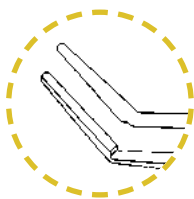
The PMS range of 23GA/0.65 mm MICS Instruments is also available with **EZChange®** removable tips.

Special designed platform to securely grip in the presence of viscoelastic.

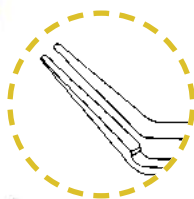
Brief Description	Product No. (complete)	Product No. (tip only)
Alio Scissors	E25-623A	E25-623R
Alio II Forceps	E30-623A	E30-623R
Fine-Ikeda Forceps	E30-624F	E30-624R
Ikeda II Forceps	E30-625I	E30-625R



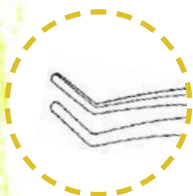
*Gold-plated handles
for easy identification.*



EZHold®
Kelman-McPherson
Tying & Lens Holding Forceps
angled 7.5 mm smooth jaws
with platform, 10.5 cm
***E30-463**

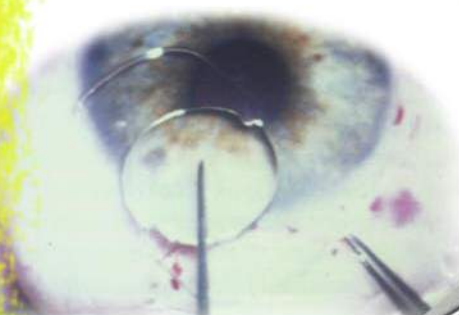


EZHold®
Bechert-McPherson
Lens Holding Forceps
angled 10 mm smooth jaws
with platform, 10.5 cm
***E30-465**



EZHold®
Clayman Style
Lens Holding Forceps
gently curved, angled
smooth jaws, 11.5 cm
***E30-622**

*for superior approach, enables easy
implantation of haptic and optic*



*forceps grasping approximately half
of lens optic for easy implantation*



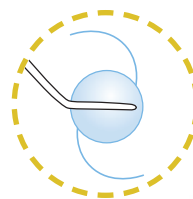
EZHold®
Blaydes Style
Lens Forceps
narrow smooth
jaws, 11.0 cm
***E30-623**

**also available in titanium, please add "T" to cat. no.*



Highly polished jaws
prevent damage to the optic surface.

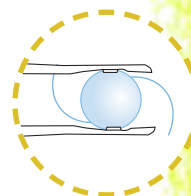
HOLD



EZHold®
Steinert Lens Holding Forceps
angled 7.5 mm smooth jaws,
flat inside surfaces, 10.5 cm
E30-643

for holding soft IOLs
while folding with an inserting forceps

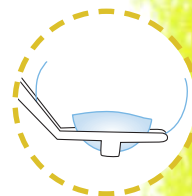
PICK UP



EZFold®
Livernois IOL Folding Forceps
angled 10 mm smooth paddle jaws,
concave inside surfaces, 10.5 cm
E30-661

designed to pick up and fold silicone
or acrylic lenses in one maneuver

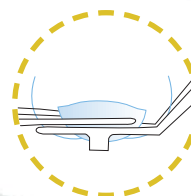
FOLD



EZFold®
Seibel Foldable Lens Loader
angled 12 mm smooth paddle jaws,
straight inside surfaces, 11.0 cm
E30-667T

paddles effectively pick up soft IOLs
for even and equal folding

TRANSFER



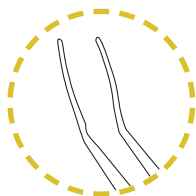
EZHold®
Faulkner Lens Holding Forceps
angled 11 mm rounded
smooth jaws, 10.5 cm
***E30-645**

CATARACT INSTRUMENTS

*also available in titanium, please add "T" to cat. no.



Foldable Lens Inserters
are best to implant acrylic lenses
through a small incision.



EZSert®

Buratto Lens Forceps
angled 8 mm shanks,
biconvex smooth jaws,
10.5 cm

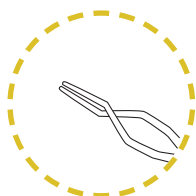
E30-646T



EZSert®

Spaleck Lens Forceps
angled 15 mm shanks,
biconvex smooth jaws,
11.0 cm

E30-648T

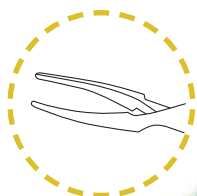


EZSert®

Ernest-McDonald

Soft Lens Insertion Forceps
cross-action design, angled 15 mm shanks,
low profile biconvex smooth jaws,
10.0 cm

E30-663T



EZSert®

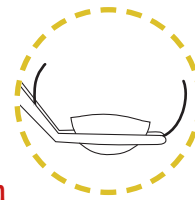
Fine Universal Lens Folder
angled 8 mm
shanks, biconvex
smooth jaws,
10.5 cm

E30-665T without lock

E30-666T with lock



*Always make certain
that the lens is centered and
symmetrically folded and the
haptics are in the desired position*



EZSert®
Buratto Lens Forceps
angled 8 mm shanks,
biconvex smooth jaws,
10.5 cm
E30-646

designed to provide a secure hold
on most soft IOLs for easy insertion



EZSert®
Spaleck Lens Forceps
angled 15 mm shanks,
biconvex smooth jaws,
10.5 cm
E30-648

ideal for inserting foldable IOLs
through a small incision; internal stop restricts stretching of
the small incision



EZSert®
Ernest-McDonald
Soft Lens Insertion Forceps
cross-action design, angled 15 mm shanks,
low profile biconvex smooth jaws,
10.0 cm
E30-663

cross-action design allows for
easy insertion of most foldable IOL styles

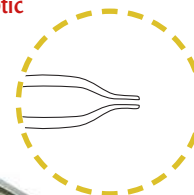


EZSert®
Zaldivar Soft Lens Insertion Forceps
angled 9 mm shanks, biconvex jaws
with extended smooth tips, 12.0 cm
E30-633 stainless steel
E30-633T titanium

designed to fold
today's soft IOLs



extended flat tips are useful to
implant superior haptic



CATARACT INSTRUMENTS



*The EZ way
to implant...*

supplied without cartridge
and silicone cushion

EZJect®

Thomas Lens Injectors
lightweight aluminium handle,
plunger piston with flat tip,
for 1-piece foldable lenses

E30-650LP syringe style, 10.0 cm

E30-651LP screw style, 14.5 cm

photo shows injection of 1-piece foldable lens

The **EZJect®** Foldable Lens Injectors can be used with
the Medical ViscoJect™ Cartridge Sets #LP604235/
#LP604240M and other injector cartridge systems.

ViscoJect™ and ViscoGlide™ are registered trademarks of Medical AG

VISCOJECT™ CARTRIDGE SETS FOR 1-PIECE LENSES
consisting of ViscoGlide™ cartridge and silicone cushion

LP604235 2.7 Cartridge Set, sterile (box of 10)
for < 2.8 mm incision size

LP604240M 2.2 Cartridge Set, sterile (box of 10)
for < 2.5 mm incision size

Silicone Cushion (blue)

LS604500

used with flat tip injectors
E30-650LP & E30-651LP

EZJect®

Cartridge Loading Forceps
angled 13 mm long jaws,
smoothly polished, 10.5 cm

E30-651LF

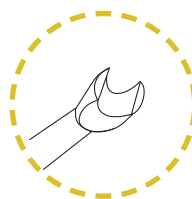
ideal to place the soft lens into the
open cartridge and to control
correct loading



Do not resterilise injector cartridge and silicone cushion. Single use only.



...simple, safe
and speedy



EZJect®
Thomas Lens Injectors
lightweight aluminium handle,
plunger piston with grooved tip,
for any kind of foldable lenses

E30-650LC syringe style, 10.0 cm

E30-651LC screw style, 14.5 cm



Injector Cartridges
for any kind of foldable lenses
with oval shaped tips
sterile, disposable plastic

LC604210 OvalGlide™
for 3.2-3.35 mm incisions

LC604220 MicroGlide™
for 2.85-3.0 mm incisions



used with grooved tip injectors
E30-650LC and E30-651LC

OvalGlide™ and MicroGlide™ are registered trademarks of Medical AG

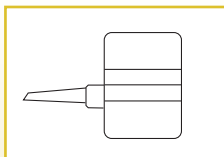
EZJect®
Lens Pusher/Manipulator
angled 13 mm parallel arms
with flat external surfaces,
10.5 cm
E30-651LM

designed to accurately adjust soft lenses
within the tube portion of the cartridge

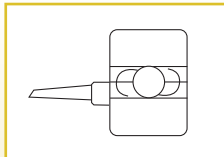


Video available

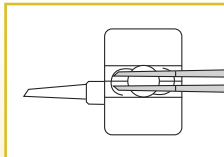
INSTRUCTIONS FOR LOADING



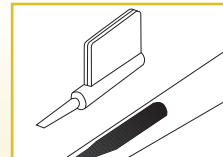
Open cartridge and fill
the loading chamber
with viscoelastic.



Place lens into the open
cartridge. Adjust lens
always in the axis of
the cartridge.



Use E30-651LF forceps
or E30-651LM pusher
to gently press the
centered lens into the
tube.



Close cartridge
and slide into the injector
opening.

IMPORTANT INFORMATION FOR IMPLANTATION:

The cartridge is inserted bevel down in the wound! Advance the lens slowly.

CATARACT INSTRUMENTS



*innovative IOL
injection system*

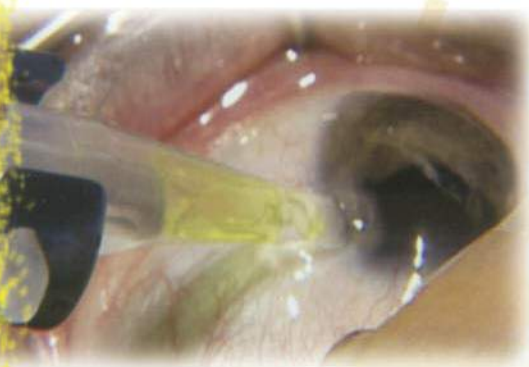
CATARACT INSTRUMENTS



EZJect® II Lens Injector
lightweight titanium handle with
single hand plunger mechanism

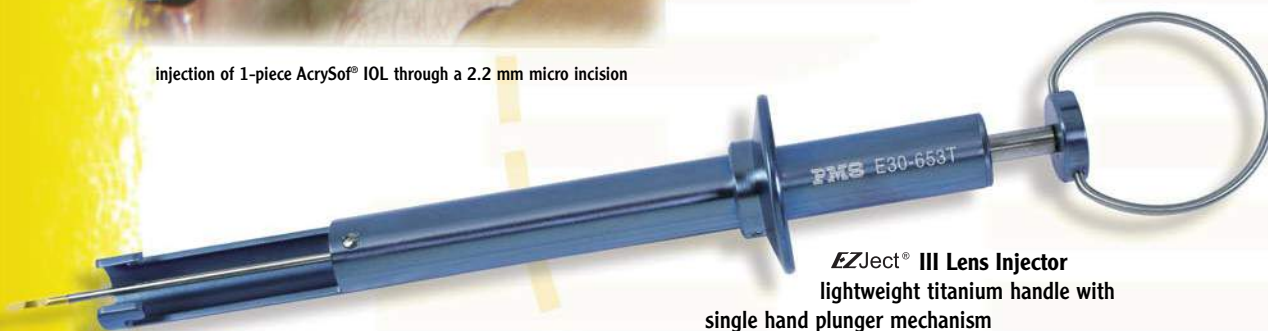
E30-652T

for 1-piece and 3-piece Acrylic IOLs using
the Monarch® II A, B and C cartridges



Injection of 1-piece AcrySof® IOL through a 2.2 mm micro incision

Specially designed handle with finger rest and
removable thumb ring allows firm grip and
precise control of the implantation procedure.



EZJect® III Lens Injector
lightweight titanium handle with
single hand plunger mechanism

E30-653T

Gold tip for good visibility
through the cartridge

for injecting 1-piece AcrySof® Aspheric IOLs
using the new Monarch® III D cartridges

Patent pending



EZJect®
IOL Inserter Forceps
all titanium body, thin
and smooth jaws, 11.0 cm

E30-654T

ideal for inserting
AcrySof® IOLs to
Monarch® A, B and
C cartridges

to be used with the **EZJect®** Lens Injectors E30-652T and E30-653T



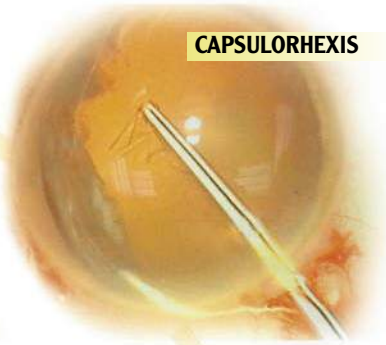
Lens Implant / Euro Cent comparison

Fortunately for every one of us who's "getting older", a man-made artificial lens has been developed which many times will even work better than the natural human lens after age 60. This clear plastic lens - **made of PMMA, Silicone and Acrylic material** - is inserted surgically as a replacement for the natural lens and will, in most cases, last a lifetime.

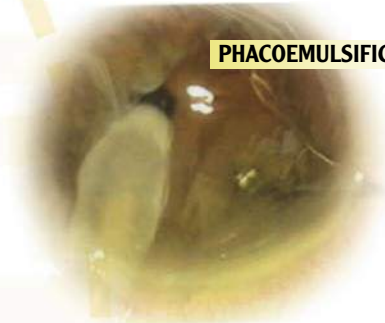
Many who go through the procedure experience not only return of lost vision, but also a renewed independence and vitality. The removal of the cloudy lens and the increase in light which results may well be one reason why senior adults are living more productive and healthy lives in the 21st Century.



CAPSULORHEXIS



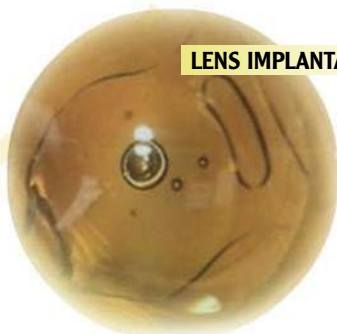
PHACOEMULSIFICATION



ASPIRATION



LENS IMPLANTATION





"It's so EZ® to change"



Removable instrument tips

Hold the tip gently but firmly and screw the handle onto the tip!
Make sure that the handle is turned only, NOT THE TIP!

Ergonomically designed handpieces

- Lightweight, aluminium 70% lighter (than steel).
- Highly corrosion-resistant, good for long life.
- Sleek design for perfect balance and control.
- Handles compatible with removable tips.
- Eliminates cost of permanent handle.
- Total length of handle 9.0 cm.



Handles and tips sold separately

Colour-coded handles

- Easier identification on the sterile field

Product code for handles

E15-100 AY	yellow
E15-100 AR	red
E15-100 AG	green
E15-100 AB	blue
E15-100 AP	purple



Do not use acid or alkali detergents or any kind of abrasive for cleaning the aluminium handle.
Never use balanced salt solution for rinsing .





Lester
Lens Pusher
E15-500R straight
E15-501R angled



Lewicky
IOL Manipulating Hook
E15-557R vaulted



Nevyas
Soft IOL Manipulator
straight, rough tip
E15-558R

Choice of EZChange® tips

Ideal for dialing rigid or foldable IOLs,
insert and maneuver lens haptics, retract iris
and to manipulate nuclear cataract.

instrument tip with thread
for absolute secure locking;
shaft and tips are made of
1-piece stainless steel



Sinskey II
IOL Manipulating Hook
E15-560R straight
E15-561R angled



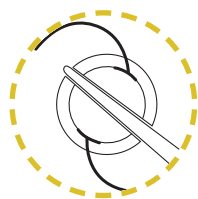
Rentsch
Lens Manipulating Hook &
Iris Retractor, straight
E15-562R



Kuglen
Iris & IOL Manipulator
E15-564R straight
E15-565R angled

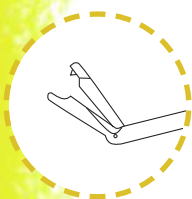
Just got easier!

CATARACT INSTRUMENTS



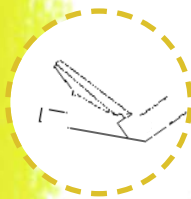
EZCut®
Williams Soft IOL Cutter
solid lower blade, wedge shaped
upper cutting blade, 11.0 cm
E30-630T

ideal to cut and remove any soft IOL;
hinged mechanism ensures needed
cutting strength



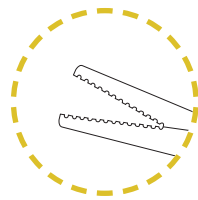
EZCut®
Leopold Soft IOL Cutter
scissors style cutting blades
with fixation pin at the front, 11.0 cm
E30-631T

scissors style allows cutting in
one smooth continuous action



EZCut®
Osakabe Soft IOL Cutter
slotted lower blade, wedge shaped
upper blade with slightly blunt pick, 11.0 cm
E30-632T

for controlled and effective cutting;
fixation pick prevents IOL slipping



EZCut®
Osher IOL Cutting Scissors
angled to side, 8 mm serrated blades,
blunt tips,
10.0 cm
E25-466

for "crisscross technique"
IOL removal



Cuts any foldable

IOL

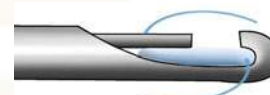
EZCut®
Alexander Soft IOL Cutter
titanium handle with single hand
plunger mechanism, straight shaft
E30-636T



**close-up of tip and
cutting mechanism**



1. Retrograde curved tip and platform cradles the IOL in the anterior chamber.



2. Lightly press the plunger to engage the lens retaining guard which secures the IOL during cutting process.



3. Continual pressure on the plunger engages the cutting blade and bisects the IOL.

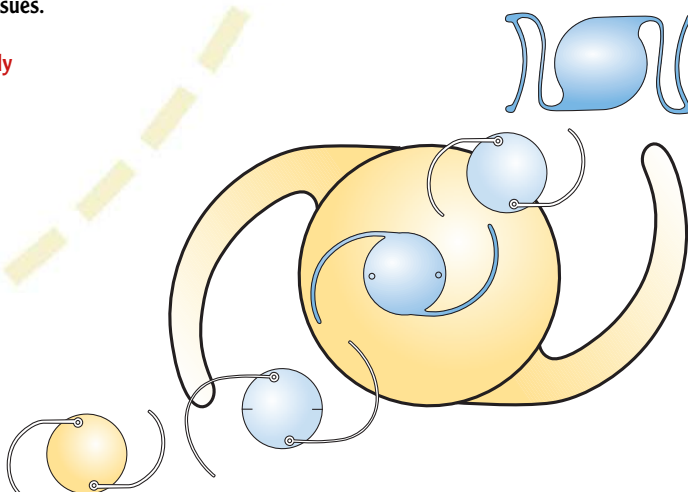
FEATURES AT A GLANCE

- Titanium construction provides durability and lightweight.
- Designed to be used through a small incision without stretching the wound.
- Plunger rod activates retaining guard and cutting blade simultaneously.
- Retaining guard firmly holds the lens in place and prevents it from "buckling" upward.
- Angled cutting blade advances lengthwise through the IOL in one linear movement.

PROTECTION AND SAFETY

- The lens is firmly hold during the cutting process, lessening the chance of endothelial damage.
- The cutter movement is designed to cut only the IOL and not the surrounding tissues.

The PMS EZCut® IOL Cutter effectively and safely cut any kind of foldable acrylic and silicone lenses through a small incision.



CATARACT INSTRUMENTS



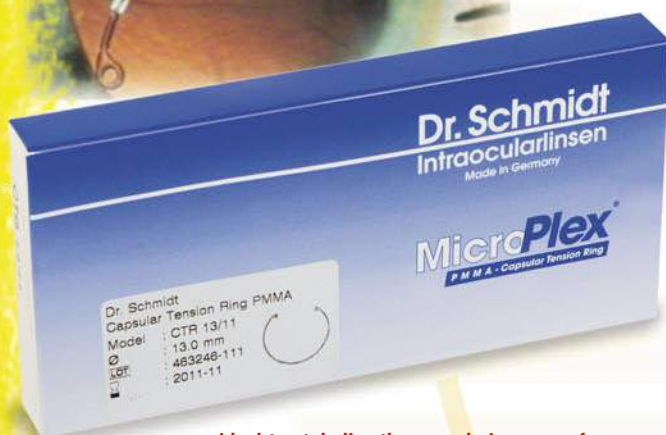
*necessary in
modern cataract
surgery*



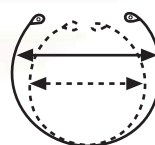
Spatulated tip with a micro hook inside for effective and reliable catching, holding and injecting of the Capsular Tension Ring. The Ring can be implanted in both clockwise or counterclockwise directions.



EZject®
Tension Ring Injector
lightweight titanium handle with
single hand plunger mechanism
and 19GA/1.1 mm curved shaft
E30-655T



*ideal to stabilize the capsule in cases of
damaged or missing zonules, luxation of IOLs
and zonulolysis*



Dr. Schmidt
Capsular Tension Ring PMMA
with eyelet, total diameter
11.0 mm to 13.0 mm,
disposable (1 unit)

EZject®
Tension Ring
Manipulator/Forceps
20GA/0.9 mm curved
shaft, disc shaped lower
jaw with hole to accomodate
the manipulator, 15.0 cm

E30-655S stationary tip
E30-655N removable tip



The manipulator can be used
independently and in combination
with the disc as a forceps.





IOL Scleral Suturing

EZJect®
Intraocular Needle Injector
titanium handle with plunger mechanism and
19GA/1.1 mm curved shaft
E30-657T

Ideal for IOL scleral fixation
through a small incision using
needled sutures for secondary
implantation. Can be used with
straight and curved spatulated needles with length up to 20 mm
(Polypropylene 10-0 or 9-0)

Osher
Needle Guide
titanium handle with
stainless steel tip,
12.0 cm
E30-658T

can be used with E30-657T,
provides counter traction for IOL suturing
needle when passes through eye wall

EZJect®
Sugiura Intraocular Needle Injector
aluminum handle with plunger mechanism,
straight shaft, cushion style
2.0 x 0.9 mm flat tip
E30-659

latest technique for
ciliary sulcus fixation of IOL;
extremely safe
and simple to use

Video available

CATARACT INSTRUMENTS



EZFit®

EZChange®

EZSert®

EZCut®

EZFix®

EZFio®

EZFold®

EZGrip®

EZHold®

EZJect®

EZWash®

EZLock®

EZLoad®

PMS TRADEMARKS

PMS





CORNEAL TREPHINE INSTRUMENTS . 138-139

CORNEAL TRANSPLANT SYSTEM 140

CORNEAL TRANSPLANT INSTRUMENTS 141-147

LASIK & PRK INSTRUMENTS 148-157

LASEK INSTRUMENTS 158-159

AK INSTRUMENTS & DIAMOND KNIVES .. 160-161

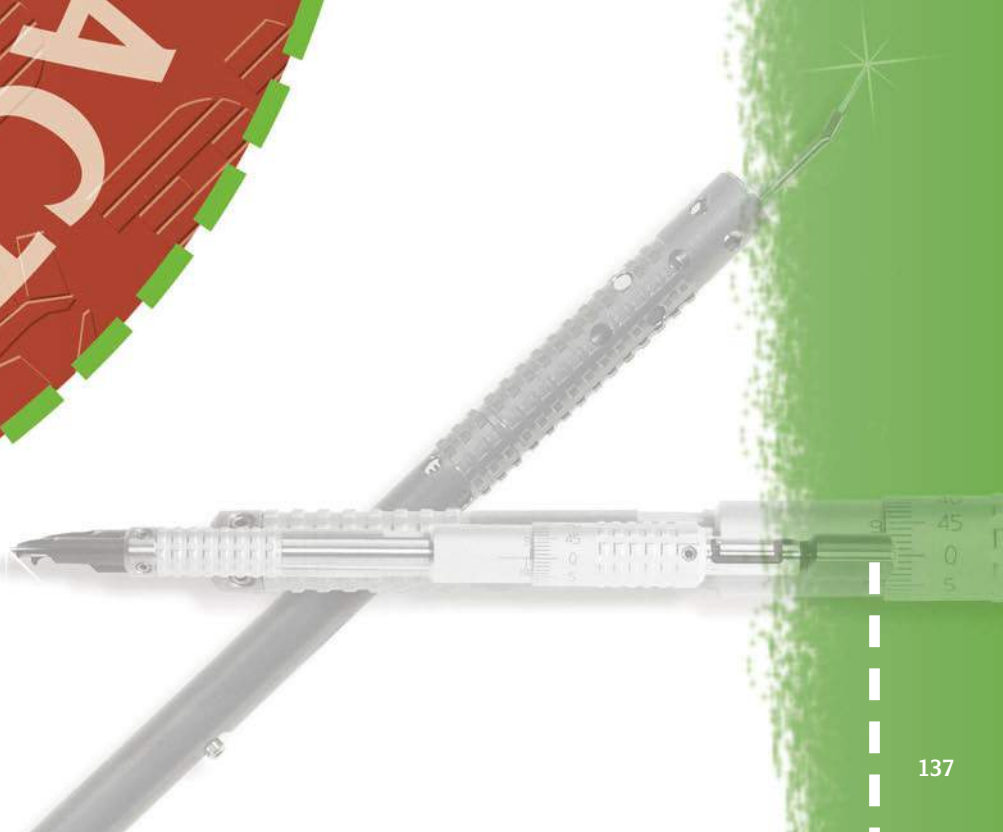
LRI INSTRUMENTS 162-165

TORIC IOL'S & CORNEAL RINGS 166-167

ICL® INSTRUMENTS 168-171

DSEK/DLEK INSTRUMENTS 172-173

DSAEK INSTRUMENTS 174-175





CORNEAL TREPHINE INSTRUMENTS

PMS **EZCut®** Trephine Blades are machined from solid stainless steel rod. Handcrafted, sharp, uniform blade edges produce a symmetrical, smooth vertical cut of all corneal layers.



EZCut®
Corneal Trephine Blades
long 15 mm model,
for "Free Hand" use

E40-530L+ size

available in 0.25 mm increments
from 6.0 mm through 9.5 mm, and
in large sizes 14, 15 & 16.0 mm dia.

Large size trephines for "Free Hand" use allow
a surgeon, or eye bank, to remove the cornea
along with its scleral rim from the donor eye



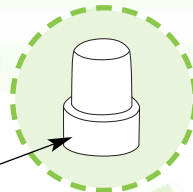
New

EZFit®
Universal Trephine Handle
adjustable spring arms to fit
short trephine blades E40-530S+
E40-531

***E40-530L+ and E40-530S+ series of trephine blade are
NOW available in disposable, sterile version upon request!**



universal hub, 10 mm dia.



EZCut®
Corneal Trephine Blades
new model with universal hub
for trephine handle E40-532

E40-530N+ size

available in 0.25 mm increments
from 6.0 mm through 9.5 mm dia.



handle is supplied without blade

EZFit®
New Trephine Handle
designed to fit trephine
blades E40-530N+
E40-532

A unique universal hub diameter with varying
blade edge diameter provides an easier, more
secure means of mounting the blade to the handle.

* by special order only, 4-6 week delivery

"Free Hand" corneal graft trephination



EZCut®
Corneal Trephine Blades
short 9.5 mm model, for
handles E40-531 & E40-533

*E40-530S+ size
available in 0.25 mm increments
from 6.0 mm through 9.5 mm dia.,



EZFit®
Trephine Blade Holder
adjustable, fits with the series of
short trephine blade E40-530S+

E40-533



trephine blades from
6.0 mm to 9.5 mm are placed here and

10.0 mm to 11.0 mm are placed here

By turning the back of the handle you can raise or
lower the mm size that the handle accommodates.

EZFit®
Corneal Trephine Punch
with Teflon base plug, to fit
E40-533 Trephine Blade Holder

E40-540

for accurate donor button preparation

Replacement Base Plug
(15 mm x 9 by 4 mm depth)
for Corneal Punch E40-540

E40-541



Corneal Transplant Block
(22 mm dia. x 8 mm depth)
for Corneal Punch E40-540

E40-542

Base Plug Shield
(27 mm dia. x 22 mm depth) fits over
base plugs E40-542 and E40-543

E40-544

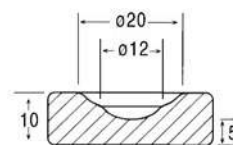
to cover cornea tissue



Large Teflon Cutting Block...
for universal use
E40-543

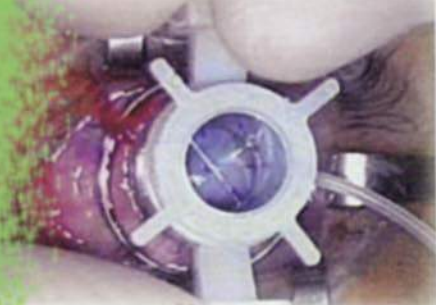


supplied without E40-533 handle



internal surface has multiple radii
shape to closely approximate to
the corneal scleral profile

KERATOREFRACTIVE



CORNEAL TRANSPLANT SYSTEM

The Hessburg Barron Vacuum Trephine for cutting the recipient cornea is a single use, sterile instrument for lamellar or penetrating keratoplasty.



A7028 6.0 mm

A7030 6.5 mm

A7032 7.0 mm

A7034 7.5 mm

A7035 7.75 mm

A7036 8.0 mm

A7038 8.5 mm

A7040 9.0 mm

A precise calibrated rotating mechanism allows the surgeon to advance the blade depth 0.25 mm with each 360° rotation.

All Trephines and Punches include a marking pen and are supplied completely assembled and ready for use.

The Barron Donor Marking Punch is a single use, sterile system, designed to make an exact cut of the donor tissue for corneal transplant surgery.



A7041 6.0 mm

A7042 6.5 mm

A7044 7.0 mm

A7046 7.5 mm

A7047 7.75 mm

A7048 8.0 mm

A7049 8.25 mm

A7050 8.5 mm

A7051 8.75 mm

A7052 9.0 mm

A7053 9.5 mm

Not for sale in the UK and USA.

CORNEAL MARKERS

PMS

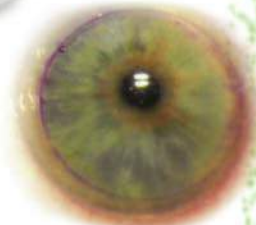


Corneal Markers - are being applied in various areas to define the capsulorhexis and arcuate positioning.

Optic Zone Markers

low profile ring with
cross hair, 10.5 cm
available in 3 sizes:
7.0, 8.0 and 9.0 mm
*E10-522+size

cross hairs are ideal for accurately
centering the marker over the patient's visual axis



marking of the recipient cornea

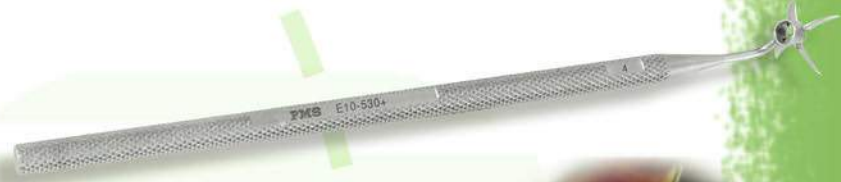
Thornton

Radial Incision Marker
semi-sharp marking blades,
4.5 mm center opening,
14.0 mm OD, 11.5 cm

*E10-530+ size

available with 4, 6, 8, 12 and 16 blades

radial incision markers with symmetrical patterns
provide orientation lines on the recipient cornea



eight-blade marker in situ

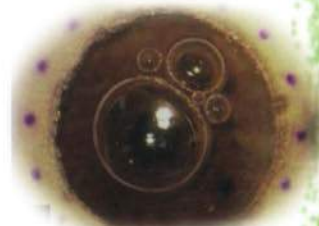
Anis

Suture Placement Marker
eight radial marking lines,
8 mm dia. central opening,

11.0 cm

E10-548

ideal to mark suture placement sites on the
recipient cornea prior to penetrating keratoplasty



ink markings of suture placement sites

Marking Pad

Gentian violet ink
non-sterile (box of 10)
630-01



Ink marking pads are used
for coating cornea markers to
produce a pattern on the cornea
which is clearly visible for the
duration of the surgery.

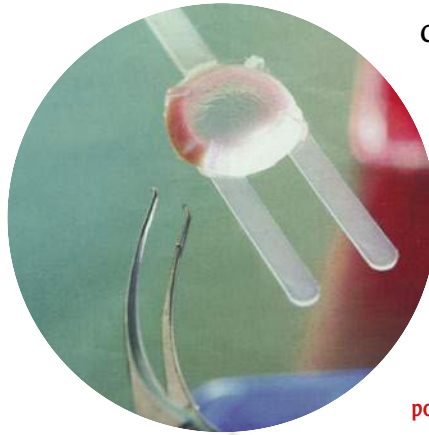
*also available on titanium round handle

KERATOREFRACTIVE



slotted spoon shaped blade is ideal for corneal button transfer and to lift contact lens bandage from bottle and place on patient's eye following LASEK

CORNEAL TRANSPLANT FORCEPS



Corneal Donor Tissue is of great value to the recipient. Thus, it should be controlled and selected by specialists, stored with utmost care and only handled using Precision Micro Surgical instruments of superior quality material. Using the double-armed forceps, you can stabilise the corneal graft in two locations simultaneously. This allows you to precisely place the needle between the two arms without tissue distortion minimising potential astigmatism.



Paton
Spatula & Spoon
slotted spoon shaped blade and
angled 7 x 2 mm wide spatula,
12.5 cm

E40-682 stainless steel

E40-682T titanium



Harms
Corneal Suturing Forceps
1 x 2 teeth, 0.12 mm/45°,
tying platform, 7.5 cm

E30-081T



Polack
Double Corneal Suture Forceps
U-shaped 1 mm spread, 2.75 mm long double tips
with 1 x 2 teeth, 0.12 mm/45°, 7.5 cm

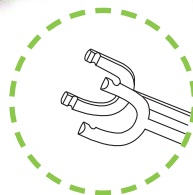
E30-087T



Double Corneal Fixation Forceps
U-shaped 2 mm spread, angled
two 3 mm long arms

E30-088T Remky-Polack
2 x 1x2/0.12 mm teeth 45°

E30-089T Hofman-Polack
2 x 2/0.1 mm notched tips



CORNEAL SCISSORS



Corneal Section & Transplant Scissors

– with right and left curved blades and blunt tips are ideal for wound enlargement and completion of trephine cuts.



Castroviejo

Corneal Section Scissors
uneven length blades

E25-040 small, right

E25-041 small, left

outer blade is 0.5 mm longer than inner blade

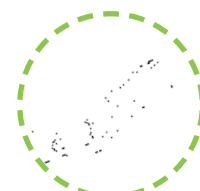
E25-050 medium, right

E25-051 medium, left

E25-060 large, right

E25-061 large, left

ideal for wound enlargement



Castroviejo

Universal Corneal Scissors
rounded blunt tips, 10.0 cm

*E25-011 small blades, light curve

*E25-015 medium blades, light curve

*E25-013 medium blades, medium curve

*E25-019 large blades, strong curve

*also available with sharp tips



Katzin

Corneal Transplant Scissors
small 5.0 mm blades,
strong curved, 10.0 cm

E25-100 right

E25-101 left

ideal to complete corneal trephination



CURVED CORNEAL SCISSORS SPECIFICATIONS

Blade sizes and average lengths in millimetres,
measured from mid screw and aperture angle*

small	8.0 - 9.0	4.5 - 5.5
medium	10.0 - 11.5	5.5 - 6.0
large	14.5 - 16.0	7.0 - 9.0
Xlarge	17.5+	10.0+

* aperture angle = blade length from angle, therefore cutting edge

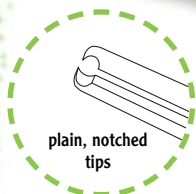


KERATOREFRACTIVE



CORNEAL SUTURE FORCEPS

Hoskin Style Forceps – have notched (1x1) atraumatic tips to grasp tissue, and a recessed area directly behind the tips for encapsulating rather than crushing tissue, a common occurrence with conventional 1 x 2 teeth forceps.



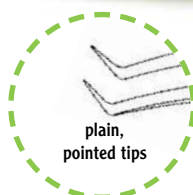
Hoskin
Suture Tying Forceps
8.5 cm, ultra fine jaws with

E30-028T plain, notched 0.25 mm tips

E30-032T 6 mm x 0.5 mm platform tips

E30-036T platform, notched 0.25 mm tips

ideal for atraumatic tissue fixation, manipulation
of limbal area and corneal lip, and fine suture tying



Hoskin
Suture Tying Forceps
8.5 cm, ultra fine jaws with

E30-030T plain, notched 0.25 mm tips

E30-038T platform, notched 0.25 mm tips

E30-034T plain, pointed tips for suture removal



Troutman-Barraquer
Corneal Suture Forceps
ultra fine jaws, 6 mm platform,
1 x 2/0.12 mm teeth, 8.5 cm

E30-044T oblique 45°

E30-046T straight 90°

these forceps are excellent for manipulation and
fixation of delicate tissue, and fine suture tying



Troutman-Barraquer
Corneal Suture Forceps
ultra fine jaws, 4.5 mm platform,
1 x 2/0.12 mm teeth, 8.5 cm

E30-045T oblique 45°

E30-047T straight 90°



for stainless steel models delete "T" from cat. no.



Donor Cornea sutured in place using...

...double continuous
acc. to F. Hoffmann (1978)

...single continuous

2:1

...single interrupted
suture technique

Barraquer
Micro Needle Holder
titanium made, TC textured
conical 8 mm curved jaws with
extra fine 0.3 mm tips, without lock

E35-211T 10.0 cm

E35-213T 12.5 cm

ideal for 11-0 to 8-0 sutures

St. Martin's
Micro Suture Forceps
5 mm tying platforms, 1 x 2/45° teeth, 8.5 cm

E30-411T 0.12 mm

E30-413T 0.3 mm

excellent for corneoscleral fixation,
grasping conjunctiva and fine suture tying

Paufigue
Universal Suture Forceps
6 mm tying platforms, 1 x 2/45° teeth, 8.7 cm

E30-415T 0.5 mm

E30-418T 0.8 mm

Castroviejo
Suturing Forceps
straight (wide handle)
6 mm tying platforms,
1 x 2/45° teeth, 11.0 cm

E30-450T 0.12 mm

E30-451T 0.3 mm

E30-452T 0.5 mm

Colibri Style (wide handle)
E30-453T 0.12 mm

All titanium forceps have
tying platforms covered with
Tungsten Carbide to ensure that
the forceps have a very firm grip.

for stainless steel models delete "T" from cat. no.

KERATOREFRACTIVE



*Instrument sets
are presented as
guidelines only*



E10-114



E10-548



E30-093T



E35-251



E10-690T

E42-120 CORNEAL TRANSPLANT SET
complete, consisting of the following:

E30-902 Halstead Mosquito Forceps, page 16

E30-934 Dieffenbach Bulldog Clamp, page 16

E30-965 Baby Jones Towel Clamp, page 16

E20-001 Bishop-Harmon Irrigator, page 20

E20-030 Rycroft Irrigating Cannula, page 20

E40-104 Liebermann Eye Speculum, page 55

E40-618 Scleral Fixation Ring, page 19

E10-548 Anis Host Bed Marker, page 141

E10-522+ Optic Zone Marker, page 141

E40-530N+ Trephine Blade, page 138

E40-532 New Trephine Handle, page 138

E10-114 Sapphire Universal Knife, page 65

E25-100 Corneal Transplant Scissors, page 143

E25-101 Corneal Transplant Scissors, page 143

E25-313 Jaffe Micro Stitch Scissors, page 59

E25-333 Westcott Tenotomy Scissors, page 59

E30-081 Harms Corneal Forceps, page 23

E30-093T Maumanee Corneal Forceps, page 146

E30-106 Bishop-Harmon Forceps, page 23

E30-450 Castroviejo Suture Forceps, page 145

E30-460 McPherson Tying Forceps, page 24

E35-251 Barraquer Needle Holder, page 146

E35-133 Castroviejo Needle Holder, page 25

E40-682 Paton Spatula & Spoon, page 142

E10-690T Maloney Keratometer, page 160

FOR CORNEAL TRANSPLANT SURGERY ADD

PMO



donor cornea being
placed on the host bed



supplied without E40-533 handle



E40-540

FOR CORNEAL TRANSPLANT SURGERY ADD

A7034 Hessburg-Barron Vacuum Trephine, page 140

A7048 Barron Donor Marking Punch, page 140

E40-530S+ Corneal Trephine Blade, page 139

E40-533 Trephine Blade Holder, page 139

E40-540 Corneal Trephine Punch, page 139

FOR CORNEAL SECTION ADD

E25-070 Troutman Right Corneal Section Scissors, page 147

E25-071 Troutman Left Corneal Section Scissors, page 147



E25-070

FOR CORNEAL SUTURING ADD

E30-411 St. Martin's Micro Suture Forceps, page 145

E30-418 Paufigue Universal Suture Forceps, page 145

E35-211 Barraquer Micro Needle Holder, page 145



E30-411

MISCELLANEOUS PRODUCTS

37-405 PVA Eye Spears, page 155

52-100 Ink Marking Pen, page 151

EZWash® Sterilising Trays, see section



37-405

KERATOREFRACTIVE



LASIK INSTRUMENTS

Adjustable Wire Speculae - provide maximal exposure of the globe for LASIK. The ability to adjust and lock the speculum is important for maintaining control in patients with narrow palpebral fissures or those with blepharospasm.

Genisi
LASIK Temporal Speculum
solid 15 mm rounded blades, 8.0 cm
***E40-100TG**

adjustable & strong, allows unobstructed micro-keratotome access. Solid blade to minimise interference and contamination from eyelashes

Machat
LASIK Temporal Speculum
open 14 mm V-shaped blades, 8.0 cm
***E40-100TM**

for maximum exposure of the eye ball and to accommodate suction ring for efficient operation of the keratotome

Slade
LASIK Temporal Speculum
open 14 mm rounded blades, 8.0 cm
***E40-100TL**

shanks of the speculum follow the facial angle on the temporal side allowing for easy access of the keratotome

Freeman
Aspirating LASIK Speculum
open 14 mm rounded blades with
14 aspiration holes, attached
to silicone tubing kit
8.0 cm
E40-100TF complete
E40-100TR replacement tubing kit

adjustable and adaptable blades are ideal for either nasal or temporal approach

*on request also available in stainless steel



Nasal Placement

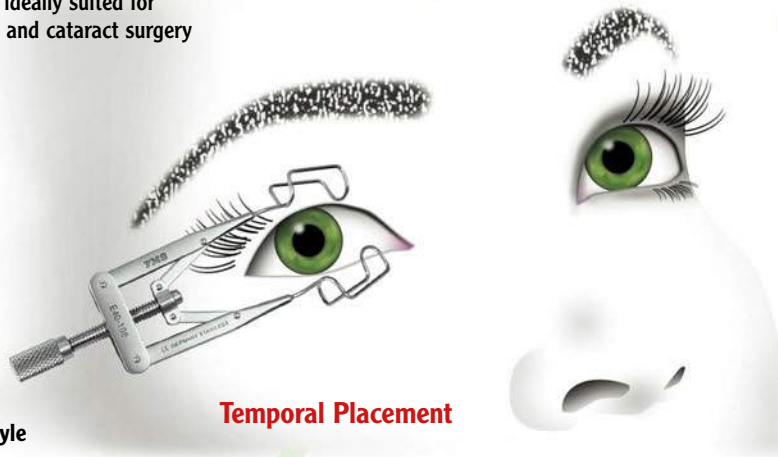
Retracting the lids – many surgeons prefer the adjustable Lieberman style speculum which retracts the lids sufficiently to provide unobstructed access for the microkeratome suction ring (see page 157).

Kershner Style
Reversible LASIK Speculum
solid 14 mm blades, 7.7 cm
E40-105 stainless steel
E40-105T titanium



Reversible Eye Speculae -

can be positioned nasally or temporally, by simply flipping the instrument; ideally suited for today's techniques of refractive and cataract surgery



Temporal Placement

Kershner Style
Reversible LASIK Speculum
fenestrated 14 mm blades, 7.7 cm
E40-106 stainless steel





Fixation Rings - are used to stabilise the globe and prevent inadvertent movement of the eye ball during laser ablation.



Blumenthal
PRK/LASIK Atraumatic Fixation Ring
closed 12 mm ID swivel ring with
concentrically grooved inside
surface, 13.0 cm

E10-512B stainless steel

E10-512TB titanium round handle

positioned at the limbus to prevent eye movement during
PRK/LASIK; also serves as a resting place for the corneal flap

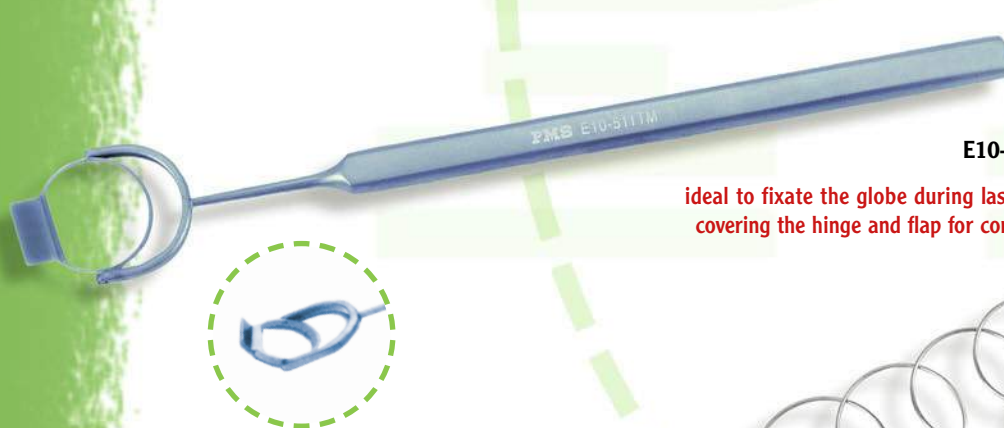


Gimbel
LASIK Atraumatic Stabilisation Ring
open 13 mm ID swivel ring
with 9 mm cutout, 13.0 cm

E10-513G stainless steel

E10-513TG titanium

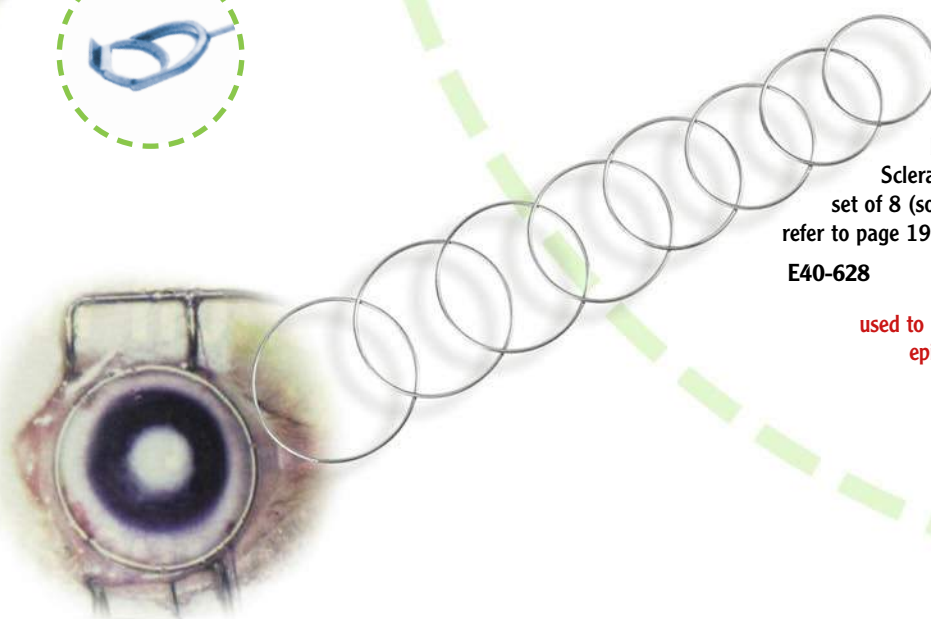
blunt teeth on both sides for atraumatic fixation;
can be used for either the left or right eye



Moretsky
LASIK Hinge Protector
with swivel fixation ring
11.0 mm ID, 13.0 cm

E10-511TM

ideal to fixate the globe during laser ablation while
covering the hinge and flap for complete protection



Flieringa
Scleral Fixation Rings
set of 8 (sold singly),
refer to page 19

E40-628

used to be fixed to the
episclera with sutures



LASIK Markers - with asymmetrical marking lines are designed to place identifying patterns on the cornea for accurate realignment of the flap.

Mendez LASIK Marker

modified cross pattern with two opposite radial marking lines and two asymmetrically placed parallel marking lines, 11.0 cm

E10-673



central rings with cross hair are used for accurately centering the marker over the patient's visual axis

Chayet LASIK Marker

8.5 mm dia. marking ring with two asymmetrically spaced smaller rings, and central cross hair, 11.0 cm

E10-675



circular opening maximises visibility during marking

Lu LASIK Marker

10.5 mm dia. external ring with radial marking lines, 3.0 mm central ring with cross hair, 11.0 cm

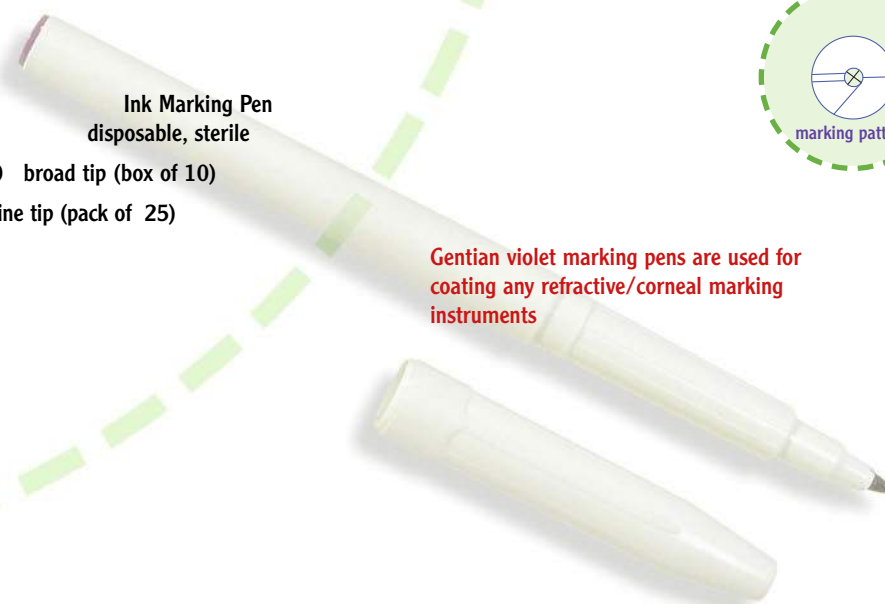
E10-677



Ink Marking Pen disposable, sterile

52-100 broad tip (box of 10)

T5222AA fine tip (pack of 25)



Gentian violet marking pens are used for coating any refractive/corneal marking instruments

KERATOREFRACTIVE



Flap Spatulae - have bevelled front edge for easy entry under the flap and smoothly rounded surfaces to elevate and reposit the flap.



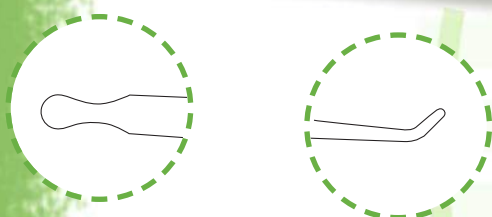
Slade
Flap Spatula/Elevator
vaulted 12 x 2 mm wide blade,
smooth tip, 11.5 cm
E15-371T

works well to find any "mark" or begin entry
into the flap margin for enhancements



Katzen
LASIK Retreatment Flap Separator
smooth bullet tip and 45° angled
delicate hook, 11.5 cm
E15-372T titanium
E15-372 stainless steel

bullet tip to cut a clean edge through the epithelium before lifting the flap and delicate hook to locate and manipulate the flap edge



Buratto
Flap Retractor & Protector
angled 8 x 5mm blade with narrow lip, 11.5 cm

E15-381T

used to retract and protect
nasally hinged flap (left & right eye)

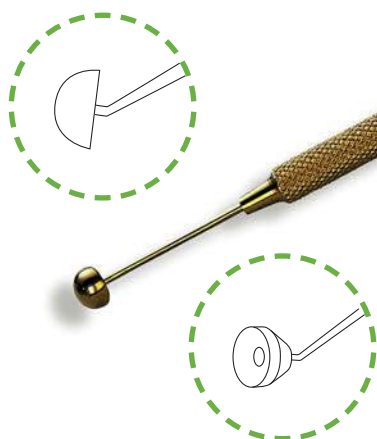


Caro
Flap Smoother
angled, hemispherical tip, 11.5 cm
E15-383T

designed to lightly press
on the corneal flap conforming
it to the newly shaped stromal bed



Caro-Avalos
Flap Smoother/Conformer
angled, funnel shaped tip
11.5 cm
E15-385T





Flap Forceps - have specially designed jaws with smooth inner surfaces to easily enter, grasp, elevate and smooth the flap.

Mendez
LASIK Multipurpose Forceps
11.5 cm
E30-331T

this instrument combines
the features of a spatula,
dissector and forceps

- formed jaws follow the curvature of the cornea
- spatulated tips and beveled edges to enter, lift and smooth the flap
- smooth inside jaw surfaces for atraumatically grasping the flap

Perone
LASIK Flap Forceps
curved, extra delicate
2 mm ring tips,
11.0 cm
E30-332T

ideal for atraumatically grasping
and securely lifting the flap

Manche
LASIK Flap Forceps
curved jaws, oval tips, smooth
inside surfaces, 11.0 cm
E30-333T

used to manipulate the flap with
minimal risk of tearing and trauma

Hersh
LASIK Retreatment Forceps
curved shafts, U-shaped 3 mm
spread, double notched tips,
11.0 cm
E30-335T

used for controlled peeling of
the flap from the stroma

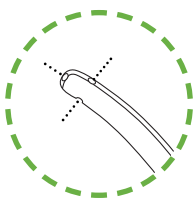
KERATOREFRACTIVE



LASIK INSTRUMENTS

KERATOREFRACTIVE

1ml syringe provides the optimum hydraulics and feel; a larger syringe can produce excessive flow with only light pressure of the plunger



Irrigation Cannulae - are used for irrigating the eye before and after repositioning the flap.

Buratto

LASIK Cannula

25GA/0.5 x 25 mm tube, formed 12 mm flattened tip with 1 front and 2 side ports

*606-25 disposable

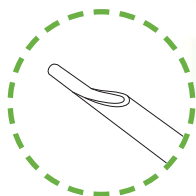
E20-525 reusable

spatulated tip allows easy entry under the flap, and three ports provide equal flow in 3 directions

All Glass Syringe (LL cone)

E20-801 1 ml

E20-802 2 ml



Slade

LASIK Cannula

26GA/0.45 x 25 mm tube, formed 9 mm thin spatulated tip with recessed end port

*613-26 disposable

E20-526 reusable

to easily locate and lift the flap edge, and effectively irrigate the lamellar interface

Banaji

LASIK Cannula

25GA/0.5 mm x 25 mm tube, formed 12 mm bullet-shaped tip with 6 ports

*604-25 disposable

E20-529 reusable

ideal for easy insertion under the flap, 6 ports provide multi-directional irrigation

Vidaurri

LASIK Cannula

25GA/0.5 mm double arm cannula, horizontal with 8 irrigating ports

*600-06 disposable

E20-522 reusable

to simultaneously irrigate both sides of the flap and stromal bed, for controlled flap manipulation

* disposable cannulae, sterile 10 per box

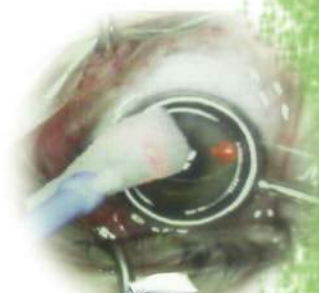


Preparing the cornea – cleaning and preparing the cornea is usually done with a wet sponge spear. The Netcell® Classic Range PVA Sponge guarantees a LINT FREE environment during LASIK surgical procedures.

PVA Eye Spears
triangular, pointed tip,
sterile (18 packs of 10)

37-405

for absorbing fluid in and around the orbital
area during LASIK and refractive procedures



PVA LASIK Spears
pre-expanded, broad tip,
sterile (20 packs of 2)

37-800

to remove excess fluid and aligning
and smoothing the corneal flap



PVA LASIK Drain Rings
sterile (box of 20)

37-830 11.5 mm opening for nasal hinge

37-831 10.5 mm opening for superior hinge

used to control stromal bed
hydration during laser ablation



PVA LASIK Shields
sterile (box of 20)

37-820 9 mm dia. (7 mm edge)

37-821 8 mm dia. (6 mm edge)

37-822 4 mm dia. (8 mm edge)

used to protect and moisten the nasal
and superior hinge of the corneal flap



Eye Kit
consisting of Instrument Wipe, Wick
and Corneal Light Shield (1 each)
sterile (20 packs of 1)

37-450

ideal for wiping delicate instrument
tips during surgery, and to
protect the cornea from
harmful light rays



KERATOREFRACTIVE

photographs do not correspond to the actual size



EZWash® Sterilising Tray
without silicone mat and
instruments
E45-113



E42-123

BASIC PRK INSTRUMENT SET
complete, consisting of 1 each:

E40-100L LASIK Speculum, page 148

E10-512B PRK Fixation Ring, page 150

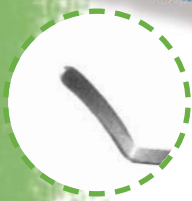
E10-522+7.0 Corneal Marker, page 160

E15-353 Fukasaku Hockey Knife, page 157

E15-365T Lindstrom Spatula, page 156

E30-460 McPherson Tying Forceps, page 24

KERATOREFRACTIVE



Lindstrom
PRK/LASIK Spatula
double ended, 14.0 cm
E15-365T

semi-sharp golf club end used for epithelial debridement
during PRK and fine spatula to lift flap during LASIK

Simpel
LASIK Flap Elevator & Repositor
double ended, 14.5 cm

E15-366T



V-end with sharp inner
edges to cut a clean edge through the epithelium,
smooth spatula end is used to lift and reposition the flap back

Intralasik Flap Lifter & Manipulator
double ended, 12.5 by 1.3 x 0.15 mm tip,
angled 35°, 1.0 x 0.15 mm tip, 10.5 cm

E15-373T

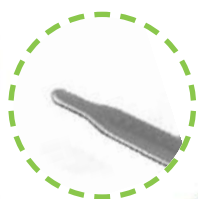
delicate pick and curved spatula
to open and manipulate the flap



Intralasek Flap Spatula/Elevator
vaulted, semi-sharp 1 x 12 mm
spatula with a jag on the tip,
12.0 cm

E15-375T

to detach the flap edge
and to open the flap





Incisional and ablative corneal procedures

KERATOREFRACTIVE



LASEK using alcohol solution



fs-LASIK with femtosecond laser



**epi-LASIK
with mechanical microkeratome**

Surface treatments: Tissue ablation is performed directly under the epithelium in surface ablation techniques. The epithelium is completely removed mechanically, chemically or with a laser (Photorefractive keratectomy - PRK), or an epithelial flap is produced using an alcohol solution (laser epithelial keratomileusis - LASEK), or by using a microkeratome (epithelial laser in situ keratomileusis - epi-LASIK). After treatment the flap is re-positioned to achieve faster wound recovery in comparison to PRK. However, most surgeons tend to remove the flap after treatment. In this case the only difference to PRK is the way of epithelial removal.

**Fukasaku
Epithelium Removal Knife
"Hockey" style, 12.5 cm
E15-353 all stainless steel
E15-353T on titanium handle**

**3 mm sharp front edge used to strip the epithelial layer; and
semi-sharp 6 mm bottom edge to remove residual epithelium**



**Fukasaku
LASIK Flap Spatula
vaulted, extra thin, semi-sharp blade, 12.0 cm
E15-363**

**used to locate and elevate the flap edge,
and to effectively dissect underneath the flap**



**E42-124 PRIMARY LASIK SET
complete, consisting of the following:**

- E40-100** Liebermann Speculum, page 55
- E10-513G** Gimbel Stabilising Ring, page 150
- E10-673** Mendez Corneal Marker, page 151
- E15-363** Fukasaku Flap Spatula, page 157
- E15-372** Katzen Flap "Unzipper", page 152
- E15-381T** Burratto Flap Protector, page 152
- E20-522** Vidaurri LASIK Cannula, page 154
- E30-330T** Mendez LASIK Forceps, page 153

**EZWash® Sterilising Tray
without instruments
E45-113**





LASEK INSTRUMENTS FOR CAMELLIN TECHNIQUE

KERATOREFRACTIVE

Simple Technique – starts with the creation of an epithelial flap, using a 20% Alcohol/BSS solution for 10-30 seconds, which is then repositioned after laser ablation.



LASEK Trephine
with central cross hair,
semi-sharp edge, 10.5 cm

E15-300+ 8.0 mm

E15-300+ 9.0 mm

E15-300+ 9.5 mm

...is performed using special
trephine with a 80 µm depth
calibrated blade

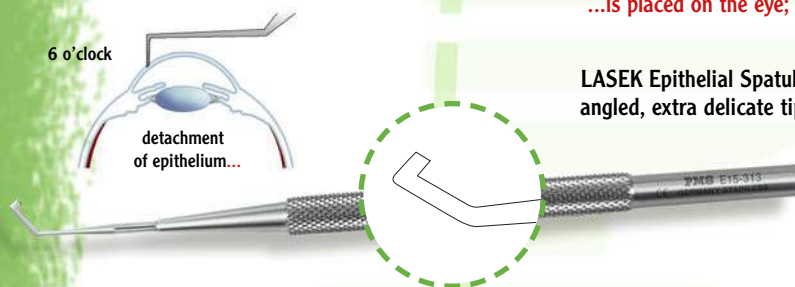
LASEK Alcohol Funnel
dual concentric rings, blunt, 11.0 cm

E15-310+ 8.5 mm for 8 mm flap

E15-310+ 9.5 mm for 9 mm flap

E15-310+ 10.0 mm for 9.5 mm flap

...is placed on the eye; a 20 % Alcohol/BSS solution is then instilled



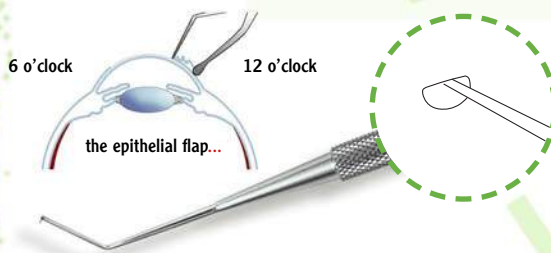
E15-313

...is performed in the pre-cut
margin of the epithelium

LASEK Epithelial Micro Hoe
semi-circular 2 mm wide tip, 10.5 cm

E15-315

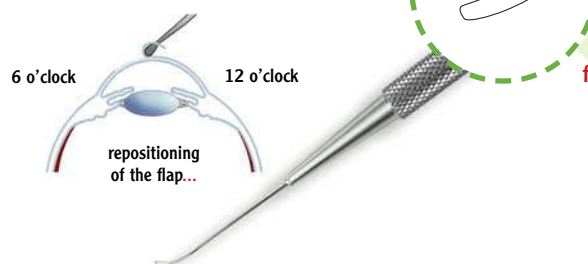
...is gently detached and folded
over to the 12 o'clock position



LASEK Epithelial
Flap Repositor
curved, blunt tip
with smooth edges,
10.5 cm

E15-317

...is done after Laser surgery to protect the
ablated surface. A soft contact lens is applied
for 3 to 4 days to keep the flap in place.





“Curtain Technique” - the initial incision is made off-center of the pupil. After an Alcohol/BSS solution is applied the flap is dissected underneath the epithelium and peeled from the center outward to the limbus.



**Vinciguerra Style
PRK/LASIK Spatula Knife**
curved 2.5 x 5 mm long blade,
semi-sharp anterior edge, 11.5 cm

E15-355T

used to make initial off-center
incision into the epithelium
and to dissect the flap outwards to the limbus



LASEK Epithelial Dissector
vaulted, 1.7 x 6 mm blade,
semi-sharp tip, 10.5 cm

E15-316

to undermine and peel the flap from the center
outward to the limbus for the “curtain technique”



LASEK Epithelial Peeler
angled, 1 x 5 mm long blade,
semi-sharp edges, 10.5 cm

E15-318

to efficiently dissect and fold back the flap



E42-125 CAMELLIN STYLE LASEK SET
complete, consisting of the following:

E40-100L Slade LASIK Speculum

E15-300+ 9.0 LASEK Trephine

E15-310+ 9.5 LASEK Funnel

E15-315 LASEK Micro Hoe

E15-317 LASEK Repositor

E20-025 Alcohol Cannula

E45-162 Instrument Tray



Silicone Instrument Tray
(160x85x20 mm)

E45-162

for secure positioning of 10 instruments



Maloney
Astigmatic Keratometer

E10-690T

projects multiple rings on cornea for
qualitative evaluation of astigmatism



Hoffer

Optical Zone Marker
low profile ring with cross hair,
10.5 cm, available in 3 sizes:
7.0, 8.0 and 9.0 mm dia.

***E10-522+ size**

ideal to define arcuate positioning



Mendez

Degree Gauge
measures 0-180° every 10 degrees,
12.0 mm dia. inner ring, 11.0 cm

***E10-562**

used with the Bores axis marker for easy alignment



A simple method of marking
the steep meridian is with the
Bores axis marker aligned in
the Mendez degree gauge.

Bores

Astigmatism Axis Marker
two blades, 11.0 mm OD,
9.5 cm

***E10-572**

fits inside the Mendez Degree Gauge
to precisely mark the steepest meridian



*also available on titanium round handle, add "T" to cat. no.

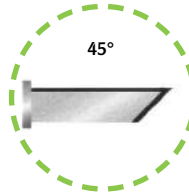


Incisional Corneal Procedures - are used to treat regular astigmatisms by flattening the corneal curvature in one meridian, utilising either transverse (straight) or arcuate (curved) incisions across the steep meridian.

Back & Front Cutting Knife
vertical and 45° cutting edges

*E10-260

suitable for all types of
keratorefractive incision

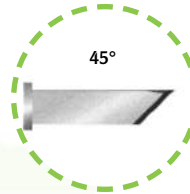


Gem Quality Diamond Knives. A gem quality diamond is considered to be free of inclusions visible at 10x magnification.

"Duo-Blade" Knife
45° cutting edge and 250 microns vertical cutting edge

E10-262

for both Russian and American technique



Micrometer mechanism is easy to adjust in 10 micron increments from 0 to 3.0 mm.



Thornton
Arcuate Knife
"triple-blade" with vertical and 15° cutting edges

E10-263

perfect for arcuate incisions, because
it easily follows the curvature of the arc



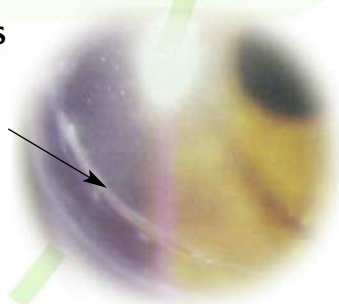
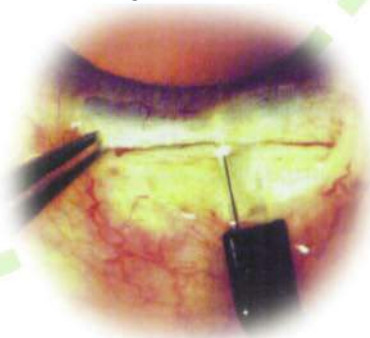
Footplates of PMS micrometer diamond knives are highly polished and coated with titanium nitride for smooth gliding on the corneal surface.

CURRENT INCISIONAL AK TECHNIQUES

performed with arcuate (curved) cuts

Nomograms developed by different surgeons precisely stipulate the length and location of such incisions.

performed with transverse (straight) cuts



Ultra thin (100 microns) diamond blades. Their extremely thin profile makes them ideal for transverse (straight) and arcuate (curved) incisions.

*also available with 0.17 mm thick standard diamond blades

KERATOREFRACTIVE



LRI INSTRUMENTS

LRI Degree Gauge - are designed to determine Limbal Relaxing Incision axis. Multiple fixation teeth are ideal to stabilise the globe during marking.



Fine-Thornton
Fixation Ring/Incision Guide
multiple blunt teeth, 13.0 cm
E10-513F 13.0 mm ID
E10-516F 16.0 mm ID

features 15° markings on the anterior surface as a guide for placement of limbal relaxing incisions



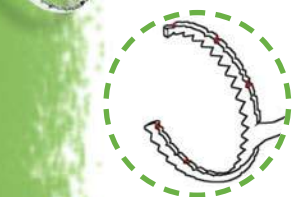
Lu-Mendez
LRI Guide/Fixation Ring
measures from 0-150° on both sides, 13.0 mm ID, 11.5 cm
E10-561

for globe fixation and axial alignment of corneal incisions



Nichamin
LRI Fixation/Degree Ring
28 atraumatic teeth, visible 10° scale and 30° hash marks at top of the ring, 14.0 mm ID, 11.5 cm
E10-563

when used with the Bore's Two-Ray Meridian Marker the system delivers simplicity and acuity with precision engineering performance

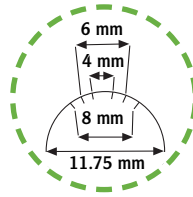


Bore's
Two-Ray Meridian Marker
low-profile 3 mm ring with cross hair, 12 mm OD, 11.5 cm
E10-573

fits with degree gauge of max. 13.0 mm ID



LRI Markers - with patient laying down - are used with the degree gauge to mark the limbus in a symmetrical pattern for correcting astigmatism.



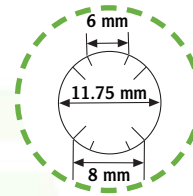
LRI Marker
single marking blade for
4, 6 and 8 mm chord length
E10-573T

markers are designed to be
used with a degree gauge



LRI Marker
double marking blade for
6 and 8 mm chord length
E10-574T

chord lengths of 6.0 mm correct approx. 1.0 D of astigmatism
chord lengths of 8.0 mm correct approx. 2.0 D of astigmatism



LRI Marker/Degree Gauge
rotatable head with thin bevelled
marking lines, 13.0 cm

E10-576T for 6 & 8 mm chord length

E10-578T for 40-60-80 degrees

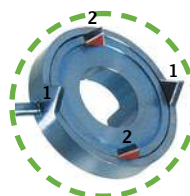
marks incision size by degrees instead of
chord length; corrects up to 2.5 D of astigmatism

Toric IOL/LRI Marker
low-profile degree gauge,
with adjustable inner
points, 13.0 cm

E10-579T

allows precise marking of the steeper
meridian prior to IOL implantation

1 Fixed points allow to verify the 90° position
as previously marked
2 Inner points are adjustable to align the
steepest axis





LRI INSTRUMENTS

LRI Markers - to make LRI at slit lamp - are designed to mark the astigmatic axis on the cornea for a correct alignment of the lens.



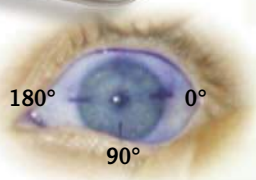
LRI Slit Lamp Gravity Marker
lightweight, all titanium body with
2-point pendulum marker, 13.5 cm
E10-582T

used to mark the 0° and 180° meridian
from the temporal position



LRI/Toric Slit Lamp Marker
lightweight, titanium body with stainless steel
3-point pendulum marker, 13.8 cm
E10-583T

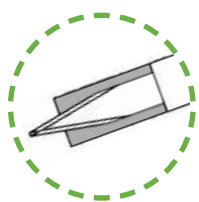
used to mark the 0°, 90° and 180° positions - as pictured at left



Donnenfeld
Slit Lamp Preset Diamond Knife
tri-facet 20° blade, 0.25 mm flat tip,
fixed depth setting of 0.6 mm,
10.5 cm

E10-380

short handle permits
arcuate incisions at slit lamp,
narrow, single footplate prevents
corneal epithelial detachments



E42-127 LIMBAL RELAXING INCISION SET
complete, consisting of the following:

- E10-690T** Astigmatic Keratometer, page 160
- E10-561** Fixation Ring/Degree Gauge, page 162
- E10-572** Astigmatic Axis Marker, page 160
- E10-383** Three-Step LRI Knife, page 165
- 52-100** Marking Pen, page 151



LRI Diamond Knives - feature a titanium handle and gem quality 1.0 mm wide diamond blade with tri-facet, flat 20° tip for controlled Limbal Relaxing Incisions.

LRI Preset Diamond Knives
tri-facet 20° blade, flat 0.4 mm tip,
one fixed depth setting of:

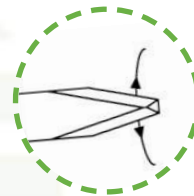
E10-384 0.5 mm

E10-385 0.55 mm

E10-386 0.6 mm



- ideal for paracentesis and astigmatism incisions
- side cutting edges for bi-directional cutting
- flat tip for controlled entry during incision
- used with open fixation ring/degree gauge



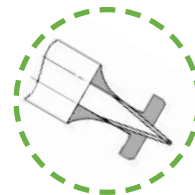
LRI Three-Step Diamond Knife
tri-facet 20° blade, flat 0.4 mm tip,
preset depths of: 0.5, 0.55 and 0.6 mm

E10-383

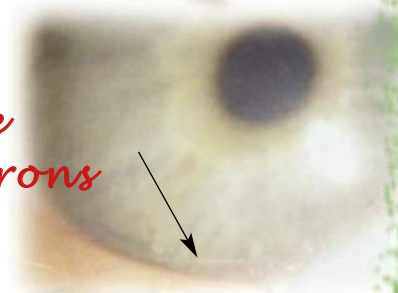
Nichamin
LRI 7-Step Diamond Knife
tri-facet 15° blade, narrow/flat
0.2 mm tip, preset depth settings of:
0.45, 0.5, 0.55, 0.6, 0.65, 0.7, 0.75 mm

E10-387

excellent blade visualisation
while performing the incision

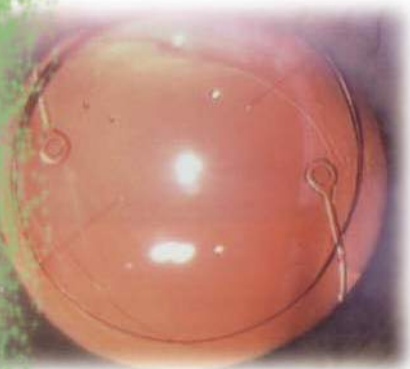


*the preferred depth of the
LRI procedure is 600 microns*



limbal relaxing incision (arrow)
performed with a diamond knife

KERATOREFRACTIVE



Hydrophobic, 3-Piece Toric IOL MS 6116 TU implanted

for more information visit
www.dr-schmidt-iol.de

MATERIAL

- Hydrophobic Silicone Elastomer
- With UV-Absorber and
- High Molecular PMMA haptics

FEATURES

- Three-piece posterior chamber lens
- 360° sharp posterior optic edge
- **Blue light protection**
- Optic size 6.0 mm
- Haptic angulation 0°

LENS STYLES

- Z-shaped haptics for implantation into capsular bag
- extended C-loop for implantation into ciliary sulcus
- undulated extended C-loop for piggyback implantation into the ciliary sulcus

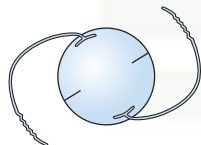
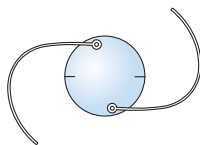
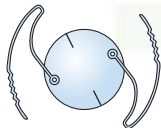
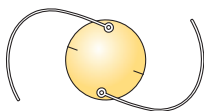
DIOPTER RANGE

SPHERE

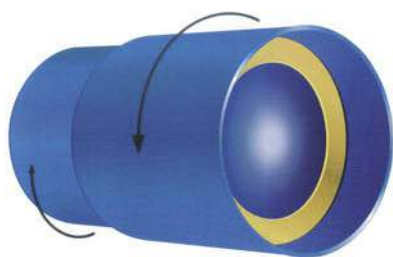
- +15.0 to +25.0 D (0.5 D steps)
- - 3.0 to +14.0 D (1.0 D steps)
- +26.0 to +31.0 D (1.0 D steps)

CYLINDER

- 1.0 to 3.0 D (0.5 D steps)
- 4.0 to 12 D (1.0 D steps)
- (special production up to 30 D cylinder)



Discover Astigmatism
and its Correction
through our
Toric Demonstrator !

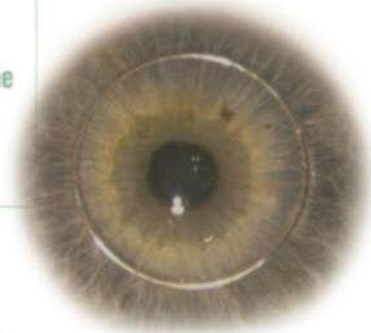


The Toric Demonstrator #100010 simulates why a toric lens is useful for patients having corneal astigmatism.



“In the eyes where the ring was implanted, the immune rejection rate was significantly lower than in the control group.”

— Jörg H. Krumeich, MD



Krumeich ring in place

Krumeich

Intrastromal Corneal Rings

available in three sizes:

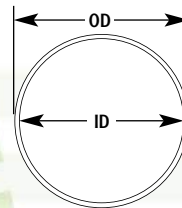
CR 7.0 OD 7.3 mm, ID 7.00 mm

CR 7.5 OD 7.8 mm, ID 7.50 mm

CR 8.0 OD 8.3 mm, ID 8.00 mm

For more information:

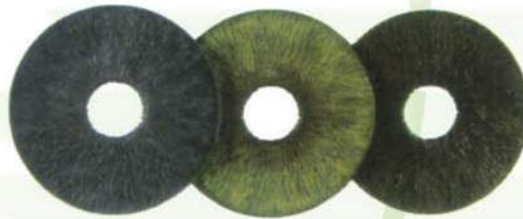
Jörg H. Krumeich, MD, can be reached at
Clinic Krumeich, Propst-Hellmich Promenade 28-
30, Bochum D-44866, Germany; +49-2327-82002;
fax: +49-2327-88171; e-mail: jk@krumeich.de.



MATERIAL Ceralloy-Ti
made from an alloy of

- 69% cobalt
- 24% steel
- 4,5% molybdenum
- 2% titanium

Artificial Iris



- Designed on the Basis of an Individual Photography of the Patient's Eye
- Structure and Topography resembling the Natural Iris
- Available on Customer's Request, Special Production



• Models: Artificial Iris with or without Fiber Layer



Kraff-Lieberman
Temporal Eye Speculum
solid 15 mm blades, 8.0 cm

E40-104T titanium

E40-104 stainless steel

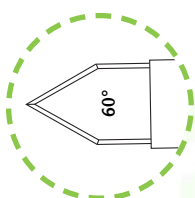
facilitates unobstructed access
for temporal approach, adjusts
easily to comfort patient's eye



Fine-Thornton
Globe Fixation Ring
3/4 open swivel ring with
nine blunt teeth, 13.0 cm

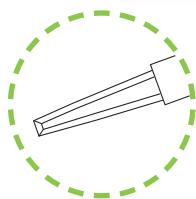
E10-513T 13 mm ID for clear cornea incision

E10-516T 16 mm ID for scleral tunnel incision



EZCut®
Clear Cornea Sapphire Knife
angled, keratome shaped 60° blade,
3.2 mm width (4 cutting edges), 13.0 cm

***E10-144**



EZCut®
Zaldivar Style Sapphire Knife
angled, trapezoid shaped blade,
0.55-1.0 mm width, 13.0 cm

***E10-181**

ideal for making the side port incision



EZCut®
Micro Incision Sapphire Knife
angled, spear shaped blade,
0.9-1.2 mm width, 13.0 cm

***E10-170**

* also available with Diamond Blade, see page 68-69



Livisolo
ICL® Loading Forceps
angled 13 mm rounded jaws,
highly polished surface, 10.5 cm

E30-601T titanium
E30-601 stainless steel

ideal to remove the ICL® from container
and place it inside the cartridge



Livisolo
ICL® Removal Forceps
angled 13 mm jaws, TC textured,
flat inside surface, 10.5 cm

E30-602T titanium
E30-602 stainless steel

ideal to grasp the ICL® inside the eye for removal
in case of upside-down placement of the lens



Phakic IOL Forceps
curved 15 mm shafts with delicate
T-bar jaws, universal lock, 11.5 cm

E30-603T



ICL® Front Loading Forceps
removable tip, 20GA/0.9 mm shaft,
angled 20°/1.2 mm wide jaws,
15.0 cm

E30-604T

Specially designed cup shaped
jaws to pull the ICL® through the
nozzle of the cartridge without
damage. This prevents the
ICL® from coming out
of the cartridge in the
upside down position



ICL® is a trademark of STAAR Surgical Company



*Instrument sets
are presented as
guidelines only*



Foldable Phakic Lens Implantation

E42-128 PHAKIC LENS SET
complete, consisting of 1 each:

E15-562T IOL Manipulator, page 35

E30-603T Phakic IOL Forceps, page 169

E10-360 Micro Diamond Knife, page 69



ICL® is implanted into the posterior chamber
Picture courtesy: STAAR Surgical Company

E42-129 IMPLANTABLE CONTACT LENS SET
complete, consisting of the following instruments:

E15-531T Vukich ICL® Lens Manipulator, page 171

E15-532T Deitz ICL® Slider/Tucker, page 171

E30-601T Livisolo ICL® Loading Forceps, page 169

E30-602T Livisolo ICL® Removal Forceps, page 169

E10-381 Zaldivar Style Diamond Knife, page 69

for Iridectomy add

EZChange®

Zaldivar Style Iridectomy Scissors

rotatable 360° tip, 20GA/0.9 x 22 mm curved shaft,
vertical cutting 2.0 mm curved blades with sharp tips, 15.0 cm

E25-621Z

for easy iris cutting
through side port
incision



EZChange®

Kershner Micro Iridectomy Forceps
rotatable 360° tip, 23GA/0.6 x 22 mm
curved shaft, 15.0 cm

E30-623K

for iris pickup



instrument tips

are coloured for
easier identification;

MAGENTA for scissors
BLUE for forceps and



ICL® is a trademark of STAAR Surgical Company



EZGuard® Safety Instruments - are premium instruments available on new titanium handle with retractable safety shield.

EZGuard®
Vukich ICL® Manipulator
0.6x1 mm oval tip, 13.0 cm

E15-516P

ICL® Manipulators have textured surface underside from tip...

EZGuard®
Deitz ICL® Tucker and Slider
0.75 mm forked tip, 13.0 cm

E15-517P

...for placement of the ICL® haptic under the iris; and backward angled 45°/11.0 mm long shaft...

EZGuard®
Deitz ICL® Slider
0.8 mm dia. ring tip, 13.0 cm

E15-518P

... for ease of manipulation of the ICL® through a paracentesis



PMS EZGuard® Safety Instruments FEATURE:

AND THE MOST POPULAR INSTRUMENT TIPS

PROTECTION

Instruments have an integrated retractable shield specifically designed to protect health care workers from accidental sharp injuries.

PERFORMANCE

The built-in shield protects the quality and consistency of the instrument tips from possible damage.

SIMPLICITY

The integrated safety shield is activated by the user through screw locking device.

MATERIAL

Stainless steel instrument tips are made from 302S26 orthodontic hard wire, this provides a hard wearing surface that will never rust and will hold for a good length of time.

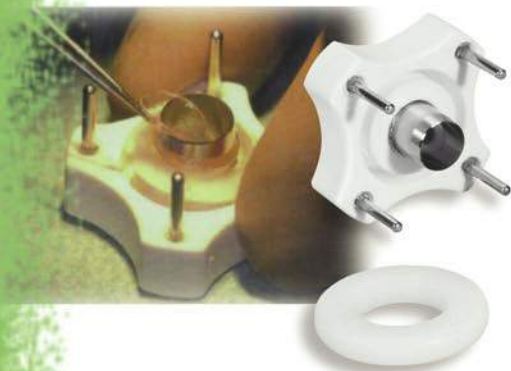


also available on round handle - made of:

- stainless steel, page 21
- titanium, page 34
- aluminum, page 94



KERATOREFRACTIVE



The Barron Donor Marking Punch
is a single use, sterile system, designed
to make an exact cut of the donor tissue
for corneal transplant surgery.

more information
on page 140

A7048 8.0 mm

A7050 8.5 mm

A7052 9.0 mm

A7053 9.5 mm

STERILE

DISPOSABLE

for punching the endothelial donor button

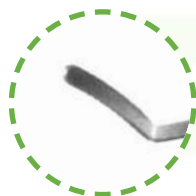


Corneal Dissectors
12 mm long x 3 mm wide blade,
semi-sharp front end, 11.5 cm

***E15-331 angled, straight**

***E15-333 angled, curved**

for intrastromal dissection



Donor Tissue Insertion Spatula
4 x 8 mm smooth platform
with two raised edges, 12.0 cm

***E15-335**

for atraumatically insertion of
the donor lamella, raised edges prevent
the graft from moving during insertion



Membrane Manipulators
angled 12 mm shaft, blunt tip, 12.0 cm

***E15-341 Reverse Sinskey Hook, 0.2 mm**

***E15-343 Z-shaped Hook, 0.15 mm**

ideal for scoring
the area of planned
Descemet's removal
and to manipulate the
donor lamella into position



for tucking the donor lamella edge

*also available on titanium round handle, add "T" to cat. no.



The Hessburg Barron Vacuum Trephine for cutting the recipient cornea is a single use, sterile instrument for lamellar or penetrating keratoplasty.

more information
on page 140



corneal graft trephination of recipient eye

A7034 7.5 mm

A7036 8.0 mm

A7038 8.5 mm

A7040 9.0 mm

STERILE
DISPOSABLE

Bores
Optic Zone Markers
without cross hair, 10.5 cm
available in 8.0, 8.5
and 9.0 mm dia.
E10-521+size

for marking the recipient cornea



DLEK Excision Scissors
extra long blades with lightly rounded tips, 11.0 cm
ideal for excision of the recipient
posterior lamellar disc

E25-471 light curved
for primary excision
10 & 2 o'clock

E25-472 medium curved
for enlargement of excision 8 & 4 o'clock

E25-473 strongly curved
for completing the excision
towards 6 o'clock position



EZSert®
Donor Tissue Insertion Forceps
vaulted, very thin 12.0 mm shanks with
ultra fine platform tips and heel stop, 10.5 mm
E30-541T titanium
E30-541 stainless steel

to fold and insert the donor
lamella - preferably coated with
viscoelastics to minimise crushing of
tissue - into the recipient's eye



KERATOREFRACTIVE



DSAEK INSTRUMENTS

for patient preparation

KERATOREFRACTIVE



Shapira
DSAEK Eye Speculum
open 14 mm round blades,
blunt distal ends, 8.0 cm

E40-100P stainless steel

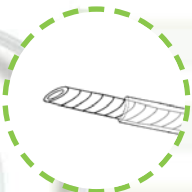
E40-100TP all titanium

ideal for micro lamellar keratoplasty

DSAEK Marker
double-ended, low profile rings of
8.0 mm and 9.0 mm dia., 12.0 cm

E10-529

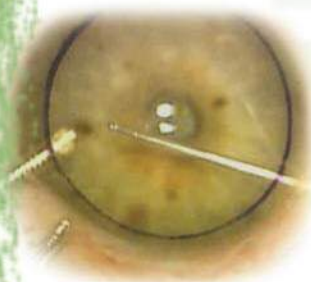
*for marking the Decemet's-Rhexis
on the epithelial side*



Gispel
DSAEK Anterior Chamber Maintainer
20GA/0.9 x 6 mm self-retaining, serrated tip
attached to silicone tubing with LL-adapter

E20-020SR

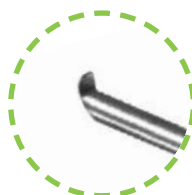
*ideal to keep a deep chamber during stripping and
removal of the Descemet's membrane*



DSAEK Endothelial Irrigating Stripper
20GA/0.9 x 12 mm angled cannula,
thin, semi-circular 0.4 x 1.0 mm tip,
angled upward, 10.0 cm

E20-481

*for gently stripping and removing
the endothelial layer*



*irrigation allows the surgeon
to maintain the chamber with
BSS thereby reducing the
dependence on viscoelastics*



for insertion & positioning



EZSert®
DSAEK Insertion Forceps
angled jaws, spatulated tips
with smooth, bevelled edges,
11.5 cm

E30-330T angled straight
E30-331T angled curved

calibrated heel stop prevents
the tips from complete closing,
thus minimising trauma to
donor tissue

“What counts is the way you insert your graft into the anterior
chamber and how you unfold it.”
— Massimo Busin, MD

EZSert®
Busin Style DSAEK Implantation Guide
angled shaft, thin concave plate with slot and 4 x 2.5 mm
funnel-shaped tip, 11.5 cm

E15-344T titanium
E15-344 stainless steel



the edge of the donor graft is grasped with the
foremost tips of the forceps and placed on the
guide plate with the endothelial-side facing up

illustration shows inverted position

to support “PULL-THROUGH” technique for quick and
easy insertion of the donor lamellar button
through a nasal clear corneal tunnel.

EZSert®
DSAEK Grasping Forceps
rotatable 360° tip,
20GA/0.9 mm x 25 mm
curved shaft with micro
TC-textured jaws, 15.0 cm

E30-549T

used through opposite side entry to grasp
the donor tissue from the insertion guide
and to pull it into the anterior chamber



the donor lamella is pulled into the funnel-shaped
part of the insertion guide using E30-549T forceps

NOTE:

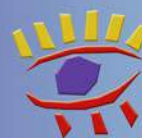
The medical information is not intended as instructional materials for
the performance of the demonstrated procedures or techniques.

KERATOREFRACTIVE

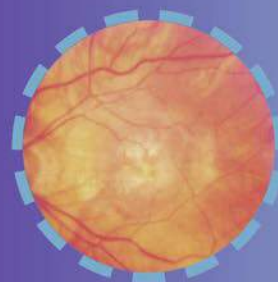
donor lamella is grasped and pulled into the A.C.

NOTES

PMS



VITREORETINAL





INTRODUCTION 178

SCISSORS AND FORCEPS .179-186

FOREIGN BODY INSTRUMENTS ...187

CARE AND HANDLING188-189

ILLUMINATED INSTRUMENTS190-191

MEMBRANE INSTRUMENTS192-193

BACKFLUSH INSTRUMENTS194-197

INFUSION & SILICONE OIL CANNULAE198

SCLERAL PLUGS, TABLETS & FORCEPS199

23/25GA CANNULAE & INSTRUMENTS ...200-207

OBLIQUE INSERTION TECHNIQUE205

MISCELLANEOUS INSTRUMENTS208-211

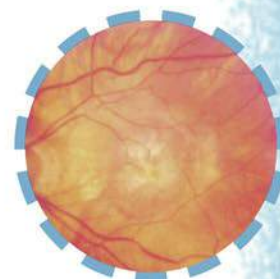
SURGICAL INSTRUMENT SETS212-213

SILICONE OIL & HEAVY FLUIDS214-220

DISPOSABLE VITRECTOMY LENSES221

SILICONE RETINAL IMPLANTS ..222-223

SCLERAL SPONGE IMPLANTS ..224





WELCOME
to the PMS World
of Vitreo Retinal
Products.

PMS offers one of the widest ranges of stainless steel and special alloy products for a unique engineering miracle: THE HUMAN EYE.

PMS *EZ*Grip®, *EZ*Change® and *EZ*Cut® vitreoretinal forceps and scissors offer the specialist the perfect instruments for grasping, manipulating and cutting intraocular tissue.

PMS VR instruments are welded to attain the extra durability, longevity and reliable performance that makes PMS known around the world as quality leader in ophthalmic surgical instrumentation and related products and equipment.

To protect these instruments we are able to offer an intelligent solution. The PMS sterilising tray system is designed to hold delicate instruments securely and allow them to be thoroughly cleaned by automated washer/disinfector machines.

*We invite you to learn
about all the outstanding
products we have
to offer.*





20GA/0.9 MM SCISSORS SPECIFICATIONS

Straight scissors blade length 2.9-3.0 mm
 Curved scissors blade length 2.9-3.0 mm
 Angled scissors blade length 1.5-1.6 mm
 Vertical scissors blade length 1.6-1.9 mm



20GA/0.9 MM EZGrip® STANDARD FORCEPS

“squeeze handle” design
offers synchronous, safe
and smooth tip closure
(important when working
close to the retina)

Crocodile Forceps
serrated 4 mm jaws

***E30-672S**

ideal for general purpose membrane
peeling and manipulating thicker
and more fibrotic membranes

End Gripping Forceps
small tip 4 mm jaws

***E30-674S**

for grasping and manipulating fine membranes,
ideal for (PVR) and difficult macular pucker cases

Hockeystick Forceps
grooved 2mm/45° jaws

***E30-679S**

for gripping and peeling membranes along
the retina surface with good visualization

Pic Forceps
smooth 2mm/45° jaws

E30-681S

for grasping and elevating membranes

Side Gripping Forceps
smooth 2mm/45° jaws,
flat 0.7 mm wide tips

E30-683S

for gripping and pulling
peripheral membranes

GA/MM CONVERSION DATA & MODELS

19GA/1.1 mm, ID 0.70 mm, illuminated

20GA/0.9 mm, ID 0.60 mm, standard

23GA/0.6 mm, ID 0.33 mm, micro

25GA/0.5 mm, ID 0.25 mm, miniature

*also available with titanium tips



*excellent for
“maculorhexis”
and ILM peeling*

rounded grip area
enables easy 360°
rotation and freedom
for manipulation and
optimal surgical control

End Gripping Forceps
fine tip 3.5 mm jaws
*E30-673S

for grasping of thin membranes in the macular
region, particularly in cases with detached retina

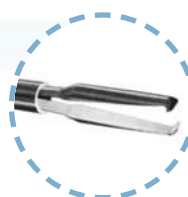
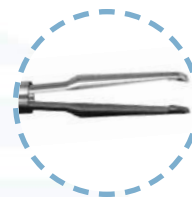
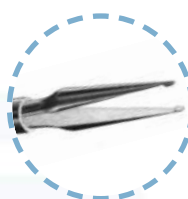
End Gripping Forceps
pointed tipped 4.0 mm jaws
*E30-676S straight shaft

effective at lifting, stripping
and peeling fine membranes

End Gripping Forceps
nail-like tipped 3.5 mm jaws
*E30-687S Eckhardt style 90°

for precise grasping of thin
membranes near the macula

End Gripping Forceps
delicate 3.5 mm jaws
with 0.7 mm pick at tip
*E30-678S



NOTE:

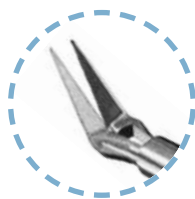
The medical informational contained in this catalogue
is for informational purposes only. It is not intended
as instructional material for the use of the
instruments, procedures or techniques.

*also available for 23GA/0.6 mm trocar cannula system, see page 198



Tip Protector for
instruments with
stationary tips

E15-022



Horizontal Subretinal Scissors
sharp 3.5mm/45° blades

E25-604SR

for cutting and dissecting
in the subretinal space



Horizontal Subretinal Forceps
narrow 3.0mm/45° jaws

E30-681SR

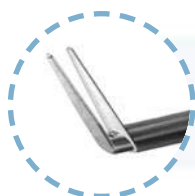
angled 45° long thin jaws are ideal for grasping...



Horizontal Subretinal Forceps
picked 3.5mm/45° jaws

E30-682SR

subretinal membranes through a small retinotomy



Vertical Subretinal Forceps
thin 3.5mm/45° jaws

E30-683SR



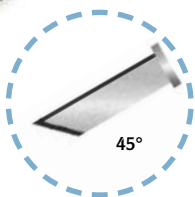
20°

Diamond Subretinal Knife
titanium bajonet handle
with J-lock mechanism,
0.17 thick x 6 mm blade
with double cutting edges

E10-301SR 20°/0.5mm wide

E10-302SR 45°/0.9mm wide

excellent for cutting of
subretinal membranes



45°



for PMS Vitreoretinal Instruments
with stationary or removable tips

Tip Protector
for stationary instrument tips
E15-022

for protecting instrument tips during
sterilisation, storage and transportation

Protective Cap
for removable instrument tips
E15-023

Vitreo Flushing Tubes
for stationary instrument tips
E20-424 metal adaptor
E20-424T titanium adaptor

for cleaning/flushing instrument tips
after each use to avoid encrustations

Vitreo Cleaning Adaptor
for removable instrument tips
E20-426T

Cleaning Syringes
for Cleaning Tube and Adaptor
available in 20, 30 and 50 ml,
disposable, sterile (sold singly)
on request

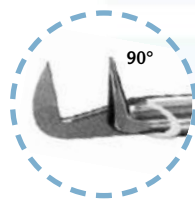
1:2

All PMS reusable instruments
are supplied with detailed instructions
for cleaning and sterilisation. General cleaning and
sterilisation advice can also be found on page 10 and 71.



scissors have
sharp tipped blades,
unless otherwise indicated

removable instrument
tips (360° rotatable)



Horizontal Scissors Tips
straight 3.4 mm blades

E25-600R blunt tips
E25-602R sharp tips

titanium "squeeze handle"
with thread for removable
instrument tips, 10.0 cm
E10-010T

Horizontal Scissors Tip
curved 2.7 mm blades
E25-603R

curved by 12 mm radius blades enable easy
cutting along the curvature of the eye ball

Horizontal Scissors Tips
angled 1.7 mm blades
E25-604R2 25°
E25-604R4 45°

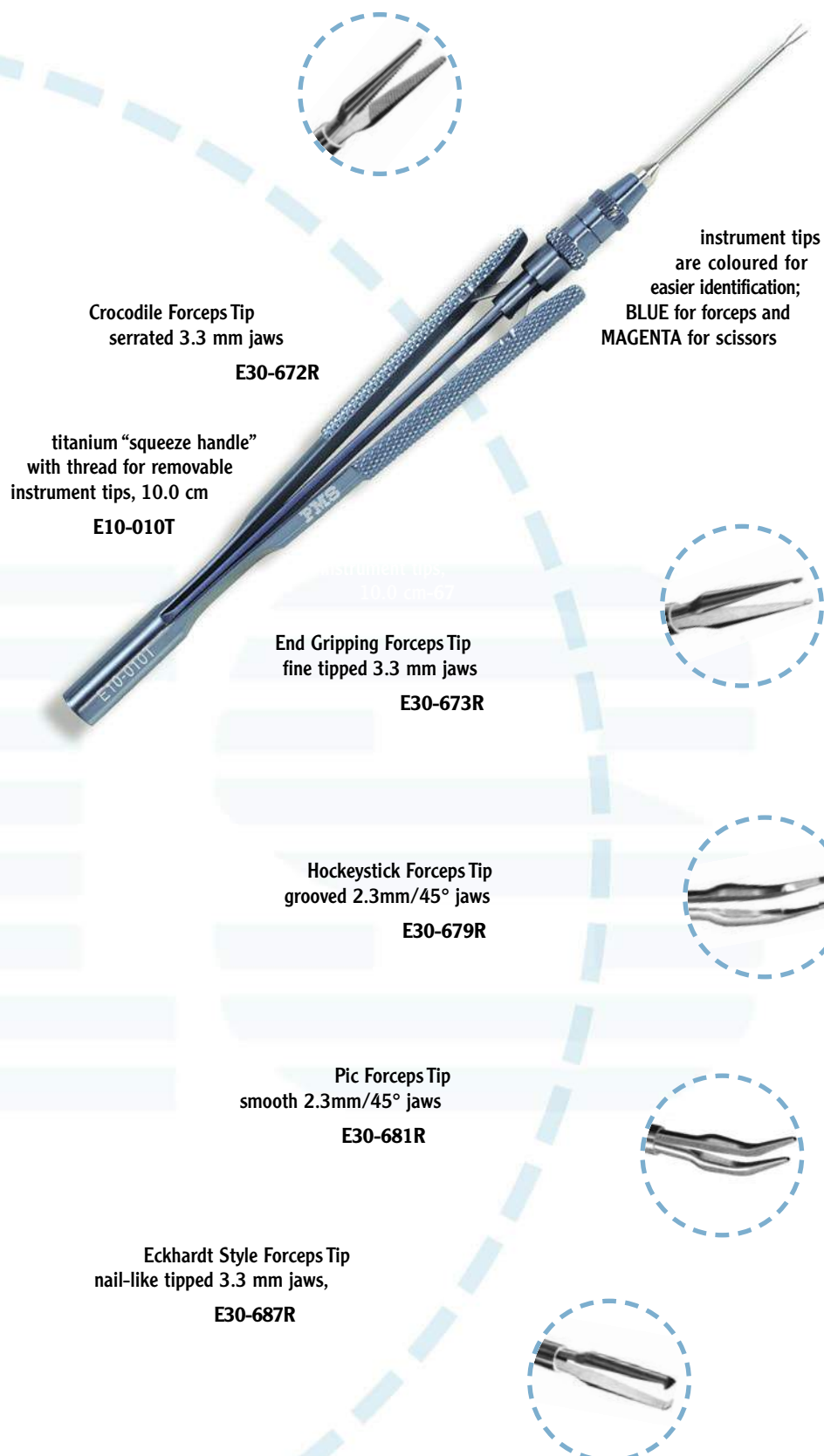
gentle angle of blade allows cutting and
dissection parallel to the retinal surface

Vertical Scissors Tips
angled 1.5 mm blades
E25-605R 45°
E25-607R 70°
E25-609R 90°

vertical scissors allow powerful, controlled cutting
action; distal blade remains stationary during use

Kroll (Vertical)
Scissors Tip with Membrane Pick
hooked 1.1mm/45° blade
E25-605RK

tips and handle sold singly



Crocodile Forceps Tip
serrated 3.3 mm jaws
E30-672R

titanium "squeeze handle"
with thread for removable
instrument tips, 10.0 cm
E10-010T

instrument tips
are coloured for
easier identification;
BLUE for forceps and
MAGENTA for scissors

instrument tips
10.0 cm-67
End Gripping Forceps Tip
fine tipped 3.3 mm jaws
E30-673R

Hockeystick Forceps Tip
grooved 2.3mm/45° jaws
E30-679R

Pic Forceps Tip
smooth 2.3mm/45° jaws
E30-681R

Eckhardt Style Forceps Tip
nail-like tipped 3.3 mm jaws,
E30-687R

tips and handle sold singly



23GA/0.65 MM EZChange® MICRO INSTRUMENT TIPS



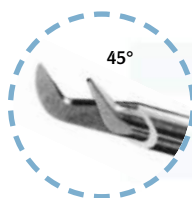
23GA/0.65 mm diameter
EZChange® instrument tips
are excellent for pediatric and
other microsurgical procedures



Horizontal Scissors Tips
delicate 1.6 mm blades

*E25-602R23 straight
E25-603R23 curved

titanium "squeeze handle"
with thread for removable
instrument tips, 10.0 cm
E10-010T



Vertical Scissors Tips
blunt 0.8 mm blades

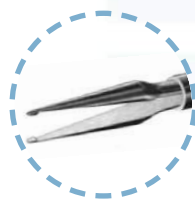
E25-605R23 45°
E25-607R23 70°

for 20GA/0.9 mm Trocar Cannula System



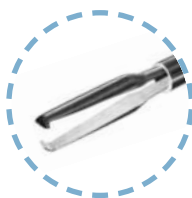
Crocodile Forceps Tip
serrated 1.7 mm jaws
*E30-672R23

cellent for peeling and manipulating membranes



End Gripping Forceps Tip
fine tipped 1.7 mm jaws
*E30-673R23

end gripping tips are ideal for macularhexis...



End Gripping Forceps Tip
nail-like tipped 1.7 mm jaws
(Eckhardt Style)
*E30-687R23

and to peel ILM

tips and handle sold singly

* fits through 23GA/0.65 mm trocar cannula system

reverse action
basket style forceps
ideal for objects of
irregular shape



Foreign Body Forceps
three 1.9 mm long arms,
slightly angled inwards
E30-693F removable tip
E30-693S stationary tip



removal of lead shot using
E30-692F18 Foreign Body Forceps

Foreign Body Forceps
removable tip (360° rotatable),
blunt, two prongs grasping jaws

E30-692F18 18GA/1.2 mm tube, 2.5 mm jaws
E30-692F20 20GA/0.9 mm tube, 1.9 mm jaws

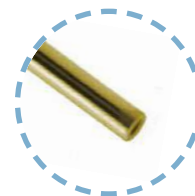
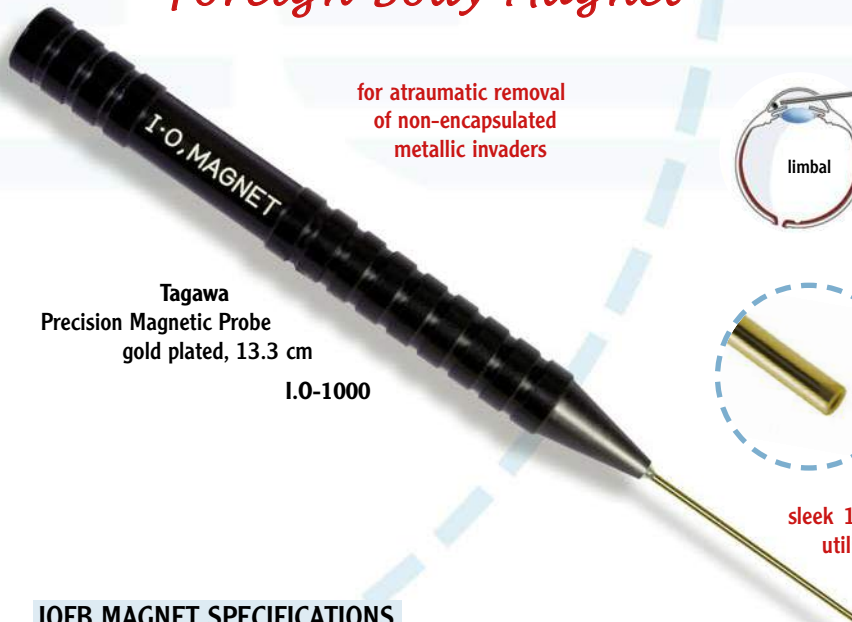


essential instruments for managing IOFB, two sizes 18 & 20GA are
ideal to remove most foreign bodies of any shape, size and material

Intraocular Foreign Body Magnet

for atraumatic removal
of non-encapsulated
metallic invaders

Tagawa
Precision Magnetic Probe
gold plated, 13.3 cm
I.O-1000



sleek 19GA/1.1 mm probe can be
utilized with a limbal, open sky
and/or pars plana approach

IOFB MAGNET SPECIFICATIONS

Probe: 19GA/1.1 mm x 33 mm
Handle: ø 10 mm x 100 mm long
Power: 1.000 gauss (at tip only)
Life expectancy: Indefinite
Sterilisation: Autoclave and ETO



for PMS Vitreoretinal Instruments with EZGrip® stationary tips



All PMS vitreoretinal forceps and scissors have a very thin shaft with a delicate working mechanism. Intraocular fluids may enter this mechanism during surgery. If these fluids are not promptly and properly cleaned out, it will lead to the possibility of instrument malfunction, because salt, cellular debris, protein and viscoelastic can accumulate the inside of the mechanism.

Additionally protein may coagulate inside the instrument if not flushed out before sterilisation and thus can completely stop the mechanism from functioning.

- Clean the instrument immediately after use with distilled/sterile water to remove blood, tissue or other contaminants.

- Remove any debris from the instrument tip very carefully. A fine soft bristled brush may be used for this.

- Clean the exterior of the instrument carefully with a moistened surgical sponge #37-900 (page 70).

- Place syringe with vitreo flushing tube E20-424 (1) over instrument tip and push over front of handle (2).



- Gently press the syringe plunger and flush instrument two or three times with purified distilled water.

- Replace the empty purified water syringe with a syringe filled with Isopropyl Alcohol, and flush the instrument to remove any remnants of water.

- Remove the empty Isopropyl Alcohol syringe then attach an empty syringe to the cleaning flush tube. To remove the alcohol blow through the instrument with one or two syringes with air.

INSPECTION

- Before sterilisation instruments should be inspected for cleanliness and suitability regarding:

- Any physical damage to the device, bent blades, chipped tips, misalignment, scratches.
- Smooth action, blades and arms should move smoothly and not jerk.
- Instrument surface should be clean, without any staining and pitting.
- All blades should be sharp and cut along the full length. Cutting performance can be tested against tissue paper and/or rubber dam.
- Any damaged instruments should be disposed of or repaired following the hospital approved procedures.

- Cover instrument tip with Protective Sheath E15-022 and place separately on a wash/sterilising tray (see section), then clean in a Washer/Disinfector or Ultra Sonic Cleaner.

- The mechanism and the handpiece should be oiled occasionally with a hospital approved medical grade instrument lubricant

- Sterilise the instruments in suitable trays using flash autoclave, (steam) autoclave, high vacuum steriliser. Autoclaving 135°C/276°F is the preferred method of sterilisation.

REPAIR

- PMS can also offer a high quality repair service for all types and makes of vitreoretinal instruments. Estimates are free and prices extremely competitive.



for PMS Vitreoretinal Instruments with EZChange® removable tips

- Unscrew the tip from hand piece and attach cleaning adapter E20-426T.
- Ultrasonically clean both parts, if possible.
- Attach syringe filled with distilled or sterile water to adapter and flush the tip two/three times.
- Flush the tip with alcohol. This will remove any remnants of water and facilitate drying.
- Dry the tip by forcing one or two syringes full of air through tip to remove any remaining alcohol.
- Force special heat-resistant instrument milk through the tip, following instruction in article number three above.
- Dry with air following instruction in article number five above.
- Immerse handle in distilled or sterile water for two minutes, and then clean and dry with surgical sponge.
- Lubricate joints in handpiece with hospital approved and medical grade agent.
- Store and sterilise the instrument in a protective tray #E45-112. Instruments should not touch each other, to avoid contact corrosion.

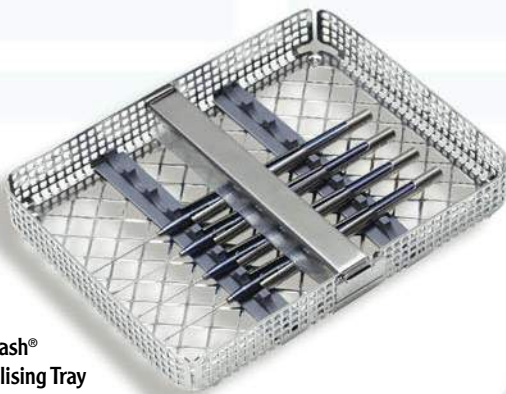


Vitreoretinal Cleaning Adapter
titanium case with LL cone
E20-426T

for flush-through cleaning of removable
instrument tips immediately after each surgery

RECOMMENDED HANDLING

- The scissors and forceps are microsurgical instruments and must be handled with care at all times.
- NEVER DROP YOUR PMS VITREOUS AND RETINAL INSTRUMENTS.
- When cleaning care should be taken to prevent chemicals or human debris contaminating the user.
- Only handle devices using personal protective equipment, e.g. gloves, etc.
- All cleaning to be carried out in a suitably controlled environment.
- Hospital approved procedure for handling, cleaning and sterilising must be strictly followed.



EZWash®
Sterilising Tray
E45-112
(supplied without instruments)

PMS EZWash® Sterilising Trays are designed to hold micro surgical instruments securely and allow them to be thoroughly cleaned by automated washer disinfector machines which are now popular in many hospitals.

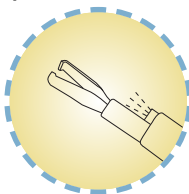


19GA/1.1 MM ILLUMINATED INSTRUMENTS

Crocodile Forceps
fine serrated jaws
*E30-672SI



End Gripping Forceps
nail-like grip tips
*E30-687SI



Horizontal Scissors
delicate curved blades
*E25-603SI

* supplied without Monofilament

Monofilament
25GA/0.5 mm "fine" fiber,
disposable, sterile (box of 5)
*PD 100.06

the monofilament is designed for use with
"illuminated" instruments with an inner
diameter of at least 23GA/0.6 mm

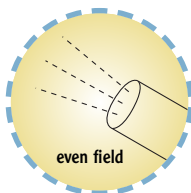


Endo-Illuminators
20GA/0.9 mm Fiber Optic Probe,
disposable, sterile (box of 5)

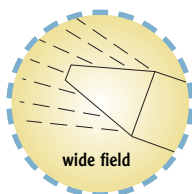
*PD 100.00 even field illumination

*PD 100.14 wide field illumination

1:2



even field



wide field

fits Ocutome, Alcon
and B&L system



* Manufacturer:
Peregrine Surgical Ltd.
Doylestown, PA
USA

VITREORETINAL INSTRUMENTS



“Chandelier illumination ... gives excellent illumination and visualization, and it allows one to perform a proper bimanual vitrectomy ...”

— Amar Agarwal, MS, FRCS, FRCOphth, and colleagues

Wide Angle Chandelier Cannula with adaptor for Ocutome system, self-retaining 20GA/0.9 mm cannula, disposable, sterile (box of 5)

*5037



Chandelier illumination is a technique using a 20GA/0.9 mm or smaller illumination fibre that is inserted into the vitreous cavity transconjunctivally through the pars plana. It increases the surgeons visibility making anterior and posterior segment surgery safer and easier to perform.

Chandelier Cannula is placed in the pars plana area without the need of sutures for fixation.



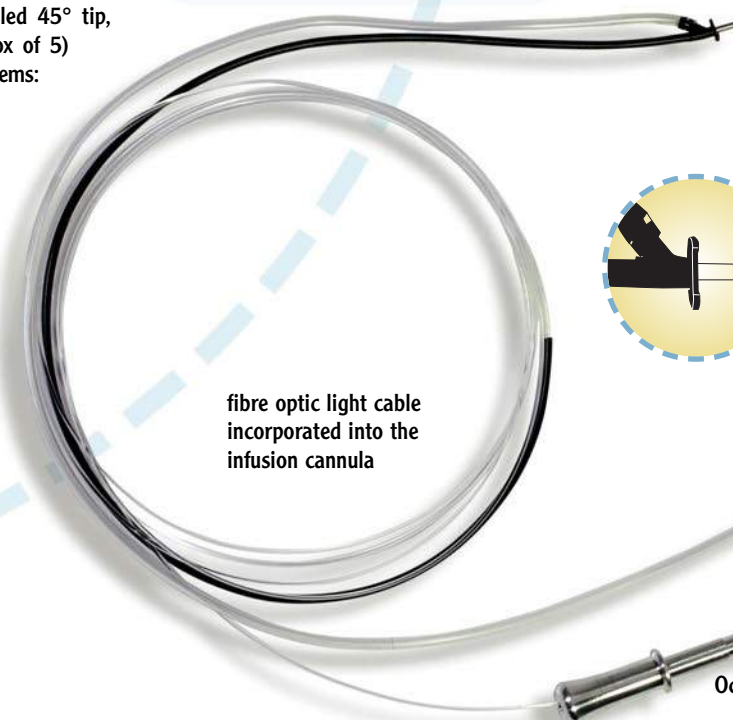
Removal of dislocated IOL with chandelier illumination and vitreoretinal forceps.

Illuminated Infusion Cannulae 18GA/1.2 mm bevelled 45° tip, disposable, sterile (box of 5) fits the following systems:

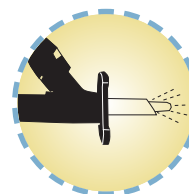
*5038 Ocutome

*5096 Alcon

*5128 B&L



fibre optic light cable incorporated into the infusion cannula



Ocutome adaptor

VITREORETINAL INSTRUMENTS



Removable Instrument Tips

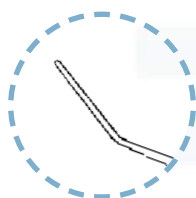
Hold the tip gently but firmly and screw the handle onto the tip!
Make sure that the handle is turned only, NOT THE TIP!

tips and handle sold singly

Aluminium Handle
for removable tips
E15-100AB

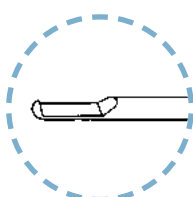


other colours
see pages
94 & 130



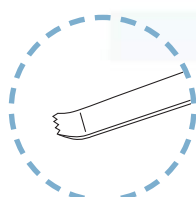
Membrane Spatula/Knife Tip
angled sharp 5 mm blade
E15-347R

for dissection and excision of
membranes from the surface



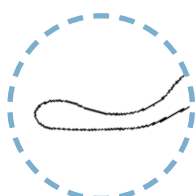
Membrane Peeler Tip
blunt recessed shaft
*E15-350R

for lifting and locating the edge of
epiretinal membranes in PVR cases



Membrane Rake Tip
angled 1 mm blade
E15-355R

to clear fine membranes
from the retinal surface



Membrane Knob Tip
curved round end
E15-365R

for manipulation of
detached retina

also available with stationary tips in all titanium (*) and/or stainless steel



Membrane Spatula Tip
angled 130° blunt spatula

*E15-363R

for blunt dissection and delamination
of membranes from the retina surface

Aluminium Handle
for removable tips
E15-100AB

tips and handle sold singly

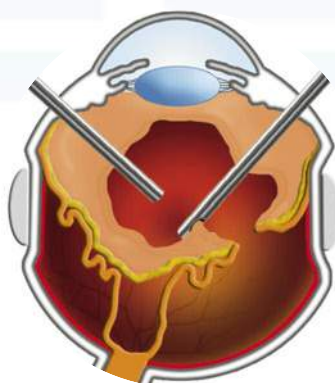
Membrane Spatula Tip
angled 130° triangular pick

*E15-371R

ideal for blunt dissection and
epiretinal membrane peeling

Membrane Pick Tip
angled 130° blunt spatula

*E15-373R



PMS EZChange® picks, rakes, and spatulas
can meet all your needs for easy, controlled
membrane manipulation and peeling
around the retina surface.



E15-350R



E15-363R



E15-347R



E15-355R

...locating, lifting, stripping...

...dissection, delamination...

...dissection and excision...

...cleaning and peeling.



20GA/0.9 MM REUSABLE BACKFLUSH INSTRUMENTS

PMS Backflush Instruments are useful for passive or active aspiration of intraocular fluids and reflux of incarcerated tissue, atraumatic "brushing" of the retinal surface and repositioning of retinal folds or breaks.

VITREORETINAL INSTRUMENTS

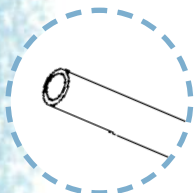
Backflush Instrument
for passive aspiration
(manual control)

E20-730 complete, consisting of:

E20-731 handpiece

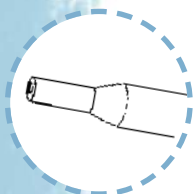
E20-700 flute tip cannula

E20-732 silicone reservoir



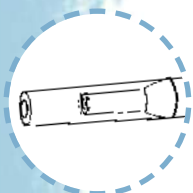
Blunt Tip Cannula

*E20-700



Tapered Tip Cannula

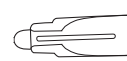
*E20-704



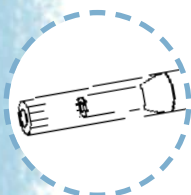
Soft Tip Cannula

*E20-710

* also available with Luer-Lock cone

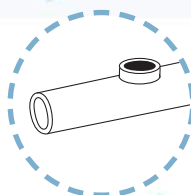


add "L" to cat. no., e.g. E20-710L



Brush Tip Cannula

*E20-720



Silicone Backflush Reservoirs
with "cut-off" aspiration control port

**E20-732 for passive aspiration (sealed end)

**E20-742 for active aspiration (open end)

Backflush Instrument
for active aspiration (syringe or machine)

E20-740 complete, consisting of:

E20-741 handpiece

E20-700 flute tip cannula

E20-742 silicone reservoir

E20-743 silicone tubing kit



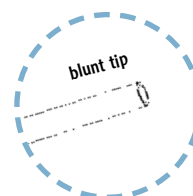
** also available sterile, 10 per box

PMS Backflush Handles accept Luer-Lock and Standard Luer Fitting Cannulae. Simple design provides ease of use and setup.

Backflush Handpieces
for passive aspiration
(manual control)

****E20-731LL** Luer-Lock male
E20-731LM Luer male

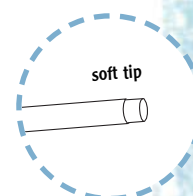
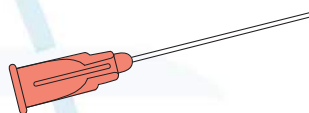
supplied
without cannula



Blunt Tip Cannula
front open port

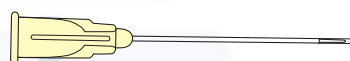
***A3207**

also known as Charles Flute Needle

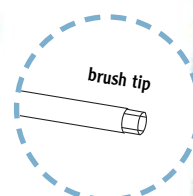


Soft Tip Cannula
2 mm extendible sleeve

***A3198**

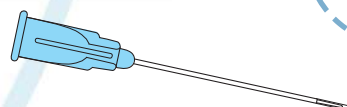


*** disposable cannulae, sterile, 10 per box**



Brush Tip Cannula
1 mm extendible sleeve

***A3206**



Backflush Handpieces
for active aspiration (syringe or machine)
supplied with E20-743 silicone tubing kit

****E20-741LL** male Luer-Lock and hose end
E20-741LM male/male Luer cone

supplied
without cannula

**** also available sterile, 5 per box**

VITREORETINAL INSTRUMENTS



The PMS range of backflush instruments are produced of high quality materials including stainless steel, silicone rubber and teflon. These instruments will provide long service if properly cleaned after each surgical procedure.

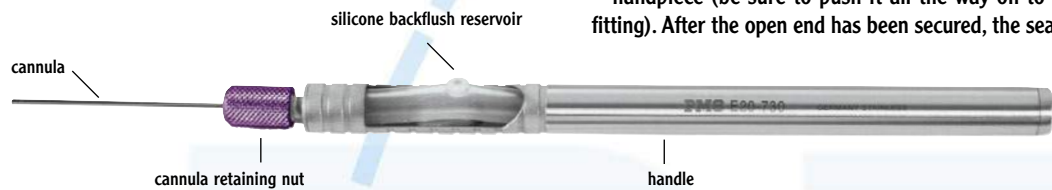
PMS backflush instruments consist of four basic parts:

- stainless steel handle
- stainless steel tip cannula
- stainless steel retaining nut
- silicone rubber backflush reservoir with white teflon aspiration control port

REASSEMBLY

After all of the parts have dried completely the instrument can be reassembled as follows:

- 1) Install the silicone backflush reservoir by inserting the open end of the reservoir into its fitting at the distal end of the opening within the handpiece (be sure to push it all the way on to the fitting). After the open end has been secured, the sealed



DISASSEMBLY

After use the instrument should be disassembled and cleaned before being sterilised. The following is a brief description of the disassembly procedure to be followed prior to cleaning.

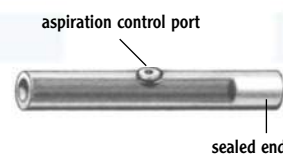
- 1) Unscrew and remove the cannula retaining nut and remove the cannula.
- 2) Remove the silicone backflush reservoir from the handpiece by pulling up the center of the tubing.

end of the reservoir is inserted into the proximal end of the opening within the handpiece (it is necessary to "crimp" the tubing while inserting the proximal end). After the backflush reservoir is in its proper position, there should be no crimps in the reservoir tubing.

- 2) Insert the cannula in the distal tip of the handpiece and secure with the cannula retaining nut.

BACKFLUSH RESERVOIRS

If the backflush reservoir shows any signs of wear or damage or if it contains tissue remnants, blood, etc., which cannot be removed, it must be replaced.



MANUAL CLEANING

- 1) Wash the handpiece and backflush reservoir thoroughly, rinse well and allow to dry before re-assembling. The silicone backflush reservoir should be inspected under magnification to be sure that it does not show any signs of wear or damage. Confirm that the teflon "washer" is in the aspiration control port and that the proximal end of the reservoir tubing is sealed.

- 2) If a silicone "brush" or "soft tip" cannula is used, it should be inspected under magnification for wear or damage and replaced as necessary. If the inspection reveals an intact silicone tip carefully wash the cannula and brush/soft tip. Then reinspect the brush/soft tip to be sure that it has not been damaged while cleaning. The cannula should be thoroughly flushed and rinsed during the cleaning procedure.

- 3) After all of the parts have been rinsed thoroughly with distilled water, allow them to dry completely before being reassembled.



SILICONE OIL

is extremely difficult to completely remove from silicone tubing. Therefore if silicone oil is used in a surgical procedure, the silicone parts of the backflush instrument must be replaced after the procedure.



Sterilisation Containers

OPTIONAL CARE & CLEANING

Only hospital approved detergents and cleaners are acceptable for use in the cleaning process. If a detergent or cleaner is used, steps 1 through 3 of the Manual Cleaning Procedure should be followed immediately afterwards.

AUTOMATED CLEANING

Automated wash/disinfector machines and ultrasonic cleaner are an acceptable method to use in the instrument cleaning process, but should not be used as the sole cleaning method. However, the instrument should, at the very least, be cleaned with purified water prior to being placed into the mentioned systems. Follow the automated cleaning with steps 1 to 3 for the Manual Cleaning Procedure.

STORAGE

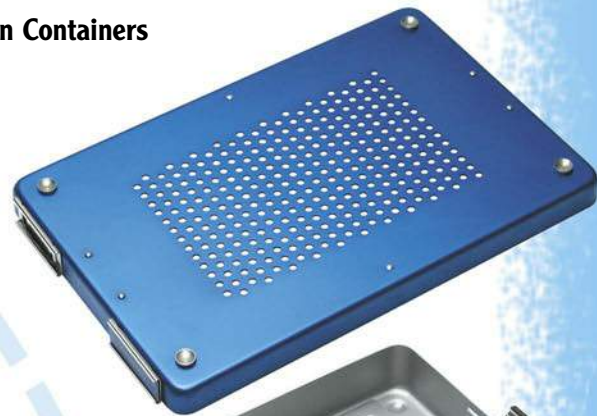
We highly recommend the utilisation of PMS EZWash® sterilisation trays and PMS EZLoad® sterilisation containers to sterilise, store and protect all of your delicate PMS vitreoretinal instruments. For more details refer to relevant section.

STERILISATION

The PMS backflush instruments (stainless steel handles and stainless steel cannulae) can be gas, flash or steam sterilised (in autoclave). The temperature should not exceed 273°F/134°C.

AND ALWAYS REMEMBER:

**HANDLE YOUR INSTRUMENTS
WITH TENDER LOVING CARE**



E45-221B
310 x 190 x 40 mm
for storage of 1 x 1/1, 2 x 1/2
or 3 x 1/3 size Sterilisation Trays

Sterilisation Trays



E45-113
1/3 size 178 x 90 x 24 mm



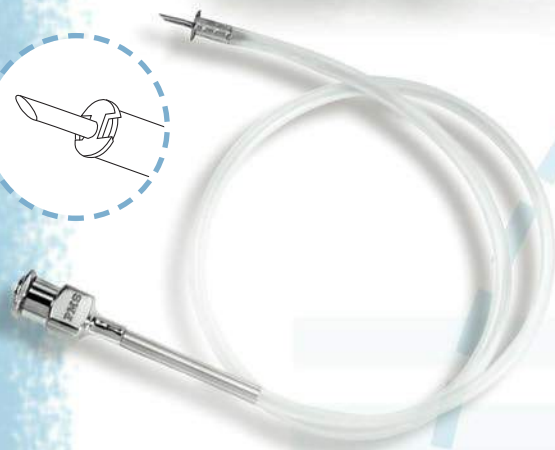
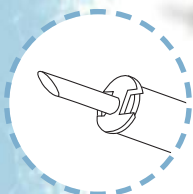
E45-112
1/2 size 178 x 140 x 24 mm



E45-111
1/1 size 275 x 178 x 24 mm



*for Gas, Liquids
and Silicone Oil*



PMS

Standard Infusion Cannulae
attached to silicone tubing with LL cone,
reusable, non-sterile (sold singly)

E20-752 2.5 mm tip

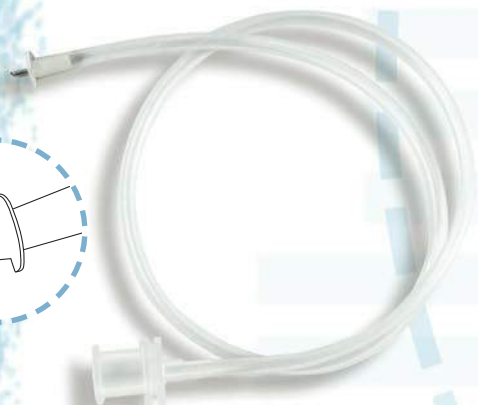
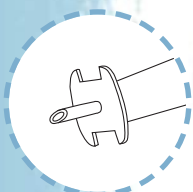
E20-754 4.0 mm tip

E20-756 6.0 mm tip



sterilise before use

Reusable cannulae are constructed of stainless steel
material; 380 mm extra long infusion tubing enables
individual location of the silicone oil syringe.



Standard Infusion Cannulae
attached to silastic tubing with LL cone,
disposable, sterile (box of 10)

***175-25** 2.5 mm tip

***175-40** 4.0 mm tip

***175-60** 6.0 mm tip

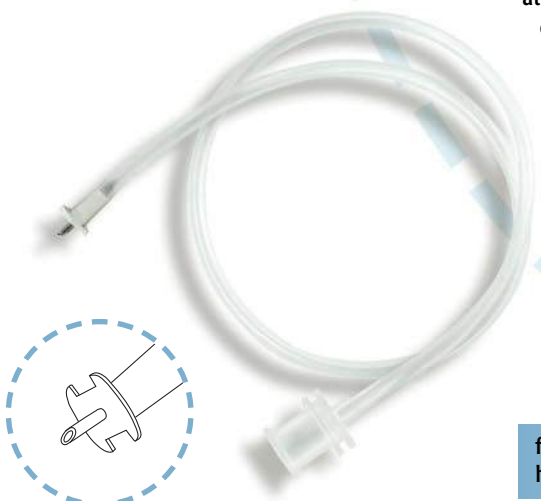
for injection of viscous fluids during
posterior segment procedures

High Viscosity Infusion Cannulae
attached to silicone tubing with LL cone,
disposable, sterile (box of 10)

***175-14** 4.0 mm tip

***175-16** 6.0 mm tip

designed for easy injection of
high viscosity substance
such as silicone oil



further VFI instruments for manual delivery of
heavy liquids are shown on pages 212 - 213



Directions for use
Note: This item is sold as **NON-STERILE**

- PREP:**
1) Sterilize (gas or steam autoclave) scleral plugs.
2) Filtration, open pouch onto sterile field.
3) With cross action forceps, grasp plug head and lift from retaining block.
4) With forceps attached to head, place tip of plug into sclerotomy.
5) With scleral plug properly positioned in sclerotomy, remove forceps.

REMOVAL

- 1) Grasp scleral plug head with forceps and gently remove from sclerotomy.



Reusable Scleral Plugs
non-sterile (4 per tablet)

***R19-1000** 19GA/1.1 mm, gold

***R20-1000** 20GA/0.9 mm, silver



sterilise before use

Disposable Scleral Plugs
(2 x 20GA/0.9 mm &
2 x 19GA/1.1 mm)
sterile (4 per tablet)

***RDP-1000**



Scleral Plug Forceps
angled 9 mm grooved jaws
with side gripping tips,
10.5 cm

E30-777T

for standard 20GA/0.9 mm scleral plugs

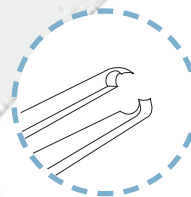
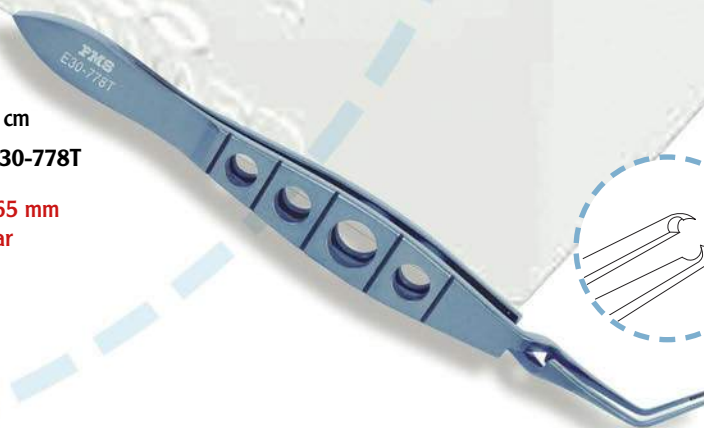
**cross-action handle, ideal for picking up the plug
from the holder and easy insertion and removal**



Scleral Plug Forceps
angled 9 mm notched
jaws with side and
end gripping tips,
10.5 cm

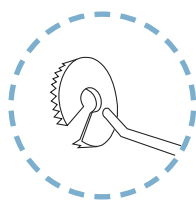
E30-778T

**for micro 23GA/0.65 mm
scleral plugs and trocar
cannulae**





*affordable,
economical...*



Trocar Fixation Plate
multiple atraumatic teeth,
central 2.75 mm opening
and side port, 11.0 cm

E15-727 stainless steel

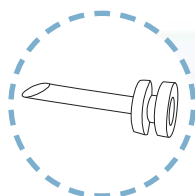
E15-727T titanium

*ideal for conjunctiva fixation
around the general area of
the pars plana incision site*



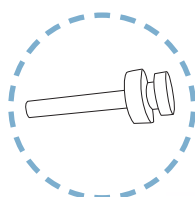
Cannula Inserter
titanium, blunt tip, 10.0 cm

E20-723T



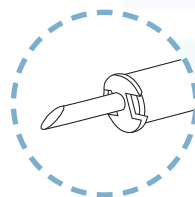
Trocar Cannulae
non-sterile (4 per tablet)

E20-723C



Cannula Plugs
non-sterile (4 per tablet)

E20-723P

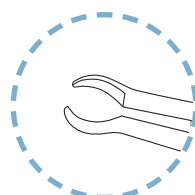


Universal Infusion Cannula
4 mm bevelled tube attached to
silicone tubing with LL cone,
non-sterile (sold singly)

E20-723U



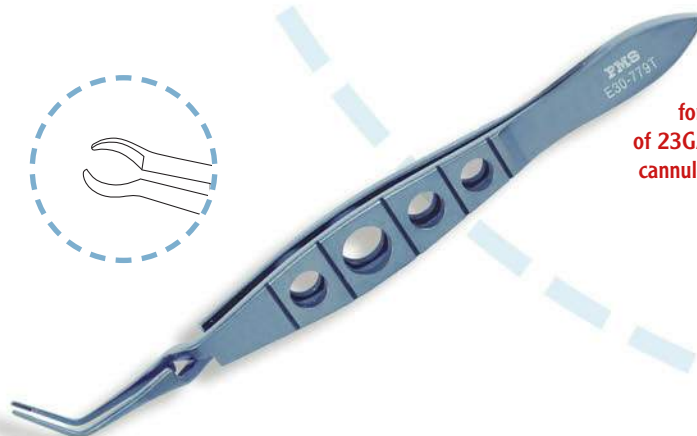
sterilise before use



Cannula Loading Forceps
titanium, angled 9 mm shanks
with biconvex curved jaws,
10.5 cm

E30-779T

*cross-action design
for insertion and removal
of 23GA/0.65 mm trocar
cannulae*





*... efficient,
two step technique*

23GA/0.65 mm Trocars System

complete, consisting of:

- 1 x Trocar fixation plate
- 1 x Cannula inserter
- 3 x Trocar cannulae
- 3 x Cannula plugs
- 1 x Universal infusion cannula
- 1 x Cannula loading forceps
- 1 x Sterilising case with ...

E20-723R ...removable lid

E20-723S ...sliding lid



23GA/0.65 mm Disposable
ONE STEP & TWO STEP
Trocars Cannula Systems
are shown on pages 200-201

PMS

Reusable Trocar Cannula Kit
non-sterile (4 per retaining block)

E20-720K 20GA/0.9 mm

E20-723K 23GA/0.65 mm



Replacement Cannula Kit

23GA/0.6 mm, consisting of 2 each:
instrument cannulae and cannula plugs

*5189 reusable, sterile (1 kit per tray)

*5190 disposable, sterile (5 trays per box)

5189



Disposable Closure Valve Set
for 23GA/0.65 mm cannulae,
consisting of 4 valves per tray,
sterile (5 sets per box)

*5209

EAGLE

Stiletto MVR Knives

23GA/0.65 x 30 mm shaft,
0.75 mm wide lancet blade,
disposable, sterile (box of 6)

EG-5563 straight

EG-5663 angled

For sclerotomy incisions with smooth, easy
penetration through the limbus or pars plana.
Tip provides a fluid-tight seal and is tapered for
easy withdrawal.





*smaller is better,
less traumatic,
less pain*



Micro Scissors
sharp tipped blades

*E25-602S23 straight

*E25-603S23 curved

*E25-605S23 vertical 45°



Crocodile Forceps
serrated micro jaws

*E30-672S23

ideal for macular applications...



End Gripping Forceps
micro tips platform

*E30-673S23

fine membrane grasping...



Eckhardt Style Forceps
end gripping nail-like tips

*E30-687S23

and peeling of ILM



Tano Style Forceps
asymmetrical jaws

*E30-689S23

* fits through 23GA/0.65 mm Trocar System



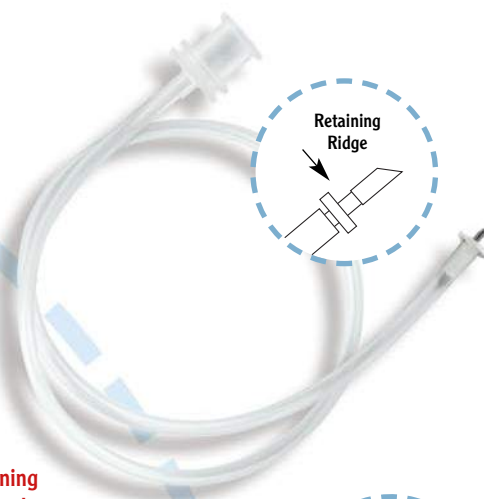
Self-Retaining Infusion Cannulae

23GA/0.65 mm x 4.0 mm tip,
disposable, sterile (box of 5)

*5144 infusion cannula

*5165 silicone oil cannula

designed for sutureless fixation; retaining
ridge holds cannula securely in place



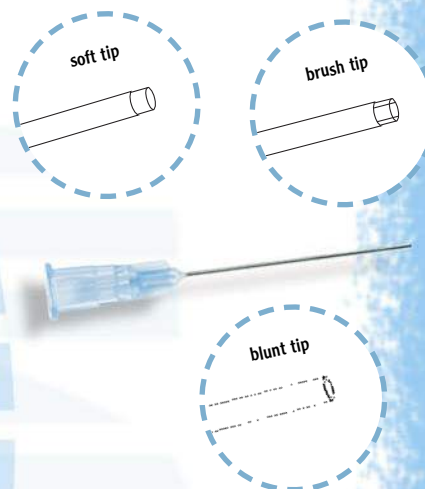
Disposable Backflush Cannulae

23GA/0.65 x 30 mm tube,
sterile (box of 10)

A3209 blunt tip, Charles Flute Cannula

A3195 soft tip, 2.0 mm silicone sleeve

A3208 brush tip, 0.6 mm silicone sleeve



Backflush Handpiece

for passive aspiration (manual control)
with XL silicone reservoir,
male Luer-Lock connector

E20-731XL

extra large reservoir
for increased capacity,
allows reflux of greater
volumes of fluid



Fluid-air exchange with simultaneous
aspiration of intravitreal fluid
through blunt tip extrusion cannula.

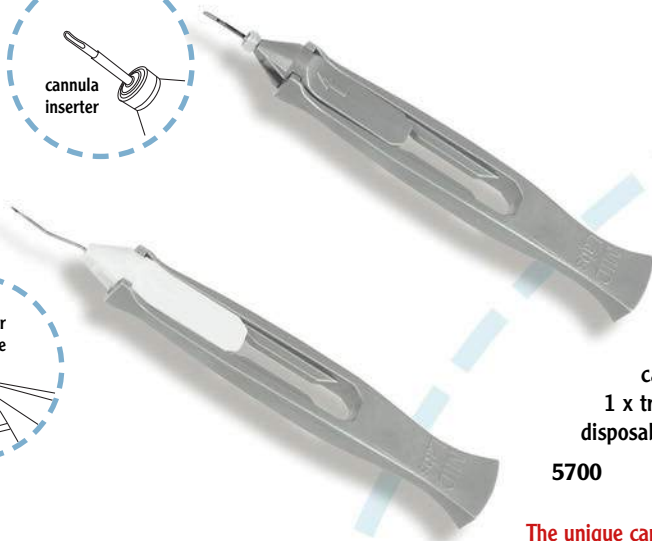


Replacement Reservoir

E20-732XL

Charles Flute Cannula

A3209



**23GA/0.65 mm
TWO STEP
Cannula System**

complete, each package includes:
3 x cannula inserter with preloaded
cannula with self-sealing valve,
1 x trocar knife and 1 infusion line
disposable (pack of 6)

5700



sterilise before use

The unique cannula inserter works together with an ergonomically designed knife to accomplish oblique cannula insertion directly into the eye via pars plana.



DIRECTION FOR USE

Self-sealing cannulae are pre-mounted on the trocar insertion tools. Slide the trocar needle forward until it locks into the handle. Introduce the cannula with the trocar needle. Forceps may be used to hold the cannula in place while removing the trocar needle. The cannula is self-sealing and will minimise fluid loss when not in use.



Attach the Luer connector of the infusion line to a source of infusion fluid. Prime the infusion line. Insert the metal connector in to the rubber cap on one of the cannulae. Immobilise the infusion line and verify that it is securely attached to the cannula before use.

**25GA/0.5 mm
ONE STEP
Trocar Cannula System**

complete, each package includes:
4 x inserter handles with preloaded
trocar cannula and one infusion line
disposable (pack of 6)

5605



sterilise before use

Insert handle consists of sharp wire trocar mounted to plastic handle. The inserter comes with a 25GA/0.5 mm cannula preloaded and is delivered in a safe, retracted position.

protected



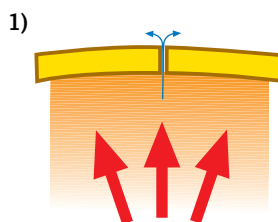
132°/134° C
270°/273° F

Not for sale in Europe

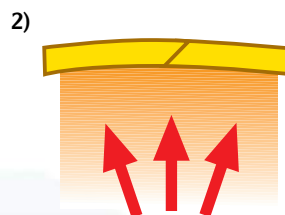


*for better incision closure
and cannulae stability*

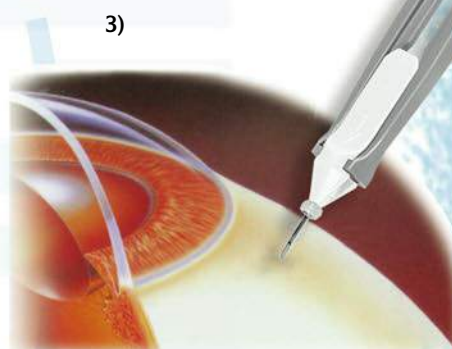
1)
The conventional method of inserting a trocar cannula vertical to the scleral surface promotes incisions that are small (0.5 to 0.6 mm), however with poor sealing ability.



2)
The oblique insertion technique with "valve" effects seals better than the traditional vertical technique. Valve-like incisions are very similar to self-sealing corneoscleral incisions performed in cataract surgery.



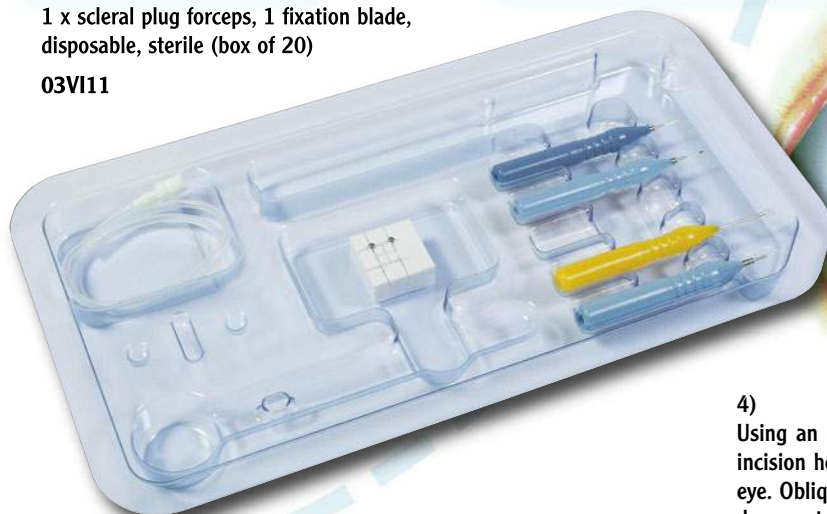
3)
Oblique insertion of trocar cannula can be performed with a straight or angled 23GA/25GA trocar inserter. Both types are designed to accomplish oblique cannula insertion directly into the eye. Straight cannula inserters are introduced at an approximate 45° angle to the scleral surface with a movement tangential to the limbus.



**23GA/0.65 mm
ONE STEP (without self-sealing valve)
Trocar Cannula Set**

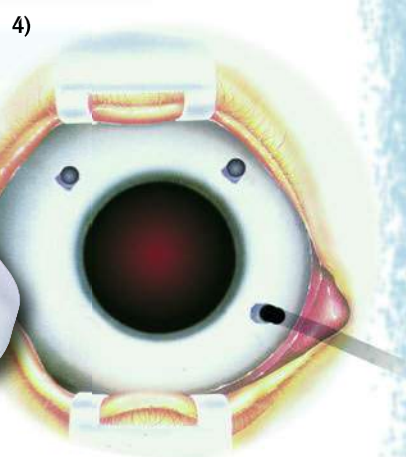
complete, each package includes:
2 x trocars with instrument cannula, 1 x inserter (dark blue) with cannula for fluid/gas, 1 infusion line, 2 x scleral plugs,
1 x scleral plug forceps, 1 fixation blade,
disposable, sterile (box of 20)

03VI11



Simple System available upon request:

23GA ParsMate Trocar Kit
complete, kit includes: 4 x trocars with insert cannula,
1 x infusion cannula, 1 x scleral tablet with 4 plugs
pressure plate may be added upon request



4)
Using an oblique incision instead of a vertical incision helps maintain cannula stability in the eye. Oblique positioning of the trocar cannulae does not affect the maneuverability of the instruments.

VITREORETINAL INSTRUMENTS



VITREORETINAL INSTRUMENTS

*it's your
choice*

Silicone Tip Cannulae

25GA/0.5 x 30 mm tube,
disposable, sterile (box of 10)

A3210 brush tip

A3211 blunt tip

A3196 soft tip

silicone tips ensure safe entry through a macular
tear or hole for aspiration of subretinal fluids

Fiber Optic Endo-Illuminators

available in 23GA and 25GA
disposable, sterile (box of 5)

single purpose illuminator providing an
even field and/or wide field illumination

Endo Laser Probes

available in 20GA, 23GA and 25GA,
straight and angled tips, sterile (box of 5)

for Alcon, Coherent, Zeiss,
HGM and Nidek systems

Bipolar Cautery Pencils

23GA/0.65 mm shaft,
smooth and pointed tips,
reusable and disposable

for gentle coagulation of scleral
surface and intraocular hemostasis

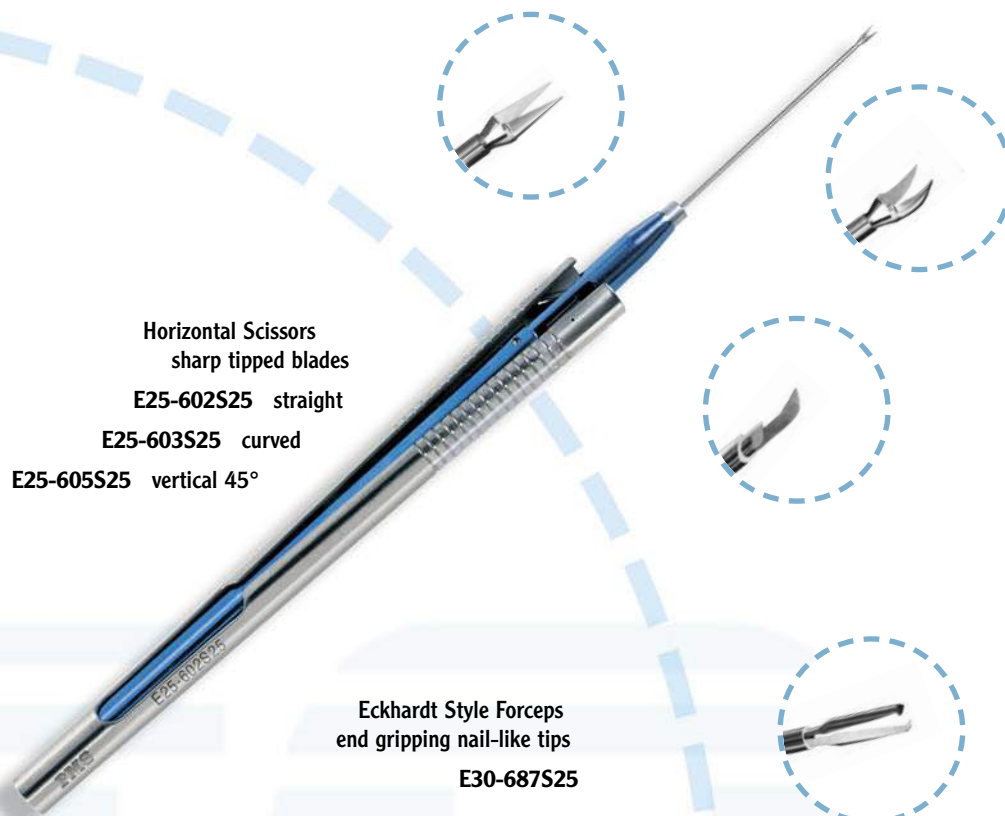
All products shown are "Made in
the USA" and carry the European
Union CE Mark registration.



coagulation of small
scleral bleeders



Horizontal Scissors
sharp tipped blades
E25-602S25 straight
E25-603S25 curved
E25-605S25 vertical 45°



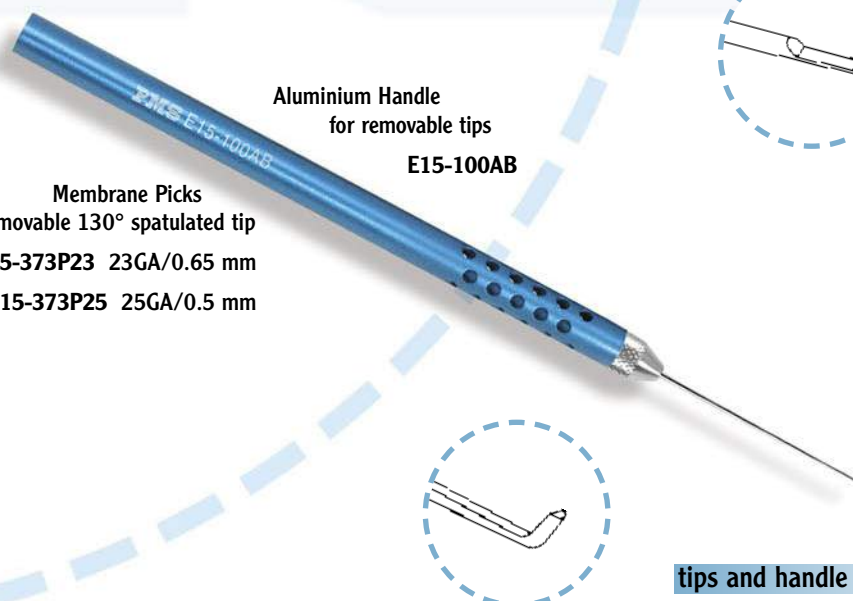
Eckhardt Style Forceps
end gripping nail-like tips
E30-687S25

Berrod Style Forceps
end gripping tips platform
E30-673S25

Membrane Spatulae
removable 130° triangular tip
E15-371S23 23GA/0.65 mm
E15-371S25 25GA/0.5 mm

Aluminium Handle
for removable tips
E15-100AB

Membrane Picks
removable 130° spatulated tip
E15-373P23 23GA/0.65 mm
E15-373P25 25GA/0.5 mm



tips and handle also sold singly



*Simple
to use !*



V.I.I.K.
Vitreous Injection Kit
consisting of the following:
Barraquer Adult Eye Speculum,
Scleral Marker (4.0/3.5 mm),
Hypodermic Needle 32GA/0.2 mm,
disposable, sterile (box of 10)

***PD900.10**

for office based intravitreal
injections and examinations.



Universal Sclerotomy Caliper
titanium, blunt tips, 4.0 cm

E40-571T

for marking 3.0, 3.5 and 4.0 sclerotomy sites



Braunstein
Fixed Sclerotomy Caliper
titanium, blunt tips, 7.0 cm

E40-573T 3.5-3.0 mm for aphakic eyes

E40-574T 4.0-3.5 mm for phakic eyes

- marks the distance from the limbus to sclera
- marks intravitreal injections entry PPV
- to make the mark for MVR blade incisions

marking sclerotomy site for pars plana vitrectomy



EAGLE

Stiletto MVR Knives

23GA/0.65 mm shaft,

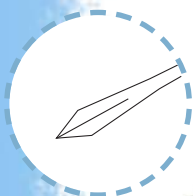
0.75 mm wide lancet blade,

disposable, sterile (box of 6)

EG-5563 straight

EG-5663 angled

For sclerotomy incisions with smooth, easy penetration
through the limbus or pars plana. Tip provides a fluid-
tight seal and is tapered for easy withdrawal.



* Not for sale in Europe



IrisMate® Flexible Translimbal Iris Retractors

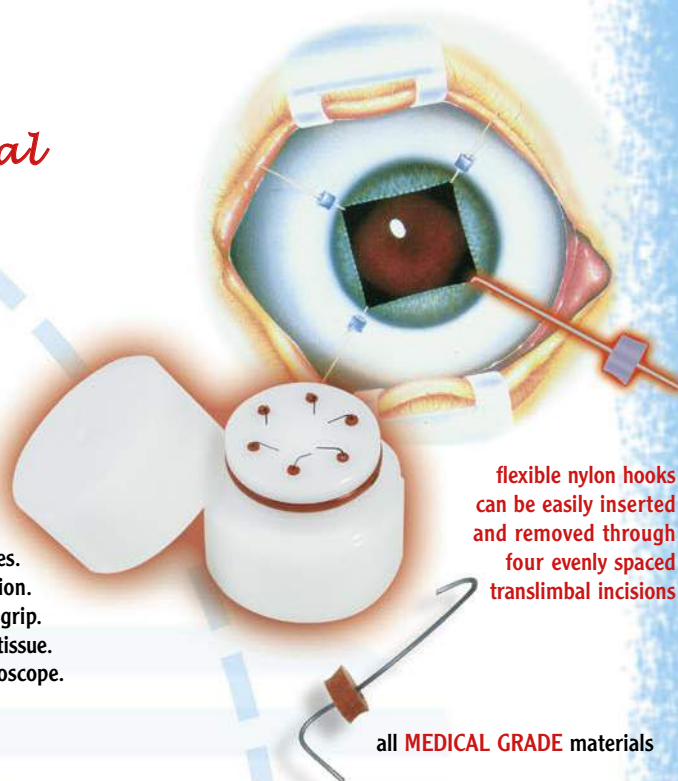
*IRIS-1000 reusable (6 pcs) in autoclavable case

**IRIS-2000 disposable (5 pcs) in plastic tray

- Ideal for temporary iris dilation.
- Safely used in Aphakic, Pseudophakic and Phakic eyes.
- Works through 0.3 mm - 0.5 mm self sealing incision.
- Specially designed silicone cinch provides superior grip.
- Nylon hook retracts iris with minimal damage to the tissue.
- Cinch is colour coded for easier viewing under microscope.

*  Manufacturer:
Howard Instruments, Inc.
Tuscaloosa, AL
USA

**  Manufacturer:
Biotech Vision Care Ltd.
Khatraj, Gandhinagar
India



flexible nylon hooks
can be easily inserted
and removed through
four evenly spaced
translimbal incisions

all **MEDICAL GRADE** materials

Video available

Retinal Nails & Forceps

for temporary fixation of the retina in case of immobile retina

Reusable Retinal Nail
20GA/0.9 mm trocar tip
of 2.85 mm working length,
non-sterile (4 per tablet)
E20-720NS



 **sterilise before use**

Retinal Nail Holding Forceps
removable tip (360° rotatable),
20GA/0.9 x 30 mm straight shaft,
cup-shaped 1.0 mm jaws, 15.2 cm

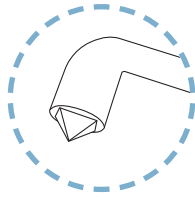
E30-690N complete

E30-690R tip only

E10-010T handle only



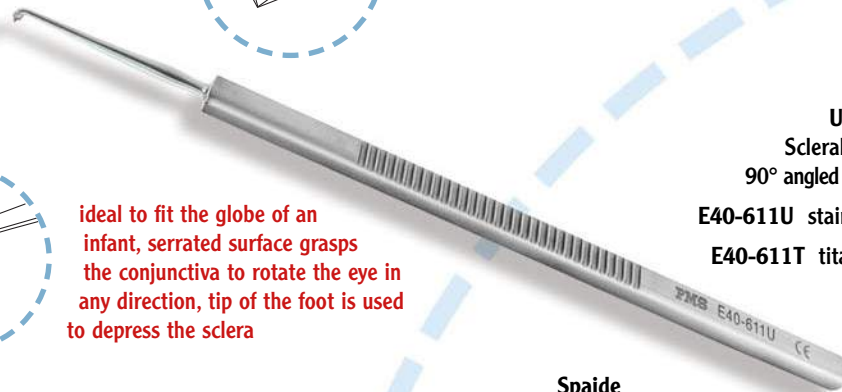
VITREORETINAL INSTRUMENTS



pick has sufficient sharpness to rotate the globe during examination

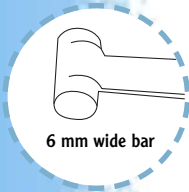


ideal to fit the globe of an infant, serrated surface grasps the conjunctiva to rotate the eye in any direction, tip of the foot is used to depress the sclera



Urrets-Zavalía
Scleral Depressor-Fixation Pick
90° angled tip with pick, 12.0 cm
E40-611U stainless steel
E40-611T titanium, curved shaft

Spaide
Pediatric Scleral Depressor
curved, serrated tip, 12.5 cm
E40-611S



teardrop shaped tip for making a sharp protrusion at the side of mid-peripheral lesion or retinal tear.

Shinja Hara
Scleral Depressor
6 mm wide bar and 7 mm angled hook with 2 mm teardrop shaped tip, 13.5 cm
E40-612S

Video available



O'Connor-Schockett
Scleral Depressor-Marker
6 mm wide bar and 1.5 mm Gass Marker, 13.5 cm
E40-612C



threphine-like 1.5 mm tip produces a ring shaped mark on the sclera when pressure is applied



Schockett
Scleral Depressor
6 mm wide bar and 2.5 mm teardrop shaped tip, 13.5 cm
E40-613 stainless steel
E40-613T titanium



rounded end designed for depressing sclera and curved marking end for reaching behind the globe

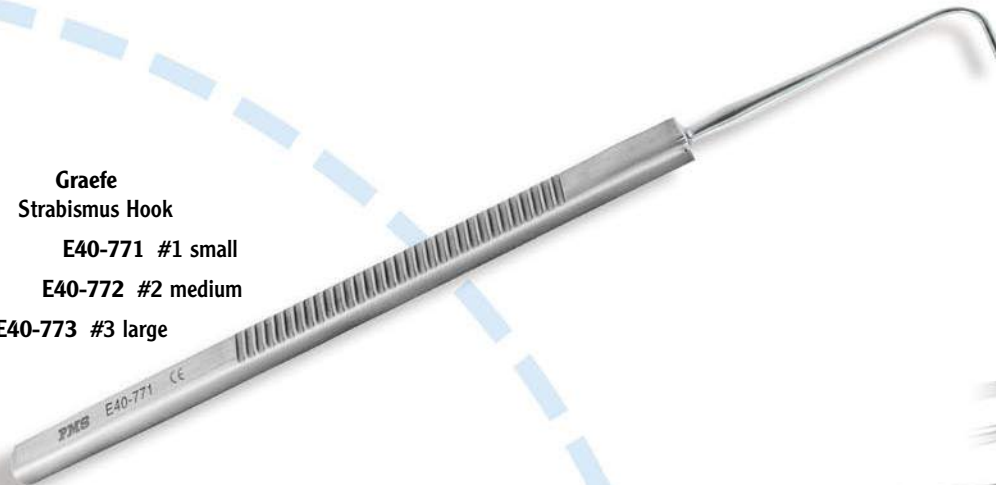


**Graefe
Strabismus Hook**

E40-771 #1 small

E40-772 #2 medium

E40-773 #3 large



**Jameson
Muscle Forceps**

slide lock, adult size,
6 teeth, 10.0 cm

E30-700 right

E30-701 left



Gass

Retinal Detachment Hook
flat tip with 1.5 mm oval hole, 14.0 cm

E40-777



Schepens

Orbital Retractor

curved smooth blade with
4.0 mm wide notch, 15.0 cm

E40-813



Bonn Model

Orbital Retractor

angled smooth blade with
convex-concave surfaces,
15.0 cm

E40-815





*Instrument sets
are presented as
guidelines only*



E25-333



E35-231



E40-613



E40-779T



E25-581

E42-140 RETINAL DETACHMENT SET
complete, consisting of the following:

E30-902 Mosquito Forceps (2x), page 16

E30-934 Dieffenbach Serrefine (4x), page 16

E40-078 Castroviejo Eye Speculum, page 17

E40-554 Castroviejo Eye Caliper, page 19

E20-001 Bishop-Harmon Irrigator, page 20

E20-031 Rycroft Infusion Cannula, page 20

E25-333 Westcott Tenotomy Scissors, page 59

E25-565 Stevens Tenotomy Scissors, page 59

E30-063 Barraquer Colibri Forceps, page 61

E30-423 Harms Tying Forceps, page 24

E30-430 Bonn Suturing Forceps, page 24

E35-132 Castroviejo Needle Holder, page 25

E35-231 Barraquer Needle Holder, page 25

E40-111 Desmarres Lid Retractor, page 17

E40-771 Graefe Strabismus Hook, page 207

E40-613 Schockett Scleral Depressor, page 206

MISCELLANEOUS TO RETINAL

E40-611U Scleral Marker & Fixation Pick, page 206

E40-777 Gass Retinal Detachment Hook, page 207

E40-779T Eye Thermocauter, titanium, page 208

E40-813 Schepens Orbital Retractor, page 207

E30-835 Sleeve Spreading Forceps, page 219

Nurse Scissors, 13.0 cm
straight 35 mm blades

E25-580 sharp/sharp

E25-582 sharp/blunt

E25-584 blunt/blunt

curved 35 mm blades,

E25-581 sharp/sharp

E25-583 sharp/blunt

E25-585 blunt/blunt



Directions for use
Note: This item is sold as *NON-STERILE*

PLACEMENT:

- 1) Clean and Sterilize (gas or steam autoclave) scleral plugs.
- 2) After sterilization, open pouch onto sterile field.
- 3) With cross action forceps, grasp plug head and lift from retaining block.
- 4) With forceps attached to head, place tip of plug into sclerotomy.
- 5.) With scleral plug properly positioned in sclerotomy, remove forceps.

REMOVAL

- 1) Grasp scleral plug head with forceps and gently remove from sclerotomy.



R19-1000

E42-141 VITRECTOMY SURGICAL SET
complete, consisting of the following:

EG-5560 Stiletto MVR Knife 20GA, page 58

R19-1000 Scleral Plug Set 19GA, page 195

E30-777T Scleral Plug Forceps, page 195

175-40 Infusion Cannula 4 mm, page 194

E20-730 Backflush Instrument, page 190

E20-741LL Backflush Handpiece, page 191

E20-704 Tapered Tip Cannula, page 190

E25-602S Vitrectomy Scissors, page 175

E30-672S Vitrectomy Forceps, page 176



E25-602S

FOR MEMBRANE MANIPULATION ADD

E15-350R Membrane Peeler, page 188

E15-355R Membrane Rake, page 188

E15-371R Membrane Pick, page 189

E30-679S Vitreous Forceps, page 176



E15-355R

FOR 23GA/0.65 MM OBLIQUE INSERTION

E20-723R Reusable Trocar System, page 197

5700 Disposable Cannula System, page 200



5700

MISCELLANEOUS TO VITRECTOMY

Fiber Optic Light Probes, page 186

Bipolar Cautery Pencils, page 202



Fiber Optic Endo-Illuminator



*naturally pure,
highly purified*



AlfaSIL TRS
Purified Silicone Oil
preloaded 15 ml syringe,
sterile (box of 5)

REF 24-TRS standard connector

REF 24TRSA for Alcon + Dorc

REF 24TRSB for Bausch & Lomb

REF 20L32 for Fritz Ruck

for automatic pressure injection

GENERAL DESCRIPTION

AlfaSIL Silicone Oil is an oil liquid, of high viscosity, used to replace the vitreous humour during vitrectomy surgeries with long time of permanence in the eye, usually more than 30 days.



tubing with VFI standard connector
REF 24-TRS

CHEMICAL COMPOSITION

Formula: $[-Si(CH_3)_2O-]_n$
Viscosity: 1000 cSt at 25°C
Refractive index 1.405 at 24°C
Density: 0.965 g/cm³ at 24°C

INDICATIONS FOR USE refer to page 207

PACKAGING AND STERILISATION

AlfaSIL Silicone Oil is available in preloaded 15 ml syringe or in 10 ml vial. AlfaSIL is dry heat sterilised and filled in its sterile container. The final container (syringe or vial) is sterilised by radiation.



The use of purified silicone oil as an internal tamponade is not recommended for patients with intraocular silicone lenses.

AlfaSIL
Purified Silicone Oil
sterile (vial of 10 ml)
REF 24



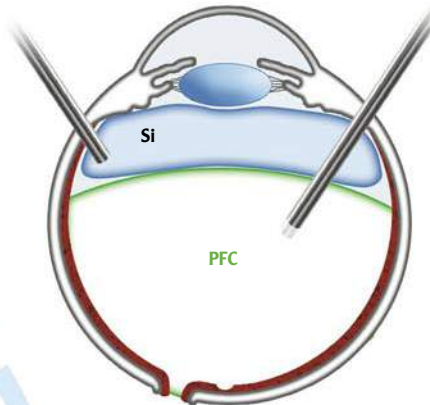


*exceptional stable,
and transparent*

INDICATIONS FOR USE

Silicone Oil SO-1000/SO-5000 is used for intraocular tamponade in severe cases of retinal detachment, e.g.

- proliferative vitreo-retinopathy (PVR)
- giant tears
- ocular trauma
- secondary RD with viral retinitis
- as well as other retinal detachment, which can not be treated with other forms of therapy.



SO-1000 exchange procedure with passive aspiration through Brush Tip Cannula

Purified Silicone Oil is available in the following:			
in 10 ml sterile vial		in 10 ml sterile syringe	
SO-1000	1000 cSt	SO-1000-S	1000 cSt
SO-1300	1300 cSt	SO-1300-S	1300 cSt
SO-2000	2000 cSt	SO-2000-S	2000 cSt
SO-5000	5000 cSt	SO-5000-S	5000 cSt



The choice of viscosity offers an optimum balance between easy injection and a stable temporary tamponade.

CHEMICAL COMPOSITION
see AlfaSIL REF 24

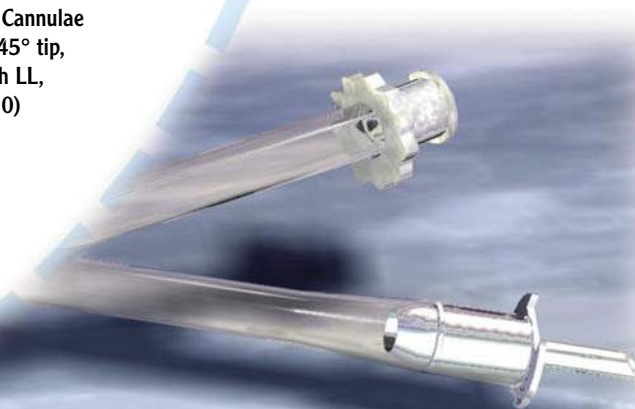
CE 0120 APPROVED FOR SALE IN ALL EUROPEAN UNION COUNTRIES

High Viscosity Infusion Cannulae
20GA/0.9 mm bevelled 45° tip,
attached to silicone tubing with LL,
disposable, sterile (box of 10)

MIS-1040 4.0 mm tip

MIS-1060 6.0 mm tip

*designed for easy injection of
high viscosity substance
such as silicone oil*



Fixed to the globe at one end. Linked to the silicone oil syringe with a Luer-Lock fitting at the other end.



STERILE EO
STERILISED BY ETO



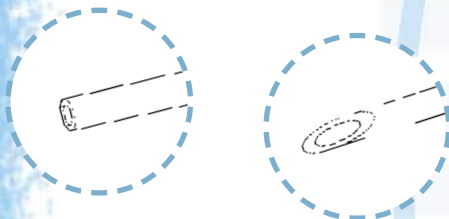
Peyman
Silicone Oil Cannulae
8 mm tube, bevelled tip
disposable, sterile (box of 10)

167-16 16GA/1.6 mm
167-19 19GA/1.1 mm

Wagner
Silicone Oil Cannulae
16GA/1.6 x 8 mm tube, bevelled tip,
attached to 6" (15.0 cm) high pressure extension tube,
disposable, sterile (box of 3)

167-16T

for injection or aspiration of high viscosity
fluids in the repair of retinal detachments



Silicone Oil Cannula (Manual Delivery System)
8 mm cannula with 6" (15.0 cm) high pressure extension tube
preattached to a 10 ml ring control syringe, sterile (box of 3)

167-20TS 20GA/0.9 mm
167-19TS 19GA/1.1 mm
167-16TS 16GA/1.6 blunt tip

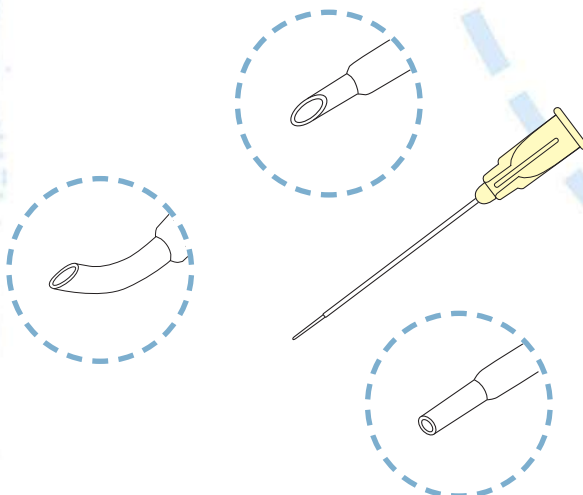


Subretinal/Vitreoretinal Injection Cannulae
20GA/0.9x25 mm tube, 32GA/0.25mm tip

173-32 straight 3 mm bevelled tip
175-32 curved 8 mm rounded tip

Subretinal/Vitreoretinal Aspiration Cannulae
20GA/0.9x25 mm tube, 32GA/0.25mm tip

173-34 curved 8 mm bevelled tip
175-28 straight 4 mm rounded tip



pictures shown are smaller/larger than actual sizes indicated



sterilise before use

Silicone Oil Cannulae
8 mm tube, bevelled tip

E20-716 16GA/1.6 mm

E20-719 19GA/1.1 mm

for injection or aspiration of high viscosity fluids in the repair of retinal detachments

Standard Infusion Cannulae
non-sterile (sold singly)

E20-752 2.5 mm tip

E20-754 4.0 mm tip

E20-756 6.0 mm tip

Silicone Oil Syringe
10 ml glass syringe with
screw activated plunger,
12.0 cm
E20-820

Viscous Fluid Pressure Injector
10 ml glass syringe with finger support
and pressure activated plunger,
12.5 cm

E20-821

High-Flow Fluid Filter .20 Micron
male/female Luer-Lock fittings,
disposable sterile
(50 per box)

201-20

**used between syringe and cannula to
filter out particulates and contaminants**

pictures shown are smaller/larger than actual sizes indicated

VITREORETINAL INSTRUMENTS



*colourless,
optical clear,*



VITRION
Perfluorocarbon Liquid
sterile (vial of 5 ml)
*REF 100VTO

GENERAL DESCRIPTION

Vitron is made by 98% of Octadecafluoro-decanydnaphthalene. It is treated to reduce as far as possible its residual toxicity. Existing impurities are 100% fluorinated and are fluorinated open chains of the same kind.

CHEMICAL COMPOSITION

Formula: $C_{10}F_{18}$
Molecular weight: 462.08
Refractive index: 1.314 at 24°C
Density: 1.941 g/cm³ at 25°C
Boiling point: 141°-143°C

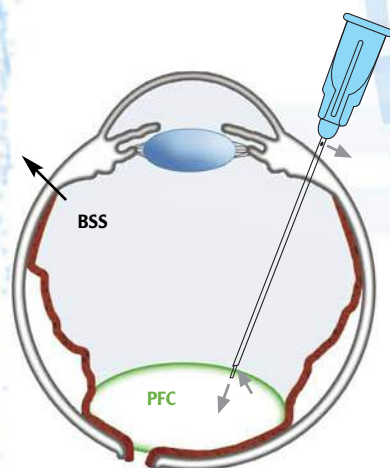
DESTINATION OF USE

Perfluorocarbon liquid is a high tensivity liquid for vitreous chamber washing during ocular surgery with a maximum time of permanence in the eye of one hour.

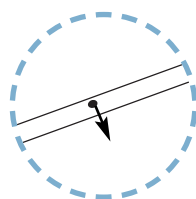
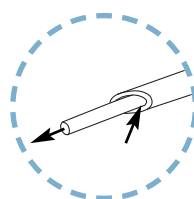
INDICATIONS FOR USE refer to page 209

PACKAGING AND STERILISATION

Vitron is packaged in 5 ml bottle of pharmaceutical glass with cap and seal. The bottle is outside and inside sterile, packaged in a sealed sterile bag.



retinal attachment with Perfluorocarbon
through Dual Bore PFC Cannula



cut-off aspirating port
allows to control constant
intraocular pressure
during injection

Dual Bore PFC Coaxial I/A Cannula

19GA outer tube with 0.4 mm aspiration port,
25GA inner tube with open end irrigating port,

E20-325 reusable (sold singly)

149-19 disposable (box of 10)

*with aspiration channel for passive
aspiration of intraocular fluid
during injection of PFC*



*100% fluorinated
and purified*

INDICATIONS FOR USE

DecalineMate® Perfluorocarbon serves perfectly as an aid in temporary flattening of the retina and in the surgical treatment of:

- retinal detachment
- giant tears
- ocular trauma
- laser coagulation and cryotherapy
- lifting of subluxated lenses
- retinal bleeding
- short term tamponade

CHEMICAL COMPOSITION

Formula: $C_{10}F_{18}$

Molecular weight: 462

Refractive index: 1.310 at 20°C

Density: 1.93 g/cm³

Boiling point: 142°C

Surface tension: 19.0 at 25°C

Interface tension: 57.8 at 20°C

DecalineMate®
Perfluorocarbon
100% fluorinated,
sterile (vial of 7 ml)

*PFD-2000



PFC-air exchange using blunt tip
extrusion cannula

VITREORETINAL INSTRUMENTS

CE 0120 APPROVED FOR SALE IN ALL EUROPEAN UNION COUNTRIES

Dual Bore PFC I/A Cannulae
disposable, sterile (box of 5)

**5191 20GA/0.9 mm

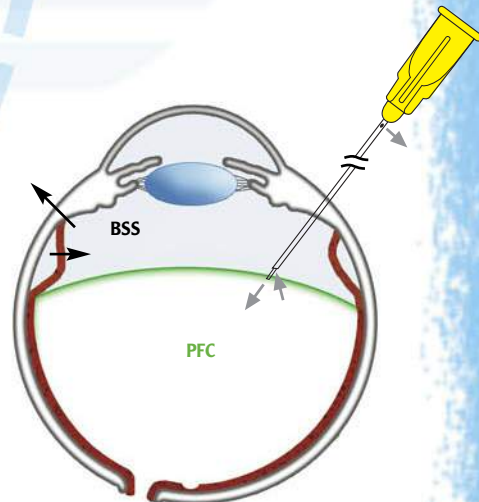
**5203 23GA/0.65 mm

*for simultaneous infusion of heavy liquids
and aspiration of intraocular fluids*

Dual Bore Subretinal BSS Injection Needle
20GA/0.9 tube with 41GA/0.1 mm tip
disposable, sterile (box of 1)

**5194

*to control subretinal
injection of BSS*



retinal attachment with Perfluorocarbon
through Dual Bore PFC Cannula

*  **Manufacturer:**
Howard Instruments, Inc.
Tuscaloosa, AL
USA

**  **Manufacturer:**
MicroVision, Inc.
Seabrook, NH
USA



Howard GasMate® Tamponades come in a kit as described below, containing a sterile 50 ml bottle gas, (your choice) and may be purchased in the following:

99.9% PURE

GMC3F8-PURE C3F8 Perfluoropropane

GMC2F6-PURE C2F6 Hexafluoroethane

GMSF6-PURE SF6 Sulfur Hexafluoride

PRE-MIXED WITH DRY NITROGEN

GMC3F8-MIXED C3F8 Perfluoropropane

GMC2F6-MIXED C2F6 Hexafluoroethane

GMSF6-MIXED SF6 Sulfur Hexafluoride

[contact us for specific mixtures](#)



GasMate® Kit

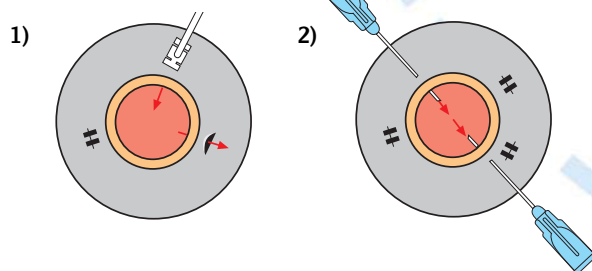
complete, each kit includes:

- 1 x sterile bottle of C₃F₈, C₂F₆ or SF₆ (your choice)
- 1 x sterile disposable syringe (60 ml),
- 1 x sterile high quality filter,
- 1 x sterile valve

CE 0120 APPROVED FOR SALE IN ALL EUROPEAN UNION COUNTRIES

INJECTION OF GAS MIXTURE

There are two possible techniques for replacing intraocular air by the gas mixture. Following fluid-air exchange, the gas mixture can be injected via the infusion line before the final closure of sclerotomies 1) or with the globe closed, using a 30GA/0.3mm needle cannula.





*optimal for routine
vitrectomy procedures*

Biconcave Lens

***RSL-1000**

clear view of the fundus in an airfilled vitreous



Flat Lens

***RSL-2000**

for 36° field of view of the central posterior pole and vitreous



Magnifying Lens

***RSL-3000**

for thorough viewing central posterior fundus and structures deep in the vitreous cavity, on the vitreous cavity and on the retinal surface



Wide Field Lens

***RSL-4000**

48° field of view when observing central posterior pole and vitreous



30° Prism Lens

***RSL-5000**

viewing of the periphery and vitreous beyond the equator

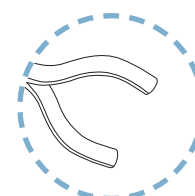


Landers

Vitrectomy Lens Forceps
angled 45° shaft, curved
grooved blades, 11.5 cm

E30-837T

for holding the Landers
Vitrectomy Lenses



*** HOWARD RSL-LENSES**

- Manufactured of optically clear silicone
- High resolution PMMA optics
- Self-retaining silicone flange in place of sew-on ring
- Economical back up for reusable lenses
- Single use, eliminates risk of contamination
- Individually sterile packaged (box of 10)

VITREORETINAL INSTRUMENTS



*Bands
Strips
Tires
Sleeves
Sponges*



FOR DECADES
medical grade silicone materials for
scleral buckling surgery have been the gold
standard in the treatment of retinal detach-
ment throughout the world with great success.

MATERIAL FEATURES:

- Soft and elastic
- Biocompatible and non-toxic
- Non-antigenic
- Tailored to size

INDICATIONS FOR USE

Silicone retinal implants are used for intrascleral and
episcleral buckling in retinal reattachment surgery.

STERILISATION AND PACKAGING

Solid Silicone Implants and Silicone Sponges are gas sterilised with
100% ethylene oxide (ETO) and are guaranteed to be sterile unless
the package has been damaged or opened. Individually sterile packaged
(box of 5).

SCLERAL BUCKLING

Circular Scleral Buckling is useful when the vitreous is hemorrhagic,
in order to prevent late retraction of the base of the vitreous and
secondary retinal detachment. This can be performed at the
beginning of the procedure or after vitrectomy.



Circular scleral buckling.

Sapphire Crescent Knives
angled, facet-free blade (bevel up)

E10-191 1.5 mm

E10-192 2.0 mm

E10-193 2.8 mm

*ideal for scleral dissection in
scleral buckling procedure*





Solid Silicone Implants

Bands

Circling styles:
40, 41, 42, 240

Strips

Grooved styles:
20, 31, 32, 219, 220, 225

Tires

Asymmetrical styles:
275, 276, 278, 280

Concave styles:
277, 279

Convex styles:
286, 287, 287WG, 289

Sleeves

Round styles:
70, 71, 72, 270

Watzke
Sleeve Spreading Forceps
angled, finely serrated jaws,
11.5 cm

E30-835

ideal to fix sleeve onto circling bands

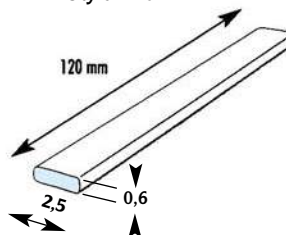
Radial Wedges

styles: 135, 137

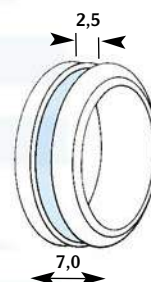
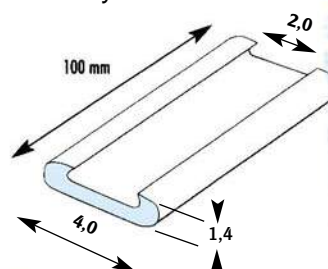
Meridionales

styles: 103, 106, 112

Style 240

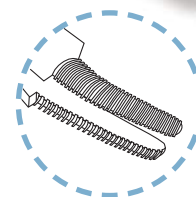
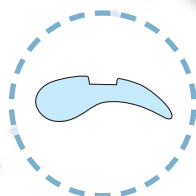
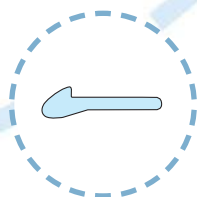
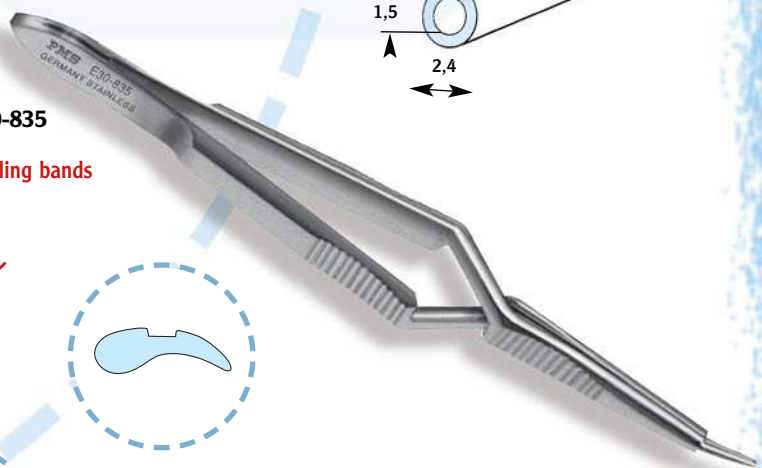
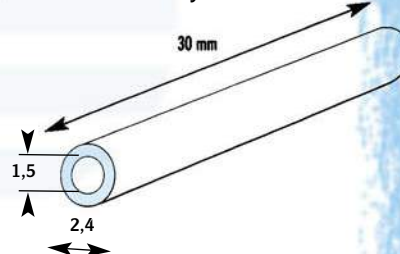


Style 20



Style 277

Style 72

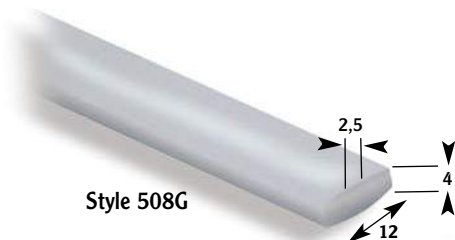
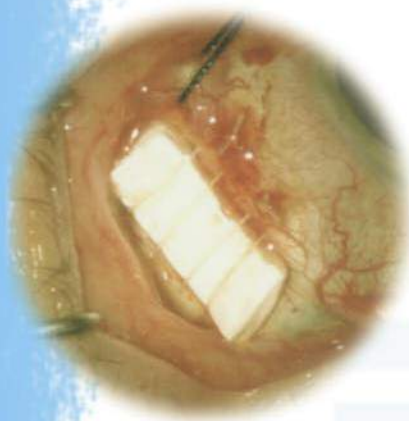


all dimensions are in millimeters, drawings shown are larger than actual sizes indicated



SCLERAL SPONGE IMPLANTS ON REQUEST

VITREORETINAL INSTRUMENTS



Gooved

Styles: 506G, 507G, 508G, 509G, 516G, 519G



Part-Thickness

Styles: 510, 511, 515, 517

MATERIAL

Scleral Sponges are made of soft silicone elastomer composed of closed micro cells.

LENGTH

Silicone sponge implants are pre-cut to a length of 80 mm unless otherwise specified.

PACKAGING

Individually sterile packaged (box of 5).



Round

Styles: 503, 504, 505



Oval/Oblong

Styles: 501, 506, 507, 509

all dimensions are in millimeters, pictures shown are larger than actual sizes indicated

PMS



SPECIALTIES





**INNOVATIVE
EYE SPECULAE . . 226-229**

SOLUTIONS FOR GLAUCOMA 230-231

KLASSIK EYE FORCEPS 232

PERFECT CAPSULORHEXIS FORCEPS . 233

COLOR UP YOUR SURGERY – THINK PINK! 234-235

FRENCH STYLE EYE INSTRUMENTS . . 236-239

ITALIAN DESIGN EYE INSTRUMENTS ... 240-243

POPULAR EYE INSTRUMENTS 244-251

DELICATE STRABISMUS INSTRUMENTS 252-253

NEW INSTRUMENTS FOR MUSCLE RESECTION 254

MEIBOMIAN GLAND COMPRESSOR (MGC) 255

LID-CONJUNCTIVA/CHALAZION INSTRUMENTS 256-257

LACRIMAL INSTRUMENTS (DCR) 258-262

BONE AND TISSUE PUNCHES 263

CORNEAL RUST RING REMOVERS 264

PTERYGIUM DRILL AND INSTRUMENTS 265

INSTRUMENTS FOR USE AROUND THE EYE . 266

ENUCLEATION INSTRUMENTS 267

INTRAOCULAR PRESSURE REDUCER . 268

**BATTERY CAUTERIES
BIPOLAR FORCEPS 269**

**PMS OPHTHALMIC
CATALOGUES 270**





for
"Little People"

extra small version of popular eye speculae
for routine premature infant lid retraction



Barraquer, wire

E40-003 premature, 3 mm

E40-005 newborn, 5 mm

E40-007 infant, 7 mm

E40-009 child, 9 mm

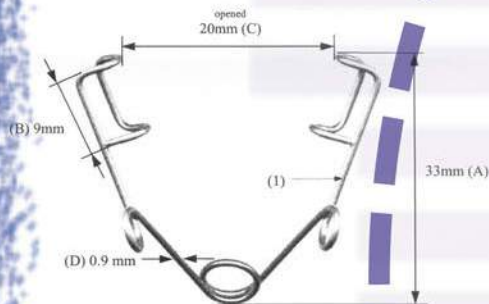
Vinzenz, wire

Infant Speculum

fenestrated 4 mm blades

E40-004

interlacing blades for easier insertion and removal



Takeda, wire

Infant Child Speculum

fenestrated 9 mm blades

E40-010

gentle spring tension of wire allows
routine infant child lid retraction

Alfonso, wire

Infant Child Speculum

fenestrated interlacing 5 and 8 mm blades

E40-008

fingergrips allow easy lifting of the speculum



Cook

Infant Eye Speculum

with set screw, 4 mm wide

E40-064 fenestrated

E40-074 solid blades

ideal for routine infant lid retraction





for "Oriental Eyes"

modified version of popular eye speculae
especially designed for oriental eyes

Barraquer, wire
fenestrated **13 mm** blades
E40-013B

Oriental eyes are not only somewhat smaller than
western eyes, they also have stronger lid muscles.

Kratz-Barraquer, wire
open **13 mm** wings
E40-013K

Therefore PMS offers smaller (13 mm wide), but stronger versions
of the Barraquer, Kratz- eye speculae and Jaffe eyelid retractor.

Jaffe, wire
Eyelid Retractor Set
closed **13 mm** blades
E40-013J

*simple, effective,
economical*

LASIK Wire Speculum
ideal for Cataract/Refractive surgery

E40-030A
Alió, fenestrated 15 mm blades

E40-030D
Durrie, 15 mm wings with olive tips

E40-030G
Greene, 15 mm wings with spring

E40-030S
Slade, large 20 mm wings
for either eye

New

Durrie

Slade

Greene

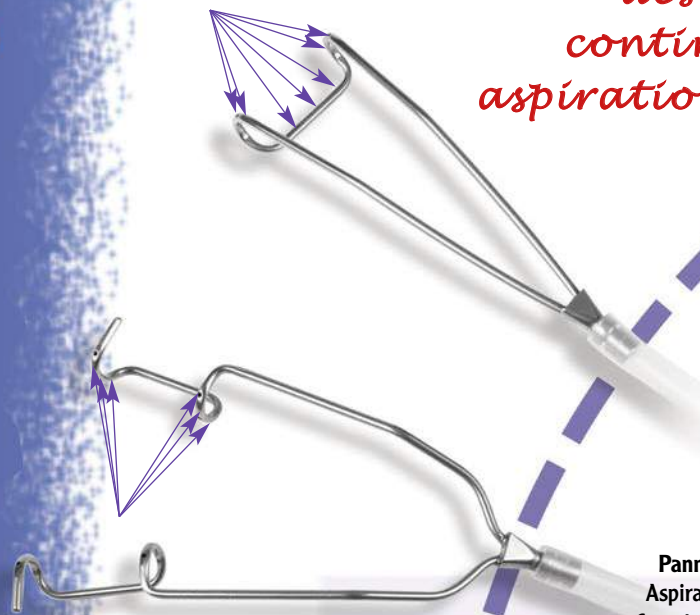
Alio

pictures are not
actual size

SPECIALTIES



*designed for
continuous
aspiration*

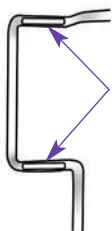


Jaffe, wire
Aspirating Lid Retractor Set
7 ports closed 17 mm blade
E40-041A

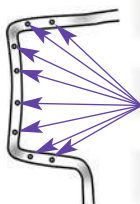
Pannu-Kratz, wire
Aspirating Speculum
6 ports open 15 mm blades
E40-033A

New

for improved
fluid control



E40-100AL
Lieberman K-Wire, 4.5 mm long
slit ports, open 15 mm blade



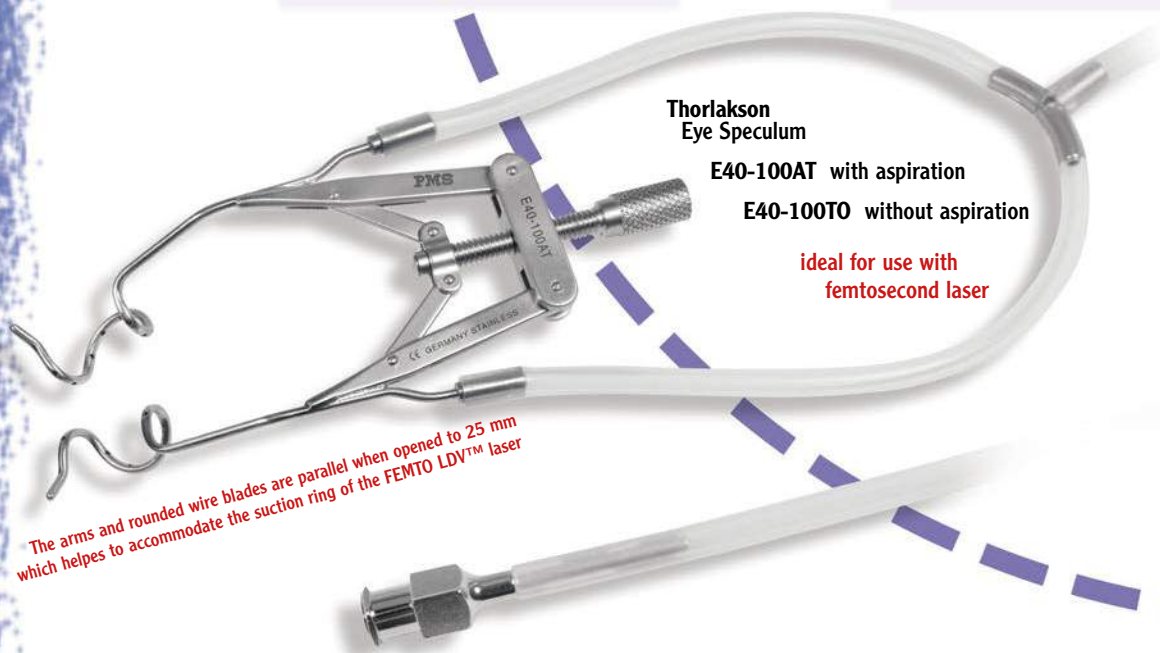
E40-100AT
Thorlakson, 8 ports
open 12 mm blade



E40-100AC
Chu Reversible, 3 ports
solid 15 mm blade

*can be used with operating
room suction or a 50 cc syringe*

Centrally aligned aspiration ports allow
the speculum to be used either nasally
or temporally.



Thorlakson
Eye Speculum

E40-100AT with aspiration

E40-100TO without aspiration

*ideal for use with
femtosecond laser*

*The arms and rounded wire blades are parallel when opened to 25 mm
which helps to accommodate the suction ring of the FEMTO LDV™ laser*

SPECIALITIES



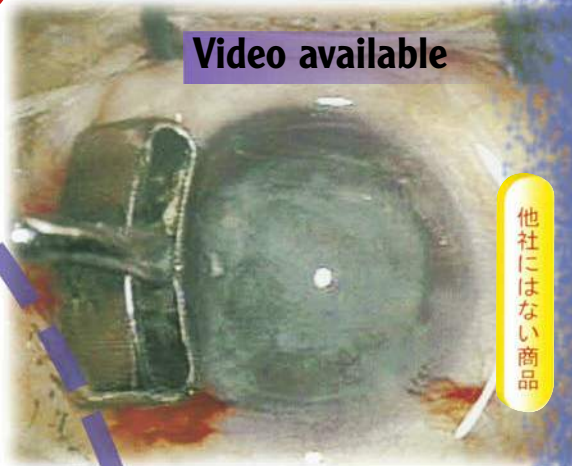
SuperDrainer for Cataract/Refractive Surgery

This device has been designed to maintain a good field of operation by preventing excess fluids and particulate matter from stagnating in the deep-set-eye during cataract/refractive procedures.

In conventitonal aspirating speculum, the aspirating port faces the conjunctiva. Consequently, the conjunctiva is often aspirated during surgery and the port tends to become clogged. To solve this problems, aspirating speculum have several ports. But since some ports are open to the air, only air is aspirated, resulting in a reduction of the aspiration effect.

This new design provides the aspirating ports in a canteen-shaped vessel and can handle a large volume of fluid without the risk of occlusion by the conjunctiva and without aspirating air as long as there is fluid in the field.

Video available



designed by Dr. Syuji Maeda,
Maeda Ophthalmic Clinic, Aizuwakamatsu City, Japan

SuperDrainer Surgical Aspirator
complete, 400 mm long silicone
tubing with LL-adaptor

SP20340 large, 9 x 5 mm

SP20341 small, 7 x 5 mm

Patent No. 3006788

*We turn your good ideas
into reality.*

SuperDrainer Suction Speculum

E40-016A Markomanolakis
long suction tube with bevel blunt tip

E40-015A Maeda
short suction tube with silicone tip

large 3.5 mm bore suction tube
for effective drainage of excess
fluids and particulate matters



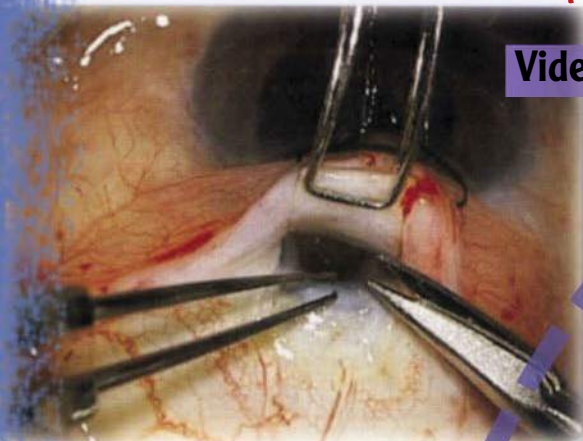
SuperDrainer inserted into the conjunctival sac of the eye ball



SPECIALITIES



BENKEIKUN Scleral Flap Retractor



designed by Prof. Ryouji Yamakawa, University of Kurume

Video available

It is not easy to insert a trabeculotome with one hand while holding the scleral flap with the other during a trabeculectomy, since the procedure often leads to early perforation if you are not accustomed to it. Benkeikun was designed to pull the scleral flap toward the cornea by simply securing the flap with a clip. This makes both hands available and will facilitate difficult manipulations during trabeculectomy. The visibility within the dissected scleral flap can be further improved by anchoring the retractor via traction suture to the drape. For more details: info@tmi-st.com.

Metric dimensions (mm)	
Weight	0.17g
Length	11
Width of jaws	3,5
Closing force	37,8 gms

Yamakawa
Scleral Flap Retractor
E40-050



1:1

Spring design 0.17g wire construction features broad, parallel closing jaws with finely sandblasted inside surfaces for secure, atraumatic handling of the scleral flap and other delicate tissue. **Available on request: E30-774** Applying Forceps for Scleral Flap Retractor.

Tanna-Lieberman
Adjustable Eye Speculum
fenestrated 15 mm blades with
traction suture posts, 8.5 cm
E40-107



Blumenthal
Conjunctiva Dissector
straight 32 mm shaft, smooth
2x1.4mm biconvex tip, 13.0 cm
E15-214



designed to gently undermine and dissect the bleb pocket

Fechtner
Conjunctiva Forceps
delicate ring shaped tips
with tying platform, 10.5 cm

E30-241 stainless steel

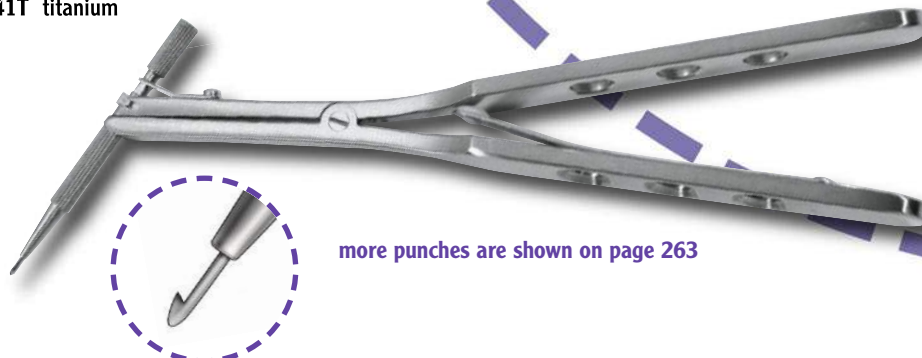
E30-241T titanium



Luntz-Dodick
Trabeculectomy Punch

E40-995 all stainless steel

E40-995T titanium handle



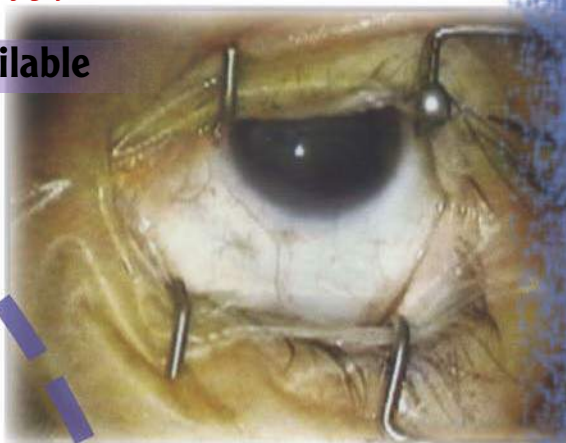
more punches are shown on page 263



KINOKO - Lid Retractor

Video available

In the usual surgical procedures for glaucoma surgery, it is necessary to rotate the eyeball downward. However, the method of applying a suture to the superior rectus muscle placement causes pain. To solve this problem and to secure a wide surgical field, the author has designed an innovative new wire speculum to retract the eyelids as well as position the globe in preparation for a trabeculotomy procedure. It features a Kratz Style Wire Speculum for effective lid control and a notch, clip and mushroom shaped post for securing traction sutures. By anchoring directly to KINOKO rather than the drape the globe can be rotated for full exposure in a controlled fashion. A suture can be easily attached or detached. For more details: info@tmi-st.com.



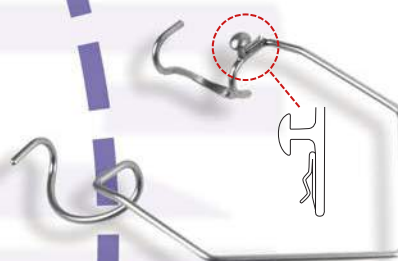
designed by Syuji Maeda, MD,
Maeda Ophthalmic Clinic, Aizuwakamatsu City, Japan

Kinoko

Triple Procedure Glaucoma Lid Retractor
open 13 mm deeply curved wings, one wing
with traction suture anchor post, clip and notch

E40-036R for right eye

E40-036L for left eye



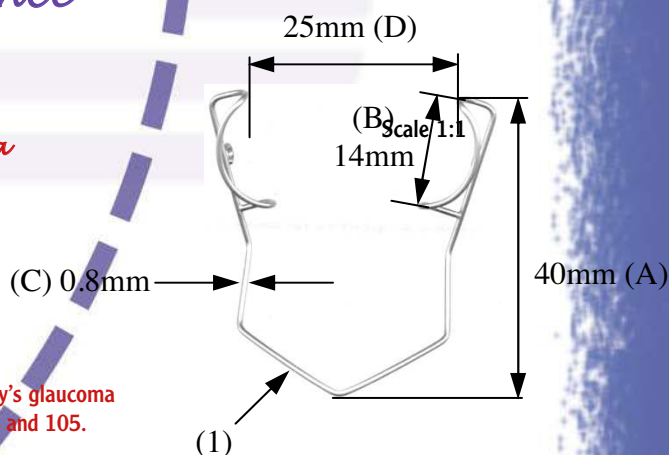
他社にはない商品

...be part of our experience

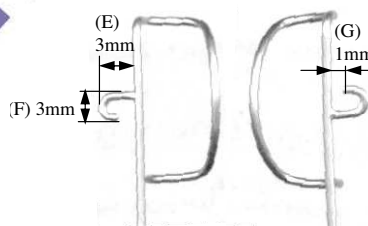
Maeda

Glaucoma Speculum
fenestrated 14 mm blades with
hooks for securing traction sutures

E40-039



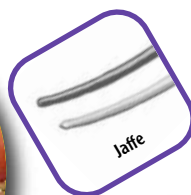
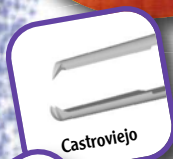
other helpful instruments for today's glaucoma
surgery are illustrated on page 104 and 105.



SPECIALITIES



...have micro-miniature *0.1 mm tips*
and *1x2 teeth of .06 mm* in height.



Tying Forceps

smooth jaws with platform

KE55200 Jaffe, straight

KE55210 Jaffe, curved

McPherson Forceps

smooth jaws with platform

KE55000 straight, 5 mm

KE55010 angled, 5 mm

KE55030 angled, 7.5 mm, Kelman-

KE55049 angled, 10 mm, Bechert-

Suture Tying Forceps

1x2 straight 90° teeth with platform

KE52020 Jaffe-Bonn, 0.12 mm

KE52300 McPherson, 0.4 mm

Suturing Forceps

1x2 oblique 45° teeth with platform

KE52500 Castroviejo, 0.12 mm

KE52510 Castroviejo, 0.3 mm

KE51800 Pierse, notched 0.1 mm tips

Corneal Colibri Forceps

1x2 oblique 45° teeth of 0.12 mm

KE51900 Castroviejo, without platform

KE51902 Harms, with platform

Capsulorhexis Forceps

extremely thin 11 mm long straight shafts

*KE55081 Utrata, triangular grasping tips

*KE55083 Nevyas, cystotome shaped tips

KE55088 Jaffe, blunt ball shaped tips

*KE55084 Masket, curved shafts,
triangular tips

* also available on
ergonomic round handle, see page 251

SPECIALITIES



*at the Peak of
Performance*

- thin profile straight and curved 11 mm shafts
- triangular grasping tips to use as a cystotome
- laser lines on jaws to gauge capsulorhexis size
- flat fenestrated handle for controlled movement

for MICS through 1.5 mm incision

Auffahrt
cross-action curved and vaulted shafts,
(Giannetti type) fine pointed tips, 9.5 cm

New

- E30-598 flat serrated handle
- E30-599 round knurled handle

curved and vaulted
(Giannetti)

cross-action design with stop pin
control maximum spread and reduce
the risk of stretching incision size.

for standard phaco 2.5 mm + incision

- *E30-581 Utrata, triangular tips
- E30-581T Utrata, titanium

- *E30-585 Nevyas, cystotome shaped tips
- E30-585T Nevyas, titanium

straight shaft
(Utrata)



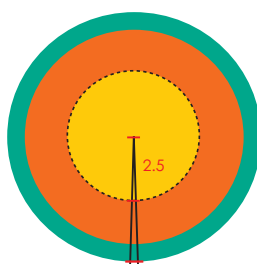
Capsulorhexis forceps on round knurled handle
which "fit the fingers" are shown on page 251.

for 2.2 mm sub incision

- *E30-589 Masket, triangular tips
- E30-589T Masket, titanium

curved shaft
(Masket)

dashed line is the intended
capsulorhexis size of 5.0 mm



* also available with laser lines at
2.5 mm and 5 mm from the tip
to gauge a precisely sized 5 mm
capsulotomy

SPECIALTIES



This titanium range is a distinctive new concept of micro instruments, which “fit the fingers” to give the Ophthalmic Surgeon a better balanced control. The round bodied handle provides the ultimate in fingertip control and response and thus facilitates precise as well as controlled and fatigue-free working.

New



Thorpe



Kraff-Bonn



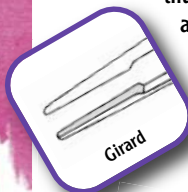
Maumenee-Colibri



Utrata straight



Masket curved



Girard



Maumenee



Kraff (Castroviejo)

Girard

Micro Tying Forceps
smooth 6 mm TC coated platform
with 0.3 mm micro tips, 10.4 cm

TP30440 straight

TP30441 curved

TP30443 angled

Maumenee

Tying Forceps
V-groove 6 mm TC coated platform
with 0.5 mm delicate tips, 10.4 cm

TP30466 straight

TP30467 curved

TP30469 angled

Thorpe

Corneal Fixation Forceps
extra delicate 2 x 3 teeth, 0.12 mm with
3.5 mm long TC coated platform, 9.5 cm

TP30236



Suture Tying Forceps
extra delicate 0.1 mm teeth
with TC coated platform, 10.4 cm

TP30430 Kraff-Bonn straight 90° teeth

TP30450 Kraff-Castroviejo oblique 45° teeth

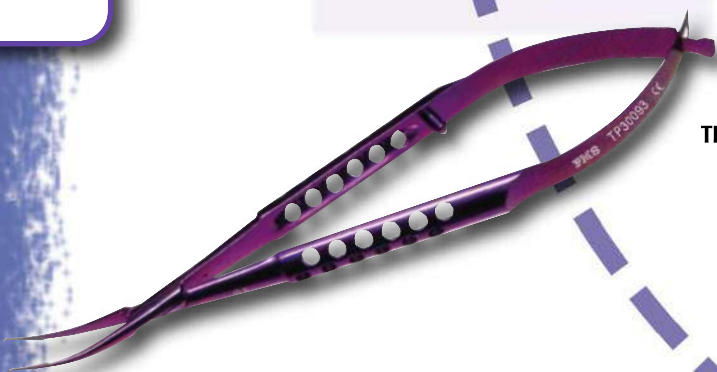


our tying and suture forceps have
Tungsten Carbide coated platforms

Maumenee

Colibri Corneal Forceps
extra delicate 0.1 mm teeth set at 45° with
TC coated 6 mm long platform, 10.4 cm

TP30093

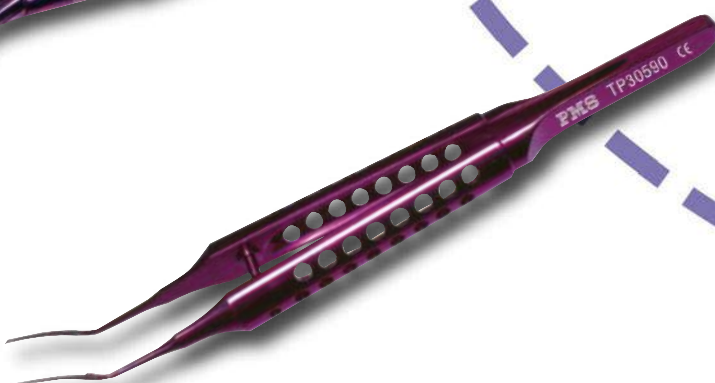


Capsulorhexis Forceps

very thin 11.5 mm long shafts with
pointed grasping tips, 10.4 cm

TP30583 Utrata straight shaft

TP30590 Masket curved shaft



SPECIALITIES



Think pink !

shafts angled 10 mm made
of one-piece stainless steel

Micro Manipulators

(blow up of tips are shown on page 131)

- TP15561 Sinskey II Lens Manipulating Hook
- TP15565 Kuglen Iris and IOL Manipulator
- TP15423 Jaffe-Bechert Nucleus Rotator

Phaco Choppers

(for horizontal, vertical, quick chopping)

- TP15611 Nichamin, ball shaped 1,1 mm/90° edged tip
- TP15613 Phaconit Quick-Chop, pointed 1.3 mm long tip
- TP15615 Lens Crushing Knife, 1.5 mm cutting part

Capsulotomy Scissors

(delicate stainless steel blades with sharp tips)

- TP25400 Vannas, straight 5 mm blades
- TP25401 Vannas, curved 5 mm blades
- TP25411 Gills-Vannas, curved 8.5 mm
- TP25435 Stern-Gills, angled 10 mm blades

Barraquer Micro Needle Holders

(delicate TC coated curved jaws, 0.4 mm tips)

- TP35201 w/o lock, 10.4 cm
- TP35203 with lock, 10.4 cm
- TP35251 w/o lock, 12.0 cm
- TP35253 with lock, 12.0 cm



TP15611



TP15613



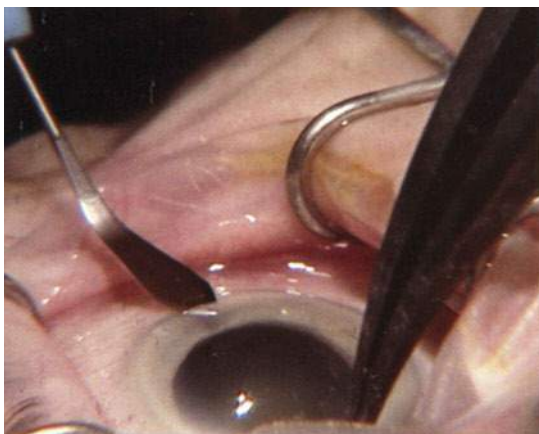
TP15615

Other stainless-titanium scissors available

- TP25011 Castroviejo Micro Corneal, curved
- TP25070 Troutman Corneal Section, right
- TP25071 Troutman Corneal Section, left
- TP25315 Westcott Stitch, sharp tips
- TP25334 Westcott Tenotomy, blunt tips

SPECIALITIES

Cataract Extraction



starts with an appropriately constructed 2.2 mm incision

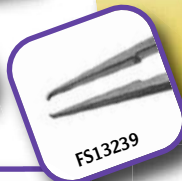
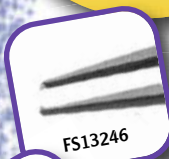
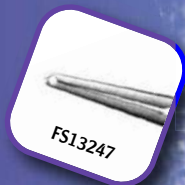
PMS now offers a complete MSICS Set made of high grade stainless steel. It includes one each of the following instruments as well as an instrument sterilizing tray:

- E42-118 Manual Small Incision Cataract Set
- E40-100 Lieberman K-Wire Speculum, page 245
- E15-561 Sinskey II Angled Lens Hook, page 246
- E15-409 Barraquer Iris Spatula, vaulted, page 246
- E35-251 Barraquer Curved Needle Holder, page 241
- E30-093 Maumenee-Colibri Forceps, page 249
- E25-400 Vannas Straight Scissors, page 241
- E25-315 Westcott Stitch Scissors, page 241
- E30-567 Kansas Nucleus Fragment Forceps, page 101
- E30-581 Utrata Capsulorhexis Forceps, page 233
- E30-623 Blaydes Lens Holding Forceps, page 122
- E15-441 Kansas Lens Nucleus Loop (not shown)
- E30-902 Halstead Mosquito Forceps, page 266
- E20-300 Simcoe Original I/A Cannula, page 244
- E45-015 Instrument Sterilizing Tray, page 294



French Style

SPECIALITIES



Pinces à monofilament

(à plateaux de 6 mm, ultra affinés)

FS13241 de Tennant, droite

FS13243 de Tennant, courbe

Pinces de McPherson

(mors à plateaux ultra fins, coudée à...)

FS13265 de McPherson, ... 5 mm

FS13261 de Waring-, ... 7 mm

FS13242 de Bechert-, ... 11 mm

Pinces à sutures cornée

(à plateaux et micro dents de 0.1 mm face à face)

FS13160 de Bonn, modèle court, 7.5 cm

FS13161 de Bonn-Moria, branches courtes, 9.5 cm

FS13246 de Bonn-Kraff, branches longues, 11.0 cm

Pinces à fixation cornée

(dents obliques de 0.1 mm et plateaux pour fils)

FS13239 de Castroviejo-Waring, droite

FS13240 de Kraff-Moria, type colibri

FS13247 de Pierse, droite alvéolée 0.1 mm

Pinces pour implants pliables

(mors polis haute-finition coudée à...)

FS17151 de Buratto, biconvex, 9 mm

FS17161 de Crozafon, arrondis 11 mm

Pinces à capsulorhexis de 2.2 mm

(mors ultra fins, pointus et à plateaux)

FS17163 de Corydon, courbe

*FS18259 de Corydon, courbe

*FS17162 de Nevyas, droite

FS17160 d'Utrata, droite - mousse

FS17165 Giannetti, courbe



*avec les lignes Laser 2.5 et 5 mm
pour mesurer la capsulorhexis



d'autres micro ciseaux à cornée, conjonctive et ténotomie sont illustrés dans le catalogue général ophtalmologique PMS pages 59 et 248

Micro-ciseaux de Worst

(longues lames fines de 9 mm)

FS17000 courbes - mousses

FS17001 courbes - pointus

FS17005 demi-courbes - mousses

FS17005

FS17001

Micro-ciseaux de Vannas

(lames mousses très fines de 5 mm)

E25-402 droites

E25-403 courbes

Micro-ciseaux de Gills -

(lames pointues, affinées de 11 mm)

E25-430 Welsh, droites

E25-431 Welsh, courbes

E25-435 Aron-Rosa, coudés

E25-430

E25-431

E25-435

Porte-aiguilles de Castroviejo

(mors standard de 11 mm x 1.2 mm, 14 cm)

E35-100 droite, sans verrou

E35-101 courbe, sans verrou

E35-102 droite, avec verrou

E35-103 courbe, avec verrou

photo échelle 0.8

Micro porte-aiguilles de Troutmann-

(mors ultra fins de 8 mm x 0.5 mm, 10 cm)

FS09911 O'Brien, droite, sans verrou

FS09960 O'Brien, courbe, sans verrou

FS09961 O'Brien, courbe, avec verrou

FS13244 Aron-Rosa, coudé, sans verrou

FS07252

E35-101

Micro porte-aiguilles de Barraquer

(mors fins de 9 mm x 0.7 mm, 12.5 cm)

FS07252 courbe, sans verrou

FS07253 courbe, avec verrou

FS09911

FS13244



Tous les modèles sont aussi disponibles avec un manche en titane de couleur, s'il vous plaît vous référer à la page 242



Crochets manipulateurs à phaco

FS17157 de Crozafon à fourche horizontale

FS18039 de Arneodo, rond, bout mousse

FS18105 de Pisacano, bout olivaire

Micro-manipulateurs "Phaco Chop"

FS18210 de Koch 90°, "Stop & Chop"

FS18216 de Thibaut-Nagahara 60°, mousse

FS18219 de Nagahara 90°, mousse

FS18227 de Haefliger, main droite

FS18228 de Haefliger, main gauche

Crochets manipulateurs à LIO

FS13225 de Buratto-Sinsky 0.2 mm

FS13227 de Lester, "bouton de col"

FS13228 de Kuglen, "Push & Pull"



Tige et bout fabriqué d'un seul morceau d'acier inox, extrémités ultra fines, tige de 10 mm angulée

Spatules à iris

(extrémités ultra fines, coudés à 12 mm)

FS07820 de Barraquer, ronde et mousse

FS07825 de Barraquer, avec une petite boule

Blépharostats

FS07699 de Corcelle, cuillers 8 mm

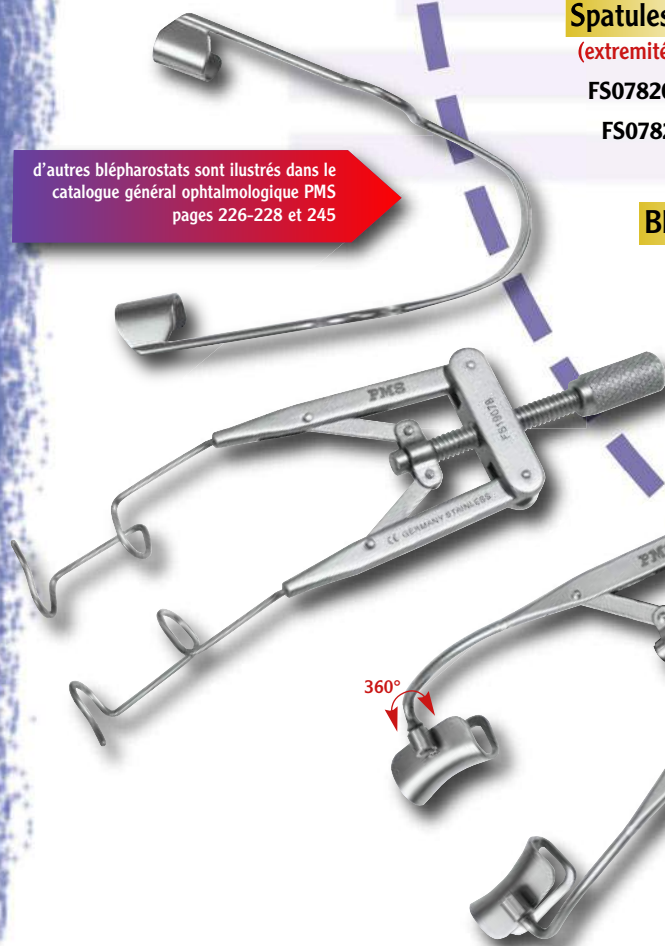
FS08113 de Corcelle-Legrand, cuillers 12 mm

FS19078 de Lieberman, anses 15 mm

FS19079 de Lieberman, anses 10 mm

FS00393 de Pley, cuillers 13 mm

d'autres blépharostats sont illustrés dans le catalogue général ophtalmologique PMS pages 226-228 et 245





Nouvelle gamme de canule pour aspiration avec embout silicone



IRRIGATION



ASPIRATION

Canule monobloc pour irrigation
avec terminaison mousse, prise femelle
(canule à 2 orifices sur le cotés de Ø 0.35 mm)

E20-427 22GA/Ø 0.7 mm

E20-428 21GA/Ø 0.8 mm

E20-429 21GA/Ø 0.8 mm, à irrigation en bout

Canule monobloc pour aspiration
avec terminaison rugueuse, prise mâle
(canule à orifice supérieur de Ø 0,35 mm)

E20-437 22GA/Ø 0.7 mm

E20-438 21GA/Ø 0.8 mm

E20-439 21GA/Ø 0.8 mm mousse

Manipulateur de noyau pour irrigation
(canule 20GA/Ø 0.9 mm, à 2 ports Ø 0.6 mm)

E20-480 de Neuhaus, coudé à fourche



Manipulateur "Phaco Chop" pour irrigation
(canule coudée 20G/Ø 0.9 mm, à orifice en bout)

E20-482 Fine Quick-Chop, pointu

E20-485 Rosen 90°, arrandis

E20-486 Thibaut 60°, mousse

E20-489 Nagahara 90°, mousse



*Gamme de canule pour aspiration avec embout silicone

Pointe avec embout silicone	21GA/Ø 0.8 mm	23GA/Ø 0.65 mm
pointe courbe	E20-413	E20-423
pointe coudée 45°	E20-414	E20-425
embout en silicone	E20-415 b/5	E20-426 b/6
manche I/A	E20-400	E20-400

New

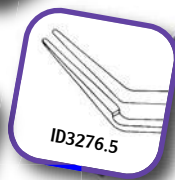
SPECIALITIES

Italian Design

Progettata per le migliori prestazioni, performance ottimali e precisione nel controllo di ogni procedura chirurgica.



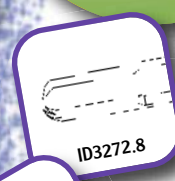
ID3207.1



ID3276.5



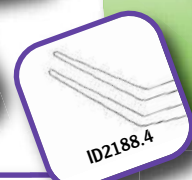
ID3272.2



ID3272.8



ID3276.6



ID2188.4



ID2186.4

Pinze serrafilì

(con piani delicati da 6 mm)

ID3207.1 Tennant, retta

ID3207.0 Tennant, curva

Pinze serrafilì, McPherson

(angolate, con piani da...)

ID3276.5 McPherson, ... 5 mm

ID3276.8 Buratto-, ... 7.5 mm

ID3276.1 Bechert-, ... 11 mm

Pinze corneali, Bonn

(con 1x2 denti retti da 0.12 mm e ppf)

ID3161.0 con manico corto, 7.5 cm

ID3272.4 con branche corte, 9.5 cm

ID3272.2 con branche lunghe, 11.0 cm

Pinze corneo-sclerali

(con 1x2 denti obliqui da 0.12 mm e ppf)

ID3272.8 Castroviejo, retta

ID3272.6 Savaresi-Colibri

ID3276.6 Janach-Colibri, denti retti

Pinze per piegamento IOL morbide

(angolate, con branche smusse e...)

ID2186.4 Buratto, biconvesse da 8 mm

ID2188.4 Crozafor, cilindriche da 11 mm

Pinze capsuloressi per MICS-MCCS

(angolate da 11 mm, apice acuto ...)

*ID3131.0 Corydon, dorso curvo

ID3131.1 Crozafor, dorso curvo

ID3133.0 Utrata, dorso retto

ID3135.1 Giannetti, dorso curvo



ID3135.1



*ID3131.0



ID3133.0

con zigrinatura a 2.5 e 5.0 mm per la misura della capsuloressi

SPECIALITIES



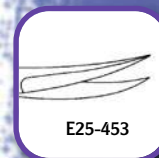
Forbici corneali sono disponibili su richiesta e illustrate nel nostro catalogo oftalmico a pagina 248



Forbici per iride e capsulotomia

(con lame acute e delicate da 5 mm)

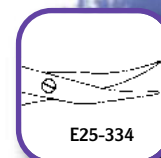
- E25-400 Vannas, retta
- E25-401 Vannas, curva
- E25-405 Vannas, angolata
- E25-442 Ong, angolata da 9 mm



Forbici per capsulotomia

(con lame curve e sottili da 8 mm)

- E25-451 smussa
- E25-453 acuta



Forbici Tipo Westcott

(con lame curve e robuste da 12 mm)

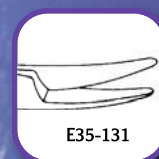
- E25-315 acuta, per togliere i punti
- E25-334 smussa, per tenotomia
- E25-331 McPherson, per congiuntiva



Port'aghi congiuntivale/palpebrale

(con piani delicati da 10 x 1.0 mm, 14.0 cm)

- E35-130 Castroviejo, retto, senza arresto
- E35-131 Castroviejo, curvo, senza arresto
- E35-132 Castroviejo, retto, con arresto
- E35-133 Castroviejo, curvo, con arresto



Port'aghi per sutura corneale

(con piani molto delicati da 9 x 0.5 mm, 11.5 cm)

- E35-250 Troutman, retto, senza arresto
- E35-251 Troutman, curvo, senza arresto
- E35-253 Troutman, curvo, con arresto
- E35-231 Barraquer, curvo, 13.5 cm
- E35-233 Barraquer, curvo, con arresto

(consigliato per suture 8-0 a 11-0)

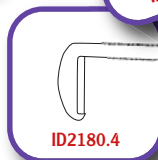


SPECIALTIES

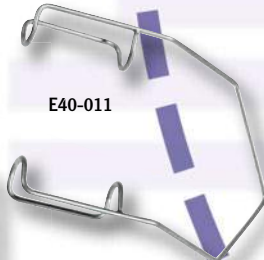
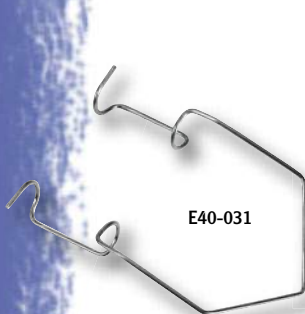


strumenti con manici in titanio colore

I manici sono disponibili anche in acciaio.
Aggiungere la "S" al codice



punte in acciaio, angolate da 11 mm,
con braccio: *retto - *curvo



Manipolatori del nucleo

(con manico colore viola)

*ID2192.2 Buratto, punta retta ad oliva

*ID2192.7 Ligabue, punta bottonuta, sabbiata

*ID2192.9 Drysdale, punta spatolata più sottile

Uncini-manipolatori per IOL

(con manico colore blu)

*ID2193.6 Osher, punta a "Y" verticale

*ID2193.1 Lester, punta push-pull

*ID2180.2 Sinskey, punta 0.2 mm

Phaco Chopper

(con manico colore rosa)

*ID2180.4 Rosen-Galan 90°, fronte arrotondato

*ID2180.6 Nagahara 60°, punta smussa

*ID2180.9 Nagahara 90°, punta smussa

Uncino da iride

(con manico colore giallo)

*ID2182.2 Bonn, punta 0.3 mm

*ID2185.2 Kuglen, punta push-pull

Spatole per iride

(con manico colore verde)

*ID2407.1 Barraquer, 10x0.5 mm

*ID2407.2 Troutman, 10x0.25 mm



Blefarostati

E40-011 Barraquer, valve da 15 mm

E40-012 Barraquer, valve da 10 mm

E40-031 Kratz-Barraquer, valve da 15 mm

E40-078 Castroviejo, valve da 16 mm

E40-079 Castroviejo, valve 13 mm

Lieberman

regolabile, valve da 15 mm

E40-100 aperte tipo Kratz

E40-102 aperte a "V"

E40-104 chiuse

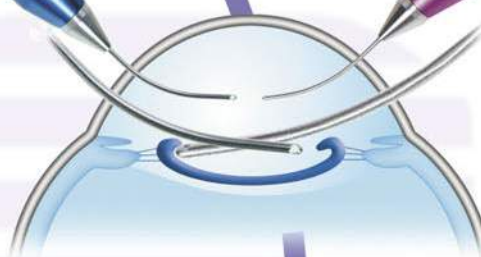


Sistema nuova coassiale I/A per Irrigazione/Aspirazione

composto da manico e
punte intercambiabili



INFUSIONE



ASPIRAZIONE

Monopezzo per infusione di colore blu

(con cannula curva a 2 fori laterali Ø 0.35 mm)

E20-427 Ø 0.7 mm, punta smussa

E20-428 Ø 0.8 mm, punta smussa

E20-429 Ø 0.8 mm, foro frontale

Monopezzo per aspirazione di colore oro

(con cannula curva a foro superiore Ø 0.35 mm)

E20-437 Ø 0.7 mm, punta sabbiata

E20-438 Ø 0.8 mm, punta sabbiata

E20-439 Ø 0.8 mm, punta smussa

Manipolatore del nucleo irrigante

(20G/0.9 mm, a 2 fori laterali Ø 0.6 mm)

E20-480 Neuhann, punta a forcella

Phaco chopper irrigante

(20G/0.9 mm con infusione frontale)

E20-482 Fine Quick-Chop, punta acuta

E20-485 Rosen 90°, fronte arrotondato

E20-486 Thibaut 60°, punta smussa

E20-489 Nagahara 90°, punta smussa



***Gamma di punte intercambiabili per manici I/A coassiali**

Punte p. sleeve silicone	21GA/0.8 mm	23GA/0.65 mm
Punta curva	E20-413	E20-423
Punta angolata 45°	E20-414	E20-425
Sleeve in silicone	E20-415 c/5	E20-426 c/6
Manico I/A	E20-400	E20-400

New

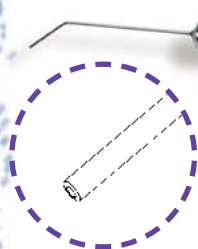
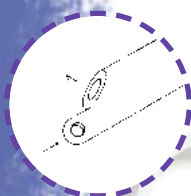
SPECIALITIES



POPULAR EYE INSTRUMENTS

100%  made

SPECIALITIES



Bishop-Harmon AC Irrigator System

E20-001 complete

E20-002 silicone bulb

E20-003 LL adaptor

E20-004 19GA cannula

Simcoe

Double I and A Cannula
23/23GA x 15 mm long tube with
0.3 mm aspirating port and tubing kit

E20-300 original model

E20-301 reverse model

Rycroft

Air Injection Cannula
20 mm tube, angled 5 mm

E20-030 30GA/0.3 mm

E20-031 27GA/0.4 mm

E20-032 25GA/0.5 mm

Schocket

Double Scleral Depressor
with pocket clip, 13.5 cm

E40-613 stainless steel

E40-613T titanium handle

Fine-Thornton

Phaco Fixation Ring
3/4 open swivel ring, 13 mm ID,
multiple teeth, 13.5 cm

E10-513 stainless steel

E10-513T titanium

Castroviejo

Eye Caliper, straight 0-20 mm scale
on either side in 1 mm increments

E40-554 stainless steel

E40-554T titanium

Maloney

Astigmatic Keratometer

E10-690T

for qualitative evaluation
of astigmatism





Barraquer, wire
E40-011 adult size, 15 mm
E40-012 child size, 10 mm

Kratz-Barraquer, wire
E40-031 adult size, 15 mm
E40-032 child size, 10 mm
E40-033 adult size, 15 mm
 heavy 1 mm wire

New Model, wire
 rounded 15 mm blades
E40-015 fenestrated, nasal side
E40-018 fenestrated, temporal
E40-034 open blades, temporal

Lieberman Style
 Temporal Eye Speculum
 open 15 mm blades, 8.5 cm
E40-100 K-wire model
E40-101 K-wire model, nasal side
E40-102 V-wire model
E40-104 solid blades

Desmarres
 Lid Retractor
 thin solid blade, 14.0 cm
E40-110 #0 11 mm blade
E40-111 #1 13 mm blade
E40-112 #2 15 mm blade

Kershner
 Reversible Speculum
 solid 14 mm blades, 7.7 cm
 for nasal and temporal approach
E40-105

E40-011

E40-031

E40-018

E40-100

E40-102

SPECIALITIES



... exclusively produced
in Tuttlingen home of the instrument making
industry for almost 200 years

SPECIALITIES

NUCLEUS MANIPULATORS

E15-418 Koch II, curved notched tip
E15-423 Jaffe-Beichert, angled forked tip
E15-429 Ligabue, vaulted flat/buttoned tip
E15-465 Drysdale, angled paddle shaped tip
very effective instruments to push, lift, rotate,
dissect and fracture nuclear and cortical material

PHACO SPLITTER & CHOPPERS

(wedge shaped tip with inferior cutting edge)
E15-611 Nichamin 90° ball shaped tip - horizontal
E15-656 Nagahara 60° blunt tip - horizontal
E15-659 Nagahara 90° blunt tip - horizontal
E15-613 Phaonit Quick-Chop, sharp tip - vertical
E15-610 Nagahara Karate, spear shaped tip - vertical
for horizontal, vertical and quick chopping

LENS MANIPULATORS

E15-501 Lester, "hour glass" tip
E15-561 Sinskey II, 0.2 mm tip
E15-567 Kuglen, "Push-Pull" tip
used to dial and position IOL's, to
retract iris; and for manipulations
in the anterior segment

IRIS REPOSITORS & HOOKS

(round, smooth blade vaulted at 10 mm)
E15-408 Barraquer, 0.25 mm conical tip
E15-409 Barraquer, 0.5 mm cylindrical tip
E15-607 Bonn, 0.3 mm reverse curved tip
ideal for repositioning - push, retract
and retain - the iris during ECCE

Graefe Strabismus Hook

E40-771 #1 small
E40-772 #2 medium
E40-773 #3 large

shafts angled 10 mm from tips are made of
one-piece medical grade stainless steel



... hand-crafted
for hand use

Bishop-Harmon
Dissecting Forceps
straight, 8.5 cm

E30-100 criss-cross serrated

E30-103 0.3 mm teeth

E30-106 0.6 mm teeth



Dressing Forceps
straight, 10.0 cm

E30-110 0.5 mm

E30-112 0.7 mm

E30-114 1.0 mm



Tissue Forceps
straight, 10.0 cm

E30-120 0.5 mm

E30-122 0.7 mm

E30-124 1.0 mm



Elschnig
Scleral Fixation Forceps
oblique 1 x 2 teeth, 10.5 cm

E30-244



Lester
Conjunctiva Fixation Forceps
straight, 0.6 mm, 9.5 cm

E30-232 1 x 2 teeth

E30-233 2 x 3 teeth



SPECIALITIES

Micro Corneal Scissors



Universal
Micro Corneal / Iris Scissors
straight 6 mm blades, 10.0 cm

E25-002 sharp tips

E25-004 sharp/blunt

E25-006 blunt tips



curved 6 mm blades

E25-003 sharp tips

E25-005 sharp/blunt

E25-007 blunt tips



Castroviejo

Universal Corneal Scissors

8 mm blades, blunt tips, 10.0 cm

E25-011 slightly curved blades

E25-013 medium curved blades

E25-015 medium 12 mm blades



Troutman

Micro Corneal Section Scissors
curved 6 mm blades, 10.0 cm

E25-062 right

E25-063 left



Katzin

Micro Corneal Transplant Scissors
strong curved 6 mm blades, 10.0 cm

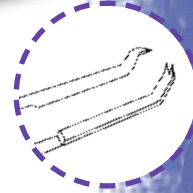
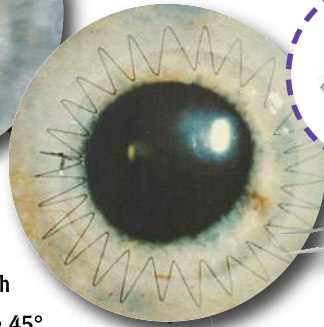
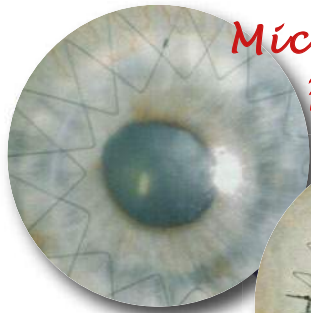
E25-100 right

E25-101 left

Micro Corneal Scissors with universal, right and left curved blades are ideal for wound enlargement and completion of trephine cuts



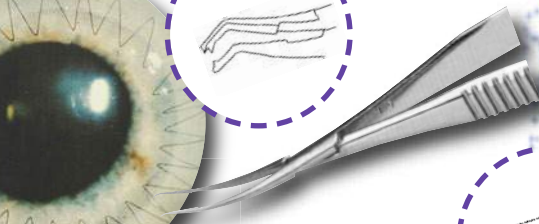
Micro Corneal Forceps



Maumenee-Colibri
cross-action flat handle,
smooth 6 mm platform,
delicate 0.12 mm teeth

E30-093 oblique 45°

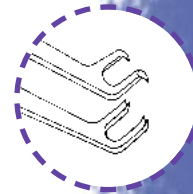
E30-094 straight 90°



Harms-Colibri
smooth 6 mm platform,
oblique 1 x 2 teeth, 7.3 cm

E30-081 0.12 mm

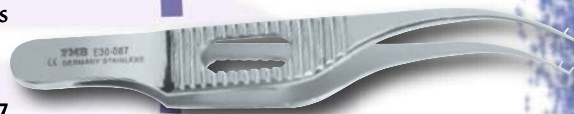
E30-085 0.4 mm



Polack

Double Corneal Suture Forceps
U-shaped 1 mm spread, double tips with
1 x 2 teeth, 0.12mm/45°, 7.5 cm

E30-087

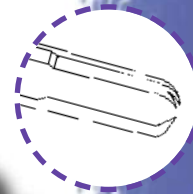


St. Martin's (Paufigue)
smooth 6 mm platform,
oblique 1 x 2 teeth, 8.7 cm

E30-413 delicate, 0.3 mm

E30-415 medium, 0.5 mm

E30-418 heavy, 0.8 mm

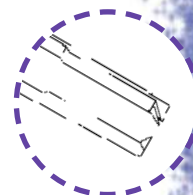


Bonn

smooth 4 mm platform,
straight 1 x 2 teeth, 0.12 mm

E30-410 short model, 7.2 cm

E30-430 long model, 9.5 cm

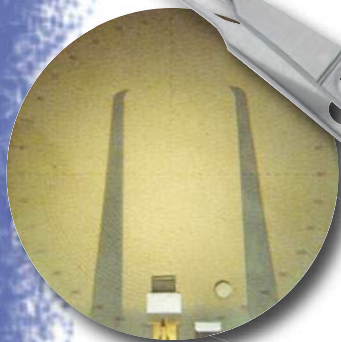


These forceps are ideal for manipulating delicate tissue, e.g. fixation of the corneal flap and continued suturing for cataract and corneal grafts.

SPECIALITIES



*precisely
engineered ...*



Castroviejo
Suturing Forceps
smooth 6 mm platform,
oblique 1 x 2 teeth, 11.0 cm
E30-450 0.12 mm
E30-451 0.3 mm
E30-452 0.5 mm

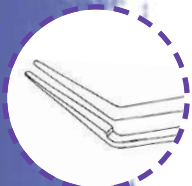


Jaffe
Micro Suture Tying Forceps
smooth 6 mm platform, 10.5 cm
E30-446 tying, straight
E30-447 tying, curved
E30-456 suture, 0.12 mm teeth



ideal ...

McPherson
Tying Forceps
smooth platform, 11.0 cm
E30-460 straight, 5 mm
E30-461 angled, 5 mm
E30-463 angled, 7.5 mm, Kelman-
E30-465 angled 10 mm, Bechert-



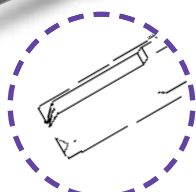
for 8-0 to ...

Troutman
Micro Suture Tying Forceps
smooth 6 mm platform, 10.0 cm
E30-428 tying, straight
E30-429 tying, curved
E30-438 suture, 0.12 mm teeth



11-0 sutures

Tennant
Micro Suture Tying Forceps
smooth 6 mm platform, 10.0 cm
E30-448 tying, straight
E30-449 tying, curved
E30-458 suture, 0.12 mm



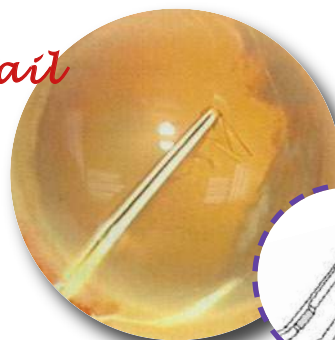
all forceps are also available in lightweight,
durable titanium, when ordering please add
"T" to end of catalog number

SPECIALTIES

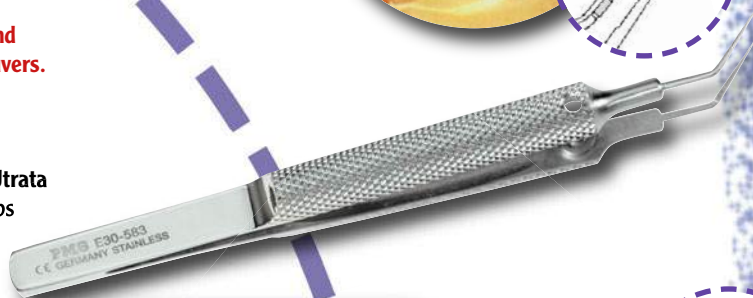


... to every detail

Thin-profile angled and vaulted
11 mm shafts on round knurled
handle, which "fit the fingers"
for the best control and
surgical manoeuvres.



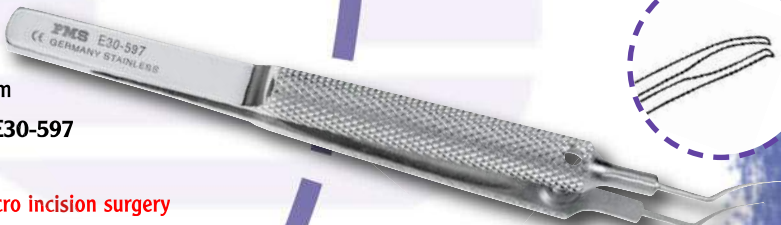
Utrata
Capsulorhexis Forceps
angled 11 mm shafts,
triangular tips, 10.0 cm
E30-583
E30-583T titanium



Masket
Capsulorhexis Forceps
vaulted 11 mm shafts,
triangular tips, 10.0 cm
E30-590
E30-590T titanium

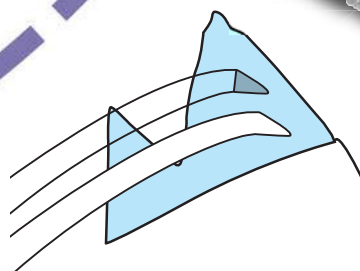


Giannetti 1.8 mm
MICS Capsulorhexis Forceps
vaulted and curved 11 mm shafts,
fine pointed grasping tips, 10.0 cm
E30-597



ideal for CCC during micro incision surgery

Inamura Style 1.5 mm
MICS Capsulorhexis Forceps
very thin vaulted 13 mm shafts,
ultra fine pointed tips, 12.0 cm
E30-591 stainless steel
E30-591T titanium



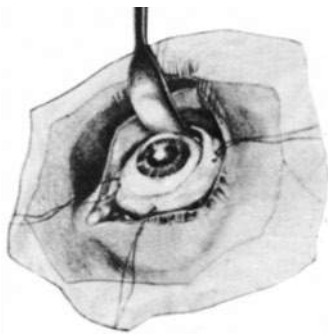
Thin-profile shafts with ultra fine grasping tips
for best control and surgical manoeuvres.

SPECIALITIES



STRABISMUS INSTRUMENTS

all instruments are also available in light weight, durable titanium, when ordering please add "T" to end of catalog number



Featured is a selection of extra delicate Muscle Hooks, multi-purpose "Teaser" and "Finder" Hooks and Tissue Retractors with thin spatulated blades for more delicate – less trauma – better results strabismus surgery.

Helveston Style Strabismus Instruments

E40-790 "Teaser" Hook, conical 6 mm long tip

E40-791 Muscle Hook, delicate blunt tip, 8 mm

E40-792 Muscle Hook, delicate blunt tip, 10 mm

E40-793 Muscle Hook, delicate blunt tip, 12 mm

E40-795 "Finder" Hook, cone shaped tip, small

E40-796 "Finder" Hook, large

The Micro Tissue Retractor

Micro
Tissue Retractors
curved thin blade

E40-807 7 mm wide

E40-809 9 mm wide

E40-811 11 mm wide

are designed for opening and closing of the conjunctiva; scleral suture placement, dissection of the scleral, and vitreo retinal procedures. The

broad 11 mm wide model is also useful in orbital, plastic and strabismus surgery.

Scleral Marking Ruler, titanium
curved 15 mm blade with 1 mm increments,
single tooth at the tip and a notch
at 5 mm and 10 mm

E40-557T

Helveston
Tying Forceps
straight plain jaws
for 4-0 to 6-0 sutures

E30-426

Smooth jaw forceps are ideal for fine suturing.

Fine
Micro Tying Forceps
curved plain jaws
for 7-0 to 9-0 sutures

E30-427

E42-132 Delicate Strabismus Surgery Set
consisting of 1 each or (x) instruments:

E30-902 Halstead Mosquito Forceps (2x), page 266

E30-934 Dieffenbach Serrefine, straight (2x), page 266

E40-104 Lieberman Eye Speculum, solid blades, page 245

E40-807 Helveston Micro Tissue Retractor, curved 7 mm blade

E40-809 Helveston Micro Tissue Retractor, curved 9 mm blade

E40-811 Helveston Micro Tissue Retractor, curved 11 mm blade

E40-790 Helveston "Teaser" Hook, conical 6 mm long tip (3x)

E40-795 Helveston "Finder" Hook, small, cone shaped tip

E40-796 Helveston "Finder" Hook, large, cone shaped tip

E40-791 Helveston Muscle Hook, blunt 8 mm tip

E40-792 Helveston Muscle Hook, blunt 10 mm tip

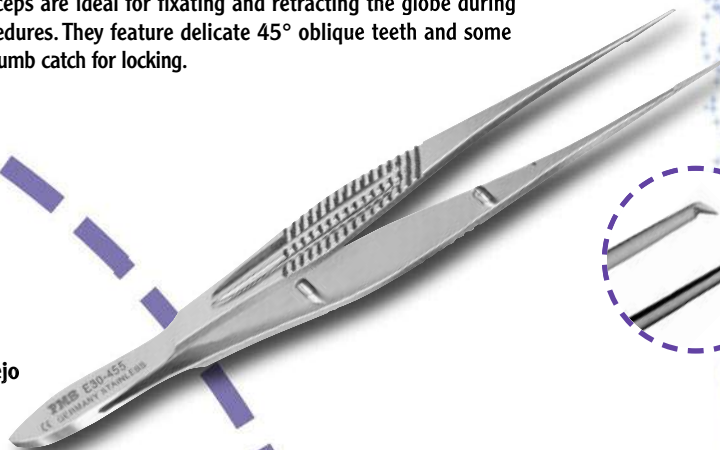
E40-793 Helveston Muscle Hook, blunt 12 mm tip

E40-557T Scleral Marking Ruler, curved 15 mm blade



These wide handle forceps are ideal for fixating and retracting the globe during strabismus procedures. They feature delicate 45° oblique teeth and some have a thumb catch for locking.

Castroviejo
Fixation Forceps
1 x 2 teeth, 10.8 cm
E30-453 0.3 mm
E30-455 0.5 mm



Stern-Castroviejo
Fixation Forceps
1 x 2 teeth, 0.5 mm, with
thumb lock catch, 10.8 cm
E30-214 stainless steel
E30-214T titanium



Moody
Fixation Forceps
1 x 2 teeth, 0.5 mm, with
thumb lock catch, 11.0 cm
E30-216 right
E30-217 left

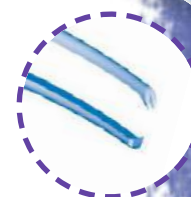


Helveston, titanium
Fixation Forceps
1 x 2 teeth, 0.6 mm, with
thumb lock catch, 11.8 cm
E30-213T



E42-132 Strabismus Set continued...

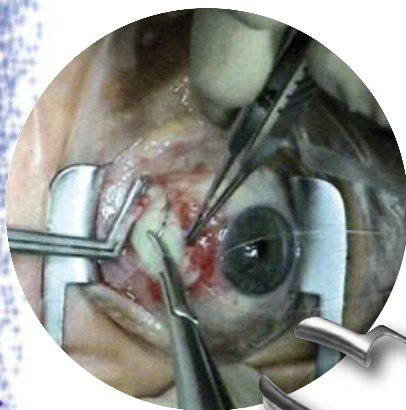
- E40-554 Castroviejo Eye Caliper, page 244
- E25-315 Westcott Stitch Scissors, page 241
- E25-334 Westcott Tenotomy Scissors, page 241
- E30-233 Lester Fixation Forceps (3x), page 247
- E30-456 Jaffe-Bonn Suturing Forceps, page 250
- E30-216 Moody Fixation Forceps, right, page 253
- E30-217 Moody Fixation Forceps, left, page 253
- E30-426 Helveston Tying Forceps (2x), straight, page 252
- E35-132 Castroviejo Needle Holder, straight, page 241
- E35-233 Barraquer Needle Holder, curved, page 241
- E20-001 Bishop-Harmon AC Irrigator System, page 244
- E10-003K Chuck Handle #3K, 10.0 cm, page 18
- E10-069 Miniature Edged Blade #69, page 18



SPECIALTIES



INSTRUMENTS FOR MUSCLE RESECTION



Putterman, titanium
6 Pins Muscle Resection Clamp
24 mm wide blades with 3 pins on top and
3 pins on bottom, 3 aligning holes on both jaws,
with thumb slide lock, 9.5 cm
E30-736T



Bangerter
Eye Speculum
solid blades, with
locking screw
E40-066 child size, 11 mm
E40-067 adult size, 15 mm



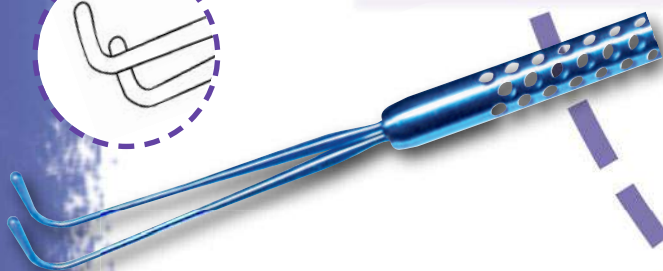
Apt's, titanium
Muscle Resection Clamp
angled 77° shafts with 11.5 mm long tips,
tongue-and-groove jaws with serrations,
marked for 2, 4 and 6 mm openings
E30-732 short 80 mm handle
E30-733 long 105 mm handle

designed for use during a
Muller's muscle-conjunctival
resection ptosis procedure

Wright, titanium
Recession Grooved Muscle Hook
angled 14 x 2.5 mm hook, 14.0 cm
E40-784T right
E40-785T left



Wright, titanium
Recession Double Muscle Hook
angled 11.5 mm working part, 14.0 cm
E40-786T



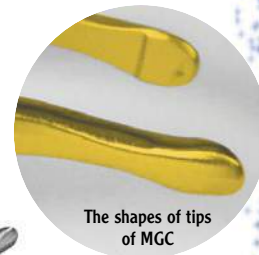
Troutman
Superior Rectus Forceps
angled 10 mm shafts, oblique
1 x 2 heavy teeth, 10.7 cm
E30-223



SPECIALITIES



*Drainage is the
treatment procedure
of choice*



The shapes of tips
of MGC

Yoshitomi
Meibomian Gland Compressor (MGC)
angled curved jaws with
smooth surfaces, 8.5 cm
E30-827 stainless steel
E30-827T titanium, blue
E30-827G titanium, gilded



Video available

MGD at slit lamp



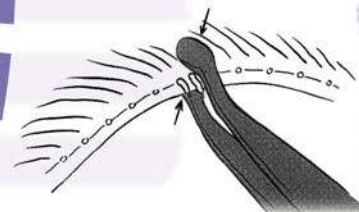
eyelids are opened lightly with fingers

This instrument was invented by Fumiaki Yoshitomi, MD, to drain meibum from dysfunctional meibomian glands (MGD) effectively.

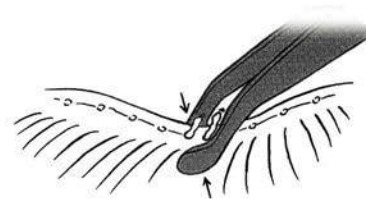
Under topical anesthesia, the eyelids are opened lightly with fingers. Then with the Meibomian Gland Compressor, the affected lid margin is gently squeezed at its anterior and posterior surface to express meibum from dysfunctional meibomian glands (MGD).

The special angles of the MGC allow the surgeon to easily insert and position the tips over the eyelid parallel to the lid margin. The broad, smooth jaws are then used to atraumatically compress the glands – relieving any occlusions with minimal pain to the patient.

MGC is user friendly and allows treatment of both upper eyelid or lower eyelid and working from either a temporal or nasal approach. Due to the curvature of the jaws, surgeon can keep his/her comfortable position during the procedure.



MGC squeezing the upper lid



MGC compressing the lower lid

Protective Eye Shell

for lid surgery with suction cup, autoclavable,
available on request: with and without handle



SPECIALTIES



**Berke
Ptoxis Forceps**
+E30-832 20 mm long
E30-833 27 mm long



**Desmarres
Chalazion Forceps**
+E30-821 20 mm
E30-822 26 mm



**Jaeger
Lid Plate**
metal, 11.0 cm
+E40-128



**Wright
Fascia Needle**
with 1 mm by 6 mm oval hole, 13.0 cm
may be used with Ptose-Up
E40-991

images are not actual size

**E42-131 LID-CONJUNCTIVA/
TRICHIASIS-PTOSIS SET**

consisting of 1 each or (x) instruments:

E20-001 Bishop-Harmon Irrigator, page 244

E30-902 Halstead Mosquito (2x), page 266

E30-909 Backhaus Towel Clamp (2x), page 266

E40-361 Kuhnt Scarifier #1, 12.0 cm, page 265

E25-566 Stevens Tenotomy Scissors, page 261

E25-532 Eye Scissors, straight, sh/bl tips, page 262

E25-315 Westcott Stitch Scissors, curved, page 241

E25-334 Westcott Tenotomy Scissors, curved, page 241

E40-554 Castroviejo Eye Caliper, 0-20 mm, page 244

E40-111 Desmarres Lid Retractor #1=11 mm, page 245

E40-112 Desmarres Lid Retractor #2= 13 mm, page 245

E40-772 Graefe Strabismus Hook, medium, page 246

E40-451 Meyhoefer Chalazion Curette #1, page 257

E40-453 Meyhoefer Chalazion Curette #3, page 257

E30-106 Bishop Harmon Tissue Forceps, page 247

E30-451 Castroviejo Suture Forceps, page 250

E30-427 Fine Tying Forceps, curved, page 252

E30-827 Yoshitomi MGC Forceps, page 255

E35-131 Castroviejo Needle Holder, page 241

E35-231 Barraquer Needle Holder, page 241

E40-811 Helveston Tissue Retractor, page 252

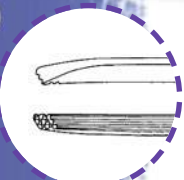
E40-812 Knapp Retractor 4-prong, page 262

+ instruments illustrated



**Bonaccolto
Conjunctiva Forceps**
longitudinally serrated 1.2 mm jaws
with cross serrations at tips, 10.3 cm

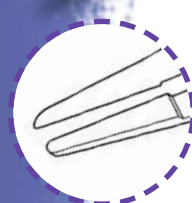
+E30-238



popular



**Barraquer
Cilia Forceps**
angled jaws with platform, 11.0 cm
E30-773



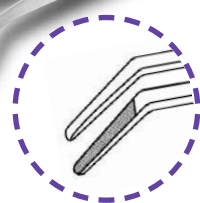
non-toothed



**Nugent
Utility Forceps**
angled jaws, 11.0 cm

E30-286 smooth

E30-287 serrated



forceps



**Gillies
Skin Hook**
single end sharp, 17.0 cm

+E40-754 small

E40-756 large



Meyhoefer
Chalazion Curettes, round,
cup-shaped sharp spoon, 12.5 cm

E40-450 #0 = 1.5 mm

E40-451 #1 = 1.8 mm

E40-452 #2 = 2.0 mm

E40-453 #3 = 2.5 mm

E40-454 #4 = 3.5 mm

E42-130 CHALAZION SURGERY SET

complete, consisting of 1 instrument each:

E40-128 Jaeger Lid Plate, metal, page 256

E40-450 Meyhoefer Curette #0, page 257

E40-452 Meyhoefer Curette #2, page 257

E40-453 Meyhoefer Curette #3, page 257

E40-454 Meyhoefer Curette #4, page 257

E25-532 Eye Scissors, sh/bl tips, page 262

E40-203 Scalpel Handle #3, 12.5 cm page 261

E40-215 Scalpel Blade #15, sterile, page 261

E30-385 Moorfield's Forceps, fine, page 257

E30-349 Lister's Conjunctiva Forceps, page 257

E30-812 Hunt Chalazion Forceps, page 257

E30-814 Francis Chalazion Forceps, page 257

E35-131 Castroviejo Needle Holder, page 241

E45-015 Instrument Sterilizing Tray, page 294



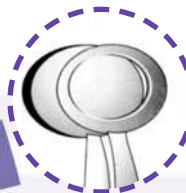
Chalazion Forceps
round and oval
plates



Lambert
8 mm ID
*E30-808



Hunt
12 mm ID
*E30-812



Francis
14x11 mm ID
*E30-814

*on request also
available in titanium

Jayle's

Corneal Suture Forceps
smooth platform with
oblique 1 x 2 teeth, 10.5 cm

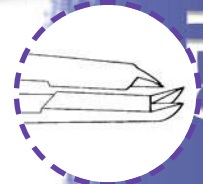
E30-341 0.15 mm

E30-343 0.3 mm

E30-347 0.7 mm



popular



Lister's

Conjunctiva Suture Forceps
longitudinally serrated jaws,
heavy 1.2 mm teeth, 10.0 cm

E30-348 oblique 45° teeth

E30-349 straight 90° teeth



English pattern



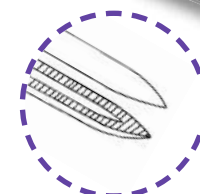
Moorfield's
Conjunctiva Forceps
with serrations and groove

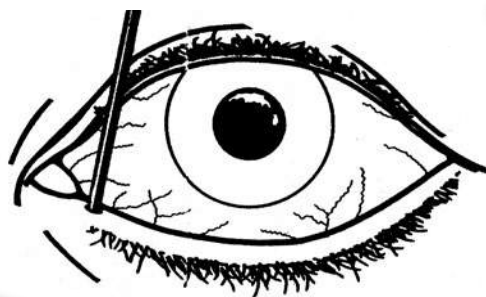
E30-385 fine, 10.0 cm

E30-386 standard, 10.7 cm



forceps





Castroviejo
double ended, delicate
and fine taper, 12.5 cm

E40-896



Ruedemann
extra fine #0 tip, 8.0 cm

E40-888

Wilder
blunt tip, 10.8 cm

E40-891 #1 delicate, 25 mm taper

E40-892 #2 medium, 21 mm taper

E40-893 #3 heavy, 13 mm taper

size scale of lacrimal dilators tips

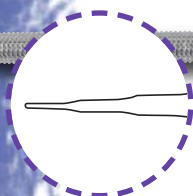
fig.	0	1	2	3
mm	0.3	0.4	0.5	0.6

Sisler
Punctum Dilator

graduated shaft with blunt tip beveling from
0.35, 0.9, 1.4 to 1.9 mm OD, 9.5 cm

E40-894

one tip does the complete dilating procedure



Bowman
double ended, bulbous tip

E40-861 #0000&000

E40-862 #00&0

E40-863 #1&2

E40-864 #3&4

E40-865 #5&6

E40-866 #7&8

E40-860 set of 6



size scale of lacrimal probe tips

fig.	0000	000	00	0	1	2	3	4	5	6
ø mm	0.5	0.6	0.7	0.8	0.9	1.1	1.3	1.4	1.5	1.6

Liebrich
double ended, cylindrical tip

E40-851 #0000&000

E40-852 #00&0

E40-853 #1&2

E40-854 #3&4

E40-855 #5&6

E40-856 #7&8

E40-850 set of 6

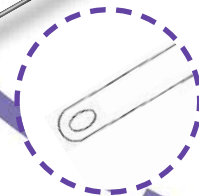
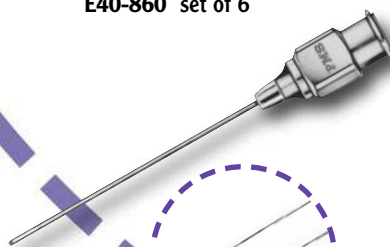


Bangerter

Lacrimal Probe Cannula
23G/0.6 mm OD straight tube
with large 0.6 x 0.3 mm oval side port

E20-646 40 mm

E20-647 60 mm





*simple and
effective*

CRAWFORD INTUBATION SYSTEM

includes 2 straight 150 mm probes with knob tip of
23G/0.7 mm OD attached to 320 mm silicone tube

Reusable (non-sterile)

E40-916 Probe Set

E40-917 Retrieval Device

E40-918 System with retrieval device

Disposable (sterile packaged)

51-917 Retrieval Device (box of 5)

51-918 System with retrieval device (box of 1)

retrieval device is designed to grasp
knob-tip of probe for ease of
removal from the inferior
meatus.

DCR BODKINS

20 G/0.9 mm OD x 45 mm long pobe
attached to 400 mm silicone tube

E40-924 straight, reusable, 1 piece

E40-923 angled, reusable, 1 piece

51-922 straight, disposable, box of 3

51-923 angled, disposable, box of 3

QUICKERT

Lacrimal Intubation Probe
malleable stainless steel, 11.0 cm,
one end has 0.4 mm taper point,
one end has cylindrical tip of size:

E40-839 #00/0.7 mm

E40-840 #0/0.8 mm

E40-841 #1/0.9 mm

E40-842 #2/1.1 mm

E40-843 #3/1.3 mm

E40-844 #4/1.4 mm

cylindrical tip

tapered point

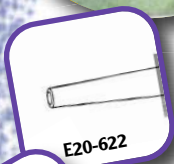
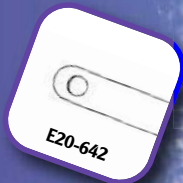
Probes are made from malleable stainless steel with blunt ends.
Machined to assure a smooth transition and secure bonding between
probe and silicone tubing. Silicone tube swaged to probe.

SPECIALTIES



LACRIMAL CANNULAE

Cannulas are uniquely designed for their special application; atraumatic irrigation of the punctum or lacrimal duct, for punctal dilation and irrigation of the nasolacrimal system.



Galezowski
23G/0.6mm OD x 11mm
blunt tip with end opening

E20-600 straight
E20-601 curved

Shahinian
23G/0.6mm OD x 11 mm straight tube,
bullet-shaped tip with 0.3 mm side port
E20-602

Labarre
25G/0.5mm OD x 30 mm tube, tip
is tapered to 0.3 mm, end opening

E20-612 straight
E20-613 short angled
E20-615 long angled
E20-617 long curved
(on demand also available in sterling silver)



Anel
23G/0.6mm OD x 10 mm
reinforced tip with end opening

E20-622 straight
E20-623 curved 90°

Gauge	ID (in)	ID (mm)	OD (in)	OD (mm)
23g	.013	.33	.025	.60
25g	.010	.25	.020	.50



Reinforced
19G/1.1 mm OD x 22 mm tube,
reinforced tip of 23G/0.6 mmx10 mm

E20-630 straight
E20-631 curved



West
23G/0.6mm OD x 28 mm tube,
blunt tip with 0.3 mm diameter

E20-642 straight, side port
E20-643 curved, bottom port
E20-645 curved, front port



Irrigating Syringe
5 ml with Luer-Lock cone
E20-805 all glass, reusable
300-05SP plastic, disposable, sterile box of 10

ideal for smooth control
of irrigation during
lacrimal duct
surgery

SPECIALTIES



E42-133 LACRIMAL SURGERY INSTRUMENT SET

(for Dacryocystorhinostomy and Intubation)

complete, consisting of 1 each or (x) instruments

- 1 E30-902 Halstead Mosquito Forceps (4x)
 - 2 E30-909 Backhaus Towel Forceps, 9.0 cm (2x)
 - 3 E20-001 Bishop-Harmon AC Irrigator, page 20
 - 4 E40-203 Scalpel Handle #3, stainless steel, 12.5cm
 - 5 E40-211 Scalpel Blade #11, sterile (box of 100)
 - 6 E40-215 Scalpel Blade #15, sterile (box of 100)
 - 7 E25-566 Stevens Tenotomy Scissors, straight, page 59
 - 8 E25-530 Universal Eye Scissors, straight, page 262
 - 9 E25-315 Westcott Stitch Scissors, curved, page 241
 - 10 E30-114 Standard Dressing Forceps, page 247
 - 11 E30-238 Bonaccolto Conjunctiva Forceps, page 256
 - 12 E30-446 Jaffe Tying Forceps, straight, page 250
 - 13 E30-451 Castroviejo Suture Forceps, page 250
 - 14 E35-131 Castroviejo Needle Holder, page 241
 - 15 E40-860 Bowman Lacrimal Probe Set, page 258
 - 16 E40-918 Crawford Intubation System, page 259
 - 17 E40-896 Castroviejo Lacrimal Dilator, page 258
 - 18 E20-630 Reinforced Lacrimal Cannula, page 260
 - 19 E40-972 West Lacrimal Sac Chisel, 6 mm wide
 - 20 E40-974 Freer Periosteal Elevator, sharp/blunt end
- + DCR instruments listed below (see page 262/263)
- E40-983 Hartmann-Halle Nasal Speculum
 - E40-812 Knapp Retractor
 - E40-823 Stevenson Retractor
 - E40-934 Gerzog Surgical Mallet
 - E40-922 Worst Pigtail Probe
 - E30-991 Beyer Bone Rongeur
 - E30-993 Kerrison Punch

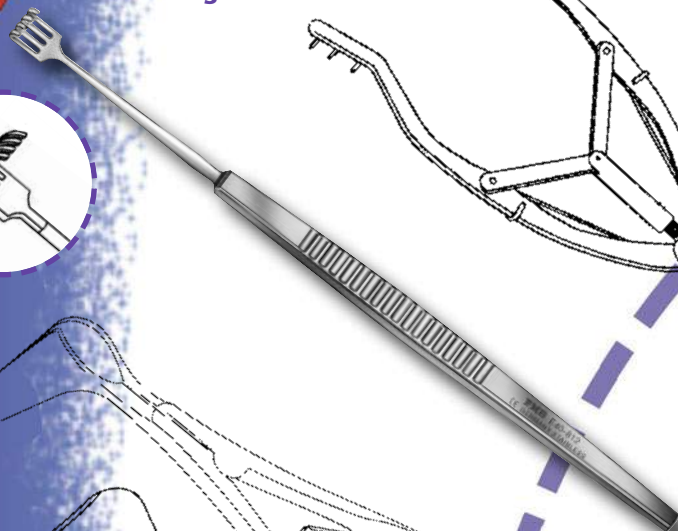


images are not actual size

SPECIALTIES



images are not actual size



Agricola
Lacrimal Sac Retractor
3x3 sharp prongs, 4.5 cm
E40-820

Stevenson
Lacrimal Sac Retractor
curved 3x3 teeth, 9.0 cm

+ E40-823

Knapp
Lacrimal Retractor
blunt four prongs, 13.5 cm

+ E40-812

Hartmann-Halle
Nasal Speculum
aseptic joint (dismantable), 15.5 cm

E40-982 child size

+ E40-983 adult size

Gerzog
Surgical Mallet
lead filled stainless steel head,
30 mm dia. head, 400g, 18.0 cm

+ E40-934

Beyer
Bone Rongeur
curved 3 mm jaws, 18.0 cm

+ E30-991

Worst
Lacrimal Pigtail Probe
with suture eyes, 14.0 cm

+ E40-922 adult size

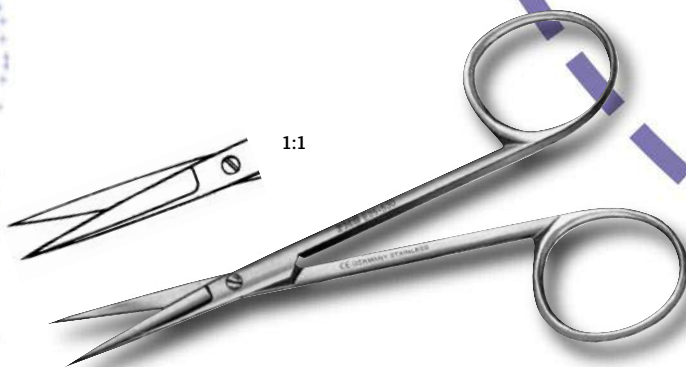
E40-921 child size

Eye Scissors, Universal model, 11.5 cm
straight – blades – curved

E25-530 pointed E25-531

E25-532 sharp/blunt E25-533

E25-534 blunt E25-535



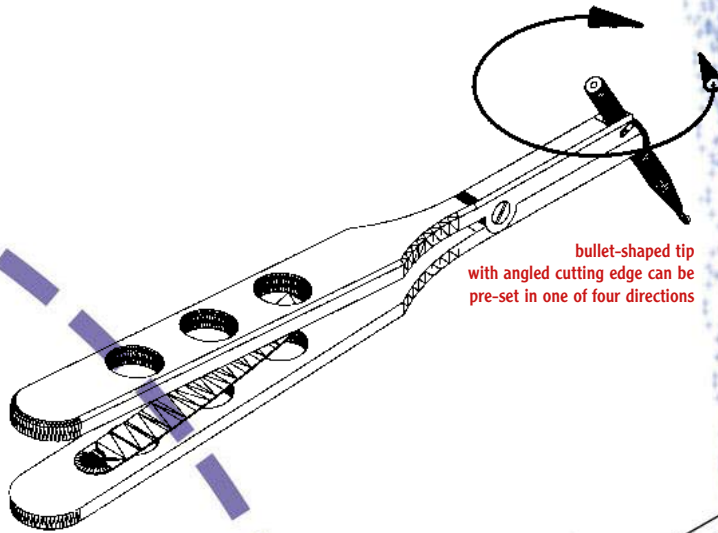
1:1

SPECIALITIES



Luntz-Dodick
Trabeculectomy Punch
exchangeable cutting head
of 1.0 mm ϕ with 0.5 mm
deep bite, 11.5 cm
E40-995

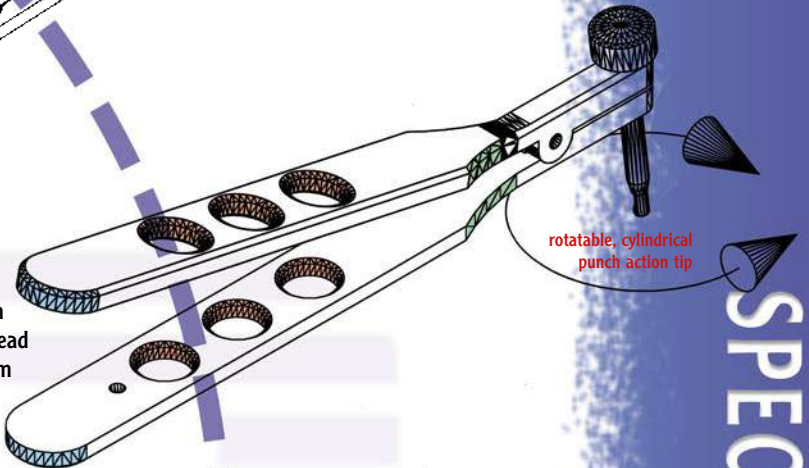
ideal for scleral tunnel insertion



bullet-shaped tip
with angled cutting edge can be
pre-set in one of four directions

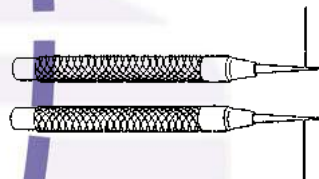
Gass
Corneoscleral Punch
rotatable 1.5 mm diameter head
with 0.75 mm deep bite, 9.0 cm
E40-996

ideal for clean, cylindrical, vertical holes



rotatable, cylindrical
punch action tip

Harms
Trabeculotomy Probe
9 mm pointed tips with 3 mm spread, 4.8 cm
E40-928 right
E40-929 left

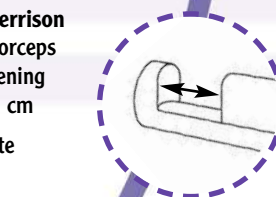


Kerrison
Sphenoidal Punch Forceps
up-cutting 90° jaws, 9 mm opening
length of shaft 80 mm, 21.0 cm

+ E30-993 3x3mm bite

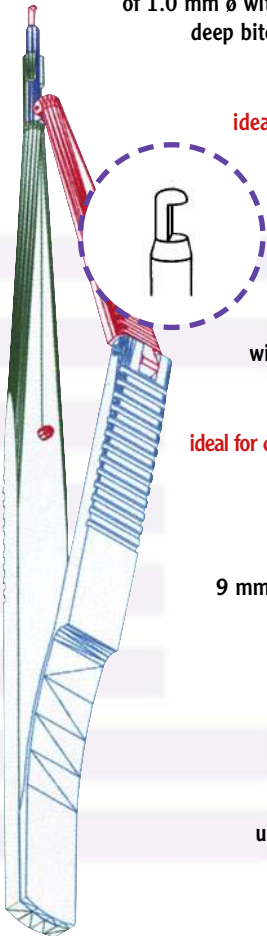
E30-994 3x4mm bite

E30-995 4x4mm bite

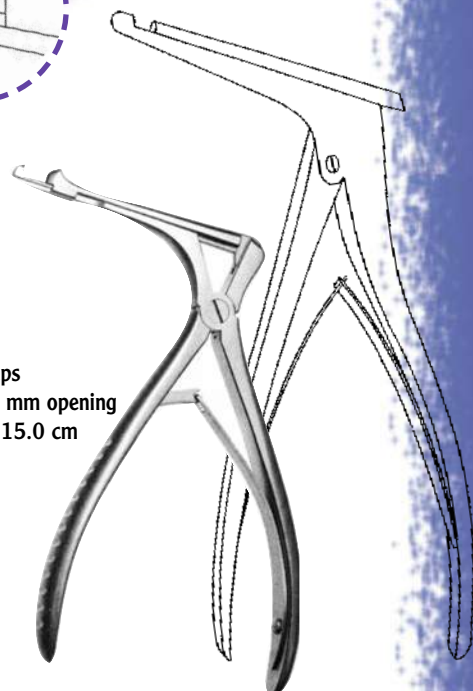


Kelly
Descemet's Membrane Punch
1.0 mm diameter head with 0.5 mm
deep bite, 13.0 cm
E40-992

ideal for round holes
without tissue tags



Citelli
Sphenoidal Punch Forceps
thru-cutting 90° jaws, 7 mm opening
length of shaft 80 mm, 15.0 cm
E30-981 1.5 mm bite
E30-982 2.0 mm bite
E30-983 3.0 mm bite





CORNEAL RUST RING REMOVERS

it's your turn

Chuck with burr

E40-424 0.5 mm dia.

E40-425 1.0 mm dia.

E40-426 chuck only



ALGERBRUSH II

Algerbrush II

Corneal Burr (Rust Ring Remover)
battery powered, complete with
two burs of 0.5 and 1.0 mm dia.

E40-420

Replacement Burrs (tungsten-carbide)

non-sterile head dia. sterile (b/5)

E40-421 0.5 mm BU-5S

E40-422 1.0 mm BU-1S

Corneal Pencil

Eye Magnet and FB loop,
translucent, reversible handle

E40-442

Shaaf

Foreign Body & Cilia Forceps

fine grooved jaws with pointed tips, 10.5 cm

E30-290 straight

E30-291 curved

Jeweler's Forceps

E30-503 #3 straight, fine 12.0 cm

E30-504 #4 straight, extra fine 11.0 cm

*E30-505 #5 straight, ultra fine 11.0 cm

*E30-506 #5-FC angled, ultra fine 11.0 cm

*E30-507 #7 curved, fine 12.0 cm

E30-513 #3C straight, fine 10.5 cm

Foreign Body Instruments

in sliding handle, double end

E40-411 Needle & Plange Lever

E40-412 Needle & Gouge

in sliding handle, single end

E40-413 Needle, curved sharp tip

E40-414 Gouge, straight round tip

E40-415 Plange Lever, curved tip

* on request also available
in lightweight titanium

SPECIALITIES



Ophthalmologists should have at least one motorized drill for removing rust ring and for polishing the cornea after excising a pterygium.

Chuck with diamond burr
medium grit diamond stone

E40-434 round 3.5 mm dia.

E40-435 wheel 5.0 mm dia.

Pterygium Drill
battery powered, complete with
round 3.5 mm dia. diamond burr

+E40-433

Replacement Diamond Burrs
medium grit diamond stone

E40-436 round 3.5 mm dia.

+E40-437 wheel 5.0 mm dia.

Cook
Eye Speculum
with locking screw, solid blades

+E40-071 adult 15 mm blade

E40-072 child 11 mm blade

McReynolds
Pterygium Scissors
angled 18 mm blades, blunt tips 10.5 cm

+E25-561

E42-135 PTERYGIUM SURGERY SET

complete, consisting of 1 instrument each:

E10-003K Chuck Handle #3K, round, page 18

E10-064 Miniature Edge Blade #64, page 18

E40-111 Desmarres Lid Retractor #1, page 245

E30-233 Lester Fixation Forceps, 2x3 teeth, page 247

E30-385 Moorfield's Conjunctiva Forceps, page 257

E30-460 McPherson, Tying Forceps, page 250

E30-450 Castroviejo Suture Forceps, page 250

E35-101 Castroviejo Needle Holder, page 237

E45-015 Sterilizing Instrument Tray, page 294

+ instruments illustrated



Bonn
Iris Scissors
delicate blades, sharp tips, 9.0 cm

+E25-500 straight

E25-501 curved

Kuhnt
Corneal Scarifier #1
hockey type blade, 12.0 cm

E40-361

Gill
Corneal Knife
curved cutting edge,
12.0 cm

+E40-341

SPECIALTIES



Backhaus
Towel Forceps
curved shanks

E30-909 9.0 cm
E30-913 13.0 cm



Rampley
Sponge Holding Forceps
with ratchet, serrated ring shaped jaws

E30-918 18.0 cm
E30-925 25.0 cm

designed to scrub the skin around the eye
with a cotton ball dipped in antiseptic solution



Artery Mosquito Forceps
straight shaft with serrated jaws

E30-900 Hartmann, 10.0 cm
E30-902 Halstead, 12.5 cm

Dieffenbach Serrefine
cross-action, straight jaws

E30-934 3.5 cm
E30-950 5.0 cm
E30-970 7.5 cm



Surgical Scissors
standard, straight blades, 14.5 cm

E25-574 blunt tips
E25-576 sharp and blunt tips
E25-578 sharp tips

further Utility Scissors
are illustrated on page
280 and 281

Dressing Forceps
bayonet shaped, serrated jaws

E30-914 Lucae, delicate shaft, 14.5 cm
E30-916 Jansen, standard shaft, 16.0 cm



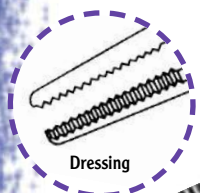
Adson Dissecting Forceps
lightweight, fenestrated handle, 12.0 cm

E30-130 micro dressing, 1.0 mm jaws
E30-132 delicate dressing, 1.2 mm jaws
E30-140 micro tissue, 1.0 mm teeth

E30-142 delicate tissue, 1.2 mm teeth

E30-146 -Graefe, 6x7 teeth

E30-147 -Brown, 7x7 teeth



Dressing



Tissue



-Graefe



-Brown



images are not actual size

Enucleation Scissors
heavy blades, blunt tips,
13.0 cm

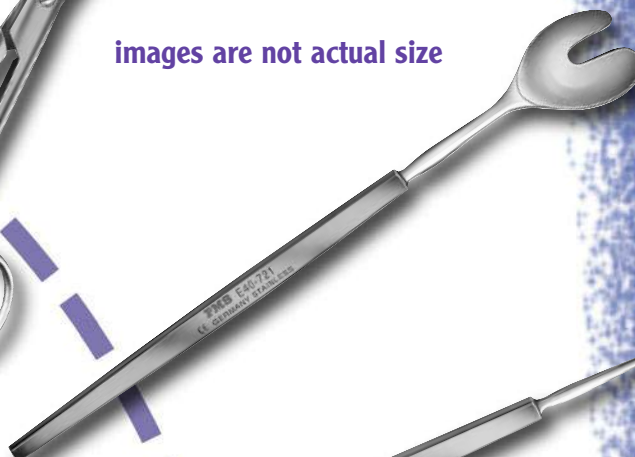
E25-571 medium curve

+ E25-573 strong curve



Wells
Enucleation Spoon
21 mm wide spoon with notch, 14.5 cm

+ E40-721



Bunge
Evisceration Spoon
round, sharp spoon, 13.5 cm

+ E40-708 small 8 mm dia.

+ E40-712 large 12 mm dia.



Jameson
Muscle Hook

E40-782 small

+ E40-783 large



Carter
Sphere Introducer and Holder
spring loaded plunger, 12.5 cm

+ E40-730

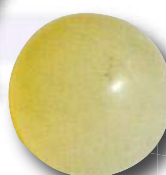
non-sterile, autoclavable Enucleation and
Orbital Implants are available on request

Foster
Enucleation Snare
complete with 12 snare wires, 14.5 cm

+ E40-722

Twisted Snare Wire
package of 12, 13.5 cm

E40-723



white silicone spheres



lucite PMMA spheres

E42-136 ENUCLEATION-EVISCERATION SET
complete, consisting of 1 or (x2) instruments:

E40-078 Castroviejo Speculum, page 242

E30-902 Halstead Mosquito (x2), page 266

E25-566 Stevens Tenotomy Scissors, page 261

E30-142 Adson Delicate Tissue Forceps, page 266

E30-147 Adson-Brown Tissue Forceps, page 266

E35-103 Castroviejo Needle Holder, page 237

E45-015 Instrument Sterilizing Tray, page 294

+ instruments illustrated



SPECIALTIES



BiRO



Schiøtz Tonometer
improved model (autoclavable)
stainless steel construction, inclined scale,
set of 3 weights (5.5, 7.5 & 10 grams) and
zero test block in foam-lined metal case

S/1002/GB Specification #3

1001/GB Specification #5 (can be certified)

charge for certificate of accuracy on request

1001/15 Extra weight 15.0 g



Honan Balloon
Intraocular Pressure Reducer
with relieve valve in case

*HB02055 complete

*HB02150 bellows, reusable

*HB02210 head band, reusable

HB02400 relief valve

HB02701 headband, disposable,
latex free (box of 12)

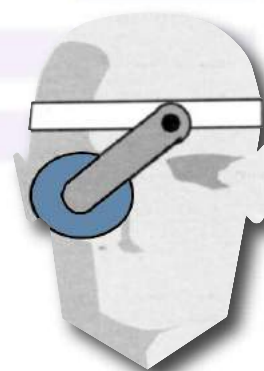
* Caution: these products are made of
latex which may causes allergic reactions

Oculo Pressor
Pressure Reducer
with velcro head band

A4947 complete

A4947ARM plastic arm

A4948 spare head band



E42-138 GLAUCOMA SURGERY SET

complete, consisting of 1 each or (x) items

E30-900 Hartmann Forceps (x2), page 266

E30-909 Backhaus Forceps (x2), page 266

E40-011 Barraquer Eye Speculum, page 245

E40-107 Tanne-Lieberman Speculum, page 230

E20-001 Bishop-Harmon A/C Irrigator, page 244

E20-031 Rycroft Air Injection Cannula, page 244

E25-501 Bonn Iris Scissors, curved, page 265

E25-315 Westcott Stitch Scissors, curved, page 241

E25-334 Westcott Tenotomy Scissors, curved, page 241

E25-411 Gills-Vannas Scissors, curved 7 mm, page 241

E25-200 Barraquer Iridectomy Scissors, blunt tips, page 22

E30-241 Fechtner Conjunctiva Forceps, ring shaped, page 230

E30-081 Harms-Colibri Forceps 0.12/45° teeth, page 249

E30-106 Bishop-Harmon Tissue Forceps, 0.6 mm teeth, page 247

E30-446 Jaffe Tying Forceps, straight smooth platform page 250

E40-554 Castroviejo Eye Caliper, straight 0-20 mm scale, page 244

E10-301SR Diamond Knife for Visco Canalostomy, 20° cutting edge, page 182

E10-367 Diamond 7-step Knife, retractable, spear shaped blade, page 105

E15-214 Blumenthal Conjunctiva Dissector, smooth 2x1.4 mm biconvex tip, page 230

E40-995 Luntz-Dodick Trabeculectomy Punch, exchangeable 1.0 mm cutting head, page 263

E40-928 Harms Trabeculectomy Probe, right, 9 mm pointed tips with 3 mm spread, 4.8 cm, page 263

E40-929 Harms Trabeculectomy Probe, left, 9 mm pointed tips with 3 mm spread, 4.8 cm, page 263

E35-251 Troutman Micro Needle Holder, very delicate 9 x 0.5 mm curved jaws without lock, page 241

S/1002/GB Schiøtz Tonometer Specification #3, stainless steel construction, inclined scale, page 268

BATTERY CAUTERIES



Battery Cautery, complete handle with one straight tip of platinum-iridium and battery

09-401 high temp 1000°C

09-402 low temp 500°C

The PMS changeable tip and battery cauteries are excellent for office, emergency room and clinical procedures.

Reusable Fine Cautery Tips made of platinum-iridium

09-501 straight tip, blue

09-502 angled tip, yellow

09-505 straight ball tip, white

guarantee precise pinpoint hemostasis and minimal tissue damage, as well as extended life cycle



POPULAR BIPOLAR FORCEPS

ideal for coagulation of small scleral bleeders, reattachment of the conjunctival flap, and sutureless closure of the conjunctiva.

McPherson Style

delicate 0.25 mm tip, 9.5 cm

81807000 straight jaws

81807010 angled jaws

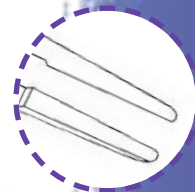


Jeweler's Style

delicate 0.25 mm tip, 11.0 cm

81811100 straight jaws

81811110 angled jaws



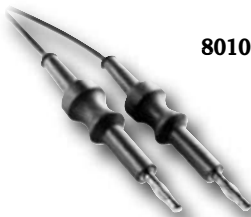
highly polished instrument tips, minimizing unwanted tissue adhesion



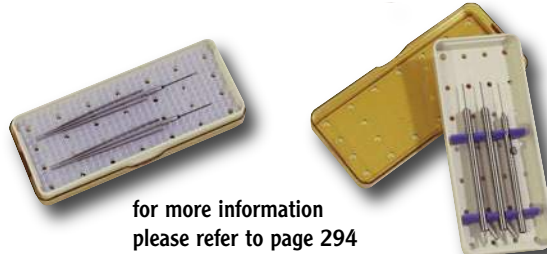
Bipolar Cord, reusable

with round 2 pin forceps connector and banana jacks fitting to unit, 12"/3.0 m long

80100025



safely stores your micro instruments



for more information please refer to page 294

SPECIALTIES



SPECIALITIES

TITANIUM

BASIC

CATARACT

KERATOREFRACTIVE

VITREORETINAL

SPECIALITIES

STERIL

**EYE CATALOGUES
ON REQUEST**

www.pms-tuttlingen.de

**BASIC EYE INSTRUMENTS
E10-001B**

**TITANIUM EYE INSTRUMENTS
E10-001T**

**CATARACT INSTRUMENTS
E10-001C**

**KERATOREFRACTIVE INSTRUMENTS
E10-001K**

**VITREORETINAL INSTRUMENTS
E10-001V**

**SPECIALITY INSTRUMENTS
E10-001S**

**STERILIZATION
E10-001E**

PMS



STERILIZATION





STERILISATION

INTRODUCTION . . . 272-273

EZWASH® TRAY-IN-TRAY SYSTEM 274-277

EZWASH® DELUXE WIRE BASKETS 278-279

EZHOLD® SILICONE FINGER MATS 280

EZHOLD® SILICONE STORAGE INSERTS 281

EZLOAD® STERILISATION CONTAINERS . 282-287

REPROCESSING & IMPORTANT SYMBOLS 288/289

EZHOLD® INSTRUMENT CASSETTES/BOXES 290-291

EZHOLD® INSTRUMENT TRAYS 292

SILICONE RACKS AND NAP PLATES . . .293

LIGHTWEIGHT PLASTIC TRAYS294

CARE & MAINTENANCE PRODUCTS 295





PROTECTS WELL YOUR VALUABLE INSTRUMENTS

The right tools for the ophthalmic surgeon are hand crafted microsurgical instruments of the best quality. The skill of highly trained craftsmen, and the time devoted to every detail in

- design
- material
- manufacturing
- progress control
- final inspection

is directly reflected in the quality of the instrument and its price.

QUALITY HAS ITS PRICE

The purchase of high quality surgical instruments represents a significant investment for the surgeon or hospital.

By using intelligent storage systems, optimally tailored for cleaning and sterilisation, maximal protection can be assured, especially for delicate surgical instruments.

PMS EZWash® Tray-in-Tray and EZLoad® Sterilisation Systems - designed for fine ophthalmic instruments - are ideal to help protect your investment over many years through proper care and maintenance.

AND ALWAYS REMEMBER:

DELICATE INSTRUMENTS NEED DEDICATED HANDLING





STERILISING EQUIPMENT

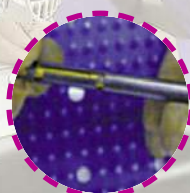
Everything you need to know about the proper care and maintenance of microsurgical instruments please contact

www.A-K-I.org.

Here you will find much information regarding the following:

- CLEANING
- DISINFECTION
- DRYING
- LUBRICATION
- INSPECTION
- STERILISATION
- STORAGE
- IN-HOUSE TRANSPORTATION

A frequent cause of mechanical damage is improper collection of instruments from the surgical field. Heavy and delicate instruments are thrown into a collection container without consideration. Transportation under such conditions gives rise to vibrations, thus making the instruments come into contact with each other which may cause mechanical damage.





NEW from
PMS



The PMS *EZWash*® Tray-In-Tray System is a versatile system for organising and protecting delicate surgical instruments during cleaning, disinfection, sterilisation, transport and storage.

EZWash® Trays are available in 1/1, 1/2 and 1/3 sizes, and can be used alone or can be stacked in several different combinations, allowing you to organise individual instruments into practical sets and protective layers.

The PMS *EZWash*® Tray System is an economical solution. The trays are designed to keep your instruments securely protected, reducing the possibility of damage and high costs of instrument repair or replacement.

FEATURES:

- Wire mesh to allow high degree of liquid penetration on to the instrument surfaces.
- Electrolytically polished 18/8 stainless steel construction inhibits rust and staining of the tray, and guarantees strength and durability.
- Total internal customisation. Hand tailored accommodation for your instrument sets that results in zero instrument movement.
- Trays can be reconfigured to accept alternative instruments.

Efficiencies in the operating room are realised because instruments arrive at their point of use in a consistent arrangement that is universal to all services.

In addition, sterilisation and processing time is reduced as general principles of set preparation are integrated into the total system needs of your facility.





Sized to fit into most filtered container system; can also be folded and wrapped in either reusable "woven" drapes and/or disposable CSR wraps.

EZWash® Instrument Baskets

1/1 size (275x178x24 or 37 mm), complete with removable top cover

E45-102 "LoProfile" 24 mm height, with two silicone instrument supports

E45-103 "HiProfile" 37 mm height, with two teflon instrument holding bars

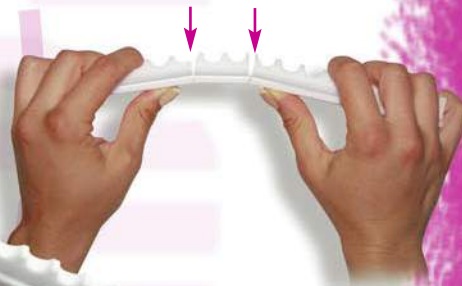


EZHold®

Instrument Holding Bar
16-slots Teflon profile, 260 mm long, complete with set of screws and plates

E45-104

easy to break due to pre-determined breaking points



In order to adapt the EZWash® Tray-in-Tray System to your individual need the Instrument Holding Bar is complete with pre-determined breaking points. This enables you to divide the 1/1 size holding bar into 2 bars with the length of 1/2 size or 1/3 and 2/3 sizes depending on the application.

EZHold®

Replacement Screw and Plate Set
for Teflon holding bar E45-104

E45-105



EZHold®

Teflon Holding Post
complete, with washer and fixation screw

E45-106

holding post can be attached anywhere in the base tray to stack EZWash® baskets at varying heights.

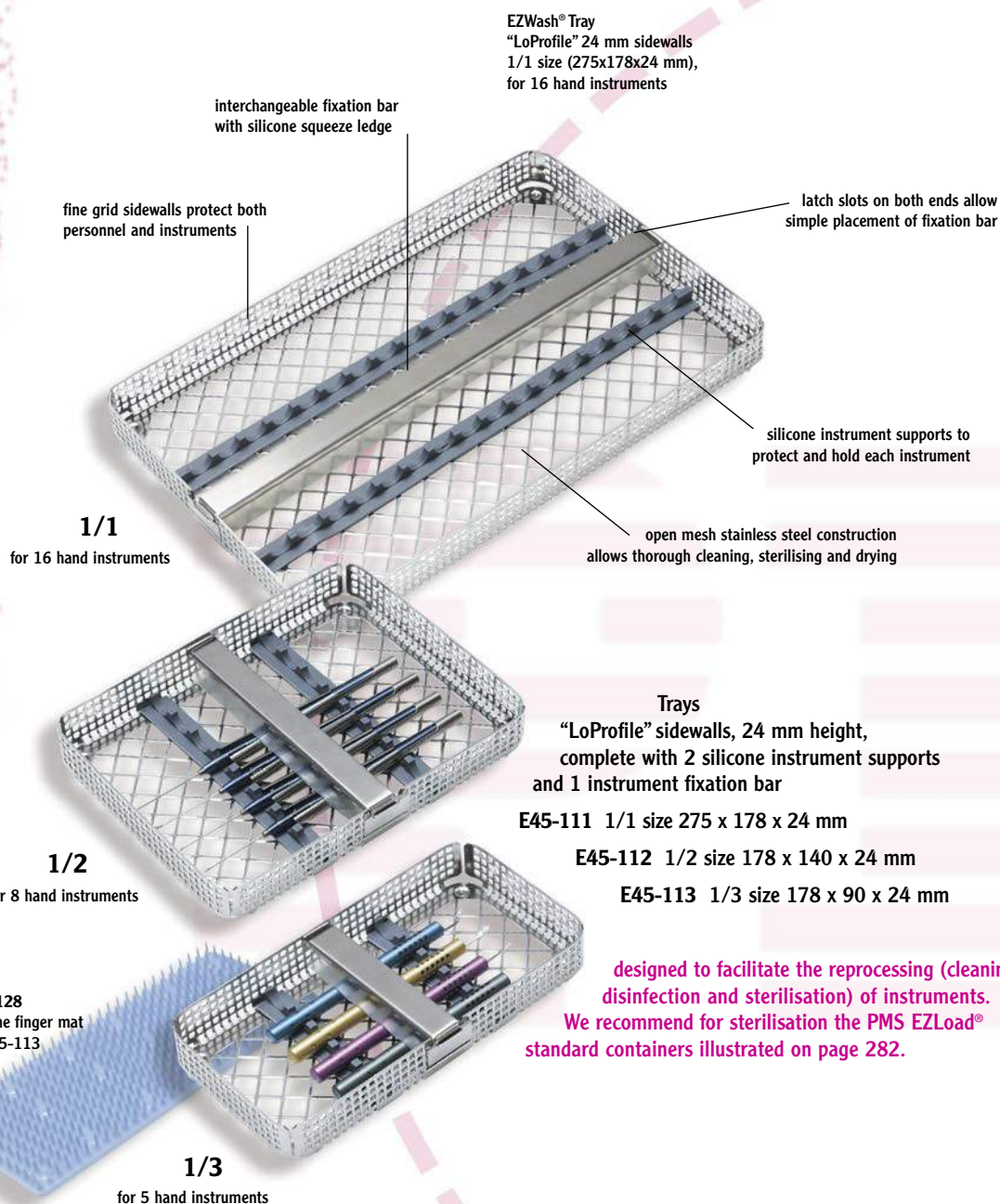


STERILISING EQUIPMENT



PMS EZWash® TRAY-IN-TRAY SYSTEM

Created to meet both the growing demand toward standardisation of instruments sets and your individualised surgical needs.



The following instrument holding devices fit into the trays to secure each microsurgical instrument, assure complete cleaning & sterilisation of the instruments and facilitate ease of use of the instruments in the operating room.

External dimension (mm)	Tray sizes	with silicone support	with silicone finger mat	with silicone nap plate	holding capacity
275 x 178 x 24	1/1	E45-111	*E45-121	*E45-131	16 + items
178 x 140 x 24	1/2	E45-112	*E45-122	*E45-132	8 +
178 x 90 x 24	1/3	E45-113	*E45-123	*E45-133	5 +

PMS standard 1/1 size and 1/2 size trays can be lidded and can also be stacked with 4 sets of Teflon post (E45-106) and placed in a filtered container system with varying heights.

* See page 277 and 293

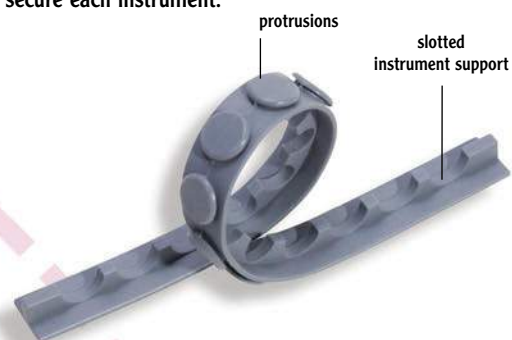


Instrument holding devices and silicone finger mats are ideally suited to secure each instrument.

Silicone Instrument Support
265 mm long rubber strip with
16-slots to fit 1/1 size tray

E45-115

can be cut to fit 1/2 or 1/3 size trays; raised protrusions on the underside fit in all bases and are easy to install; to reposition simply grasp and pull



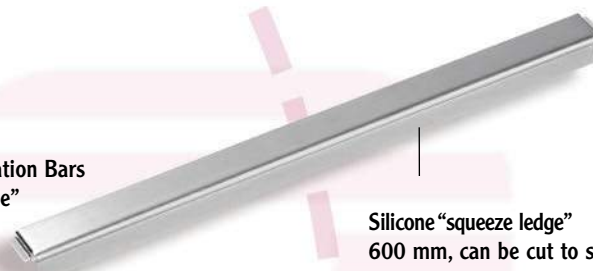
Instrument Fixation Bars with silicone "squeeze ledge"

E45-116 for 1/1 size tray

E45-117 for 1/2 size tray

E45-118 for 1/3 size tray

interchangeable instrument fixation bars for horizontal and/or vertical placement



Silicone "squeeze ledge"
600 mm, can be cut to size

E45-119

extra soft material to prevent damage to the instrument surface and its function

Silicone Finger Mats
extra soft, light blue material with narrow spaced fine nubbins

E45-126 for E45-121

E45-127 for E45-122

E45-128 for E45-123

E45-129 extra large size
(520 mm x 240 mm)

with venting holes, raised protrusions on the underside to enhance air sterilant penetration and to facilitate rapid drainage of fluid



removable silicone mats feature cone shaped nubbins to accommodate all kinds of microsurgical instruments

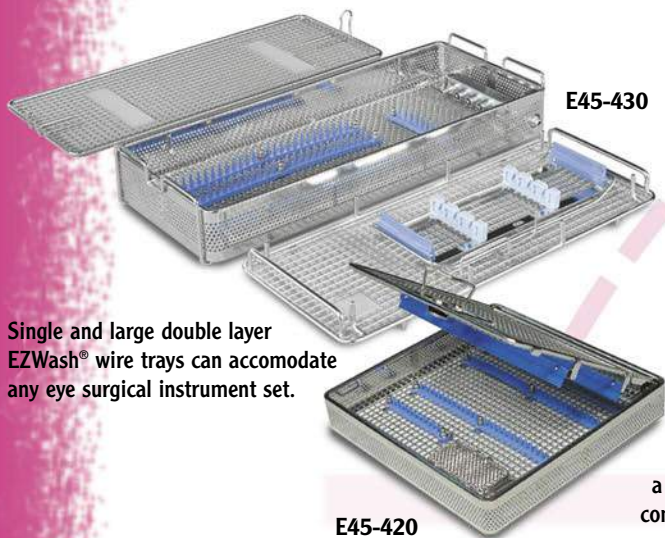
NOTE! Do not use during cleaning in automated washer/disinfector or ultrasonic cleaners. Use only to protect and hold instruments whilst sterilising, storage and transportation.

STERILISING EQUIPMENT



EZWash® STAINLESS STEEL WIRE BASKETS

New reprocessing procedures require new instrument trays. The PMS EZWash® Wire Baskets enable microsurgical instruments to be washed and sterilised using modern automated methods.



Single and large double layer EZWash® wire trays can accommodate any eye surgical instrument set.

E45-430

EZWash®
Deluxe Wire Basket (double level)
363 x 146 x 60 mm, complete with
E45-434, E45-435, E45-437,
E45-441 and E45-442

E45-430

EZWash®
Deluxe Wire Basket (single level)
245 x 245 x 60 mm, complete with
a set of silicone finger strips and
compartment for cannulae, needles, etc.

E45-420

E45-420

FEATURES

TOTAL INTERNAL CUSTOMISATION

Hand tailored accommodation for your instrument sets that results in zero instrument movement.

PERFORATED SHEET METAL WALLS

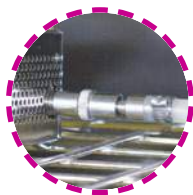
Fine grid sidewalls protect both personnel and instruments.

COARSE BASE MESH / LID

Allow high degree of liquid penetration onto the instrument surfaces, and facilitate rapid drying.

RAPID CLEANING AND STERILISATION

- Quick connection to washing machine.
- No manual cleaning required.





Safe, protective individual storage inserts are ideal for systematic organisation of delicate ophthalmic surgical instruments in sets.

EZWash® Insert Wire Tray
320 x 135 x 30 mm, with
stationary posts and frame
to be used with E45-430

E45-434
stationary posts for clearance of instruments

EZWash® Insert Instrument Rack
190 x 60 x 22 mm, with
3-slots instrument bars
to be used with E45-434

E45-435
securely holds 3 instruments of 100 to 160 mm length

EZWash® Insert Cannula Holder
120 x 15 x 30 mm removable bar, complete with
4xmale LL / 1xfemale LL hub, tubing connector,
L-bracket with set of screws and simple quick
connection to washing machine

E45-437
cannula bar can be elevated 90° for convenient placement
or removal of individual cannulae and I/A handpieces

EZHold® Silicone Finger Strips
extra soft material with fine nubbins,
complete with set of screws as shown above

E45-441 95 mm
E45-442 215 mm
ideal for protective storage of instruments

EZHold® Fixation Pins
E45-410 smooth to stack ring instruments
E45-411 slotted to adapt partition sheets

EZHold® Partition Sheets
stainless steel, 20 mm height
E45-412 50 mm
E45-413 130 mm
E45-414 225 mm
E45-415 460 mm

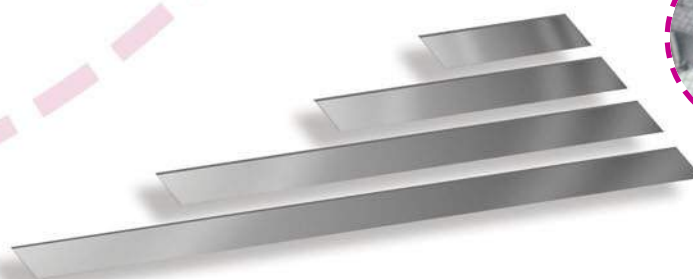
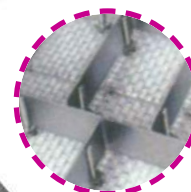
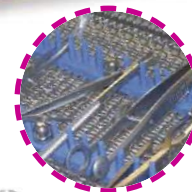
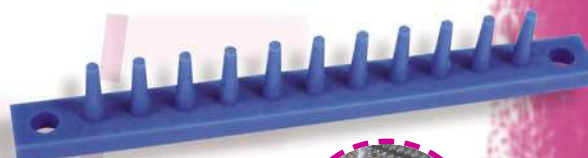
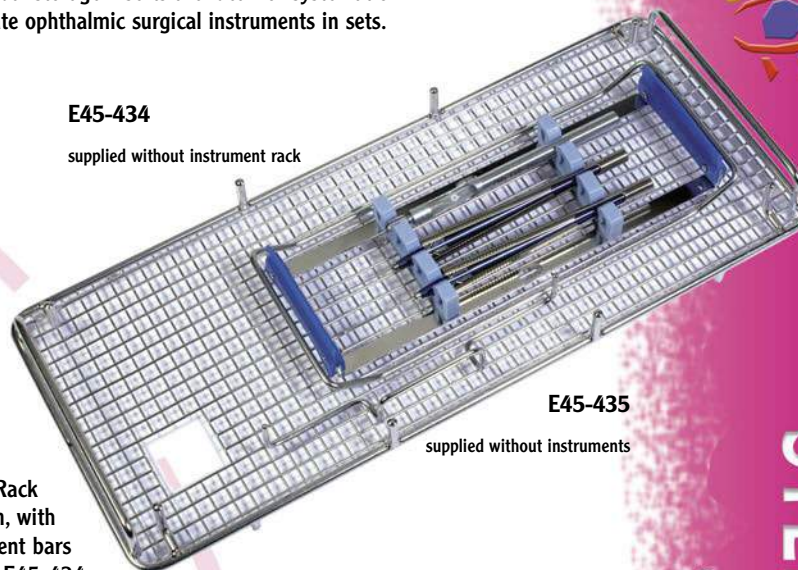
E45-434

supplied without instrument rack

E45-435

supplied without instruments

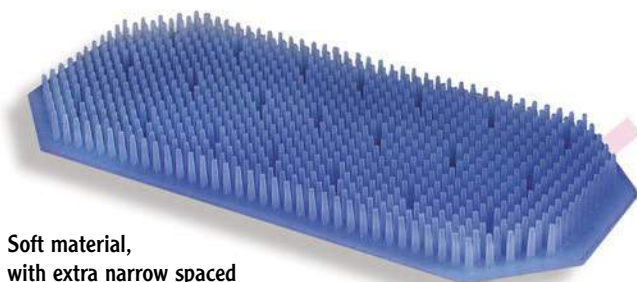
STERILISING EQUIPMENT





EZHold® SILICONE FINGER MATS

Four finger configurations allow utilisation of the silicone finger mats with a variety of surgical instruments.



Soft material,
with extra narrow spaced
nubbins for delicate instruments

E45-271
Silicone Finger Mats
pre-cut, 270 x 125 mm
for minicontainers see page 285

E45-274
pre-cut, 245 x 245 mm
for flat containers see page 287

***E45-279**
large sheet, 520 x 230 mm
can be cut to size



E45-136
Silicone Nap Plates
265 x 170 mm for E45-131

E45-137
170 x 140 mm for E45-132

E45-138
170 x 90 mm for E45-133

***E45-139**
large sheet, 600 x 300 mm

*large sheet may be cut with scissors
to suit instruments of unusual shape
for best protection

E45-259
large sheet 520 x 230 mm
coarse grid with semi-soft pins

Smith US Army
Utility Scissors
with sharp/blunt tip
E25-816 16.0 cm
E25-818 18.0 cm
E25-820 20.0 cm
ideal to cut large sheets

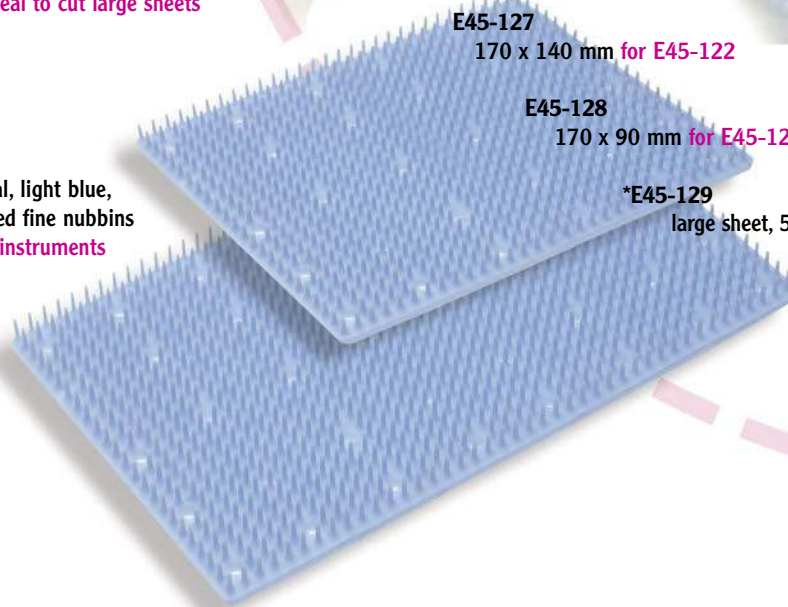
E45-126
Silicone Finger Mats
265 x 170 mm for E45-121

E45-127
170 x 140 mm for E45-122

E45-128
170 x 90 mm for E45-123

***E45-129**
large sheet, 520 x 240 mm

Extra soft material, light blue,
with narrow spaced fine nubbins
for microsurgical instruments



EZHold® SILICONE STORAGE INSERTS

PMO



These components are made of advanced, lightweight, durable R-Mer® and hold all types of delicate surgical instruments.



Instrument Holding Bars

E45-520 2.9"/73 mm

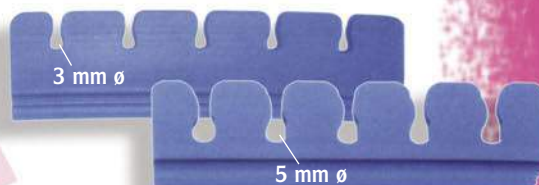
E45-521 7.0"/178 mm

The instrument holding bar can be attached anywhere in the tray with screws; silicone instrument holders are inserted into the instrument holding bars.

Silicone Instrument Holders 3 mm ø

E45-535 5 slots, 2.8"

E45-536 12 slots, 7.0"



Silicone Instrument Holders 5 mm ø

E45-555 5 slots, 2.8"/70 mm

E45-556 12 slots, 7.0"/178 mm

Plastic Holding Post 1.4"/3.5 mm

E45-524



L-Bracket
E45-522

Movable Posts

E45-525 short 1.2"/3.0 mm

E45-526 long 2.0"/5.0 mm

T-Bracket
E45-523



Universal Bandage Scissors blunt blades, angled to side

E25-715+ colour, 15.0 cm

E25-718+ colour, 18.0 cm

- +Y
- +R
- +A
- +G
- +B



Metal Screw
for E45-522 to E45-524
brackets and posts
E45-512

Utility Scissors
straight, blunt blades, 14.5 cm
E25-714



A NURSE'S BEST FRIENDS

STERILISING EQUIPMENT



EZLoad® STANDARD STERILISATION CONTAINERS

Stackable, space-saving storage. Choose from 3 standard bottom heights (40, 65 & 80 mm); designed to accommodate a wide variety of instrument sets (mix and match height to optimise tray storage capacity).



bottom and lid with fast clip system
for simple exchange of filters

New



LOCKING SYSTEM

EZLock® quick-release with positive action spring mechanism on the lid.



Sterilisation Containers
with perforated or unperforated bottom,
see E45-314+ thru E45-328+

when ordering please add
colour to article number

- +S
- +Y
- +R
- +A
- +G
- +B

Lids
(310 mm x 190 mm)
anodised, lightweight aluminium,
perforated with multiple round holes

E45-310+ colour

- +S
- +Y
- +R
- +A
- +G
- +B

Bottoms
silver coloured, available
perforated or unperforated,
see E45-312/4 thru E45-313/8

Only the lid of the container is available in different colours.

The following PMS EZLoad® sterilisation containers are specially designed to accommodate 1/1, 1/2 & 1/3 EZWash® Trays assuring complete sterilisation, as well as safe in-house transportation and storage.

External dimension (mm)	Removable lids, perforated	Bottoms, silver coloured perforated - unperforated		Container, complete with perforated - bottom - unperforated	
310 x 190	E45-310+ colour				
310 x 190 x 40		E45-312/4	E45-313/4	E45-314+	E45-324+
310 x 190 x 65		E45-312/6	E45-313/6	E45-316+	E45-326+
310 x 190 x 80		E45-312/8	E45-313/8	E45-318+	E45-328+



For easy identification, safe sterilisation, precise controlling and protective sealing of reusable, filtered sterilisation containers.

Identification Plates
ALUMINIUM (50 x 18 mm)
available in following colours:

- E45-330Silver
- E45-330Yellow
- E45-330Red
- E45-330Azure
- E45-330Green
- E45-330Violet
- E45-330Orange
- E45-330Brown



can be engraved to your
specification; max. 16 letters

Drape Fixation Clamps
stainless steel (set of 4)
E45-334



to hold drape; slip on to the sides

Drape Retainer
flexible, tension frame
(310 x 190 mm)

E45-335

to hold woven drapes in place

Classic Woven Drapes
reusable, green colour

*E45-336 600 x 400 mm

*E45-337 650 x 650 mm

*E45-338 850 x 850 mm

act as protective packaging
for instrument racks and trays.

* also available in blue colour,
please add "B" to end of cat. no.

Paper Filters
with chemical indicator,
disposable (pack of 100)

E45-331
for single use

Textile Filters
reusable (set of 2)

E45-332
for frequent use

PTFE Teflon Filters
long-life (set of 2)

E45-333
for permanent use



single use



frequent use
≈ 40 cycles



permanent use
≈ 1200 cycles

filters are suitable for all steam sterilisation methods



Paper Label/Indicator
disposable (pack of 100)

E45-351
for controlling validity of packaging



Plastic Safety Seals
disposable (pack of 100)
E45-361

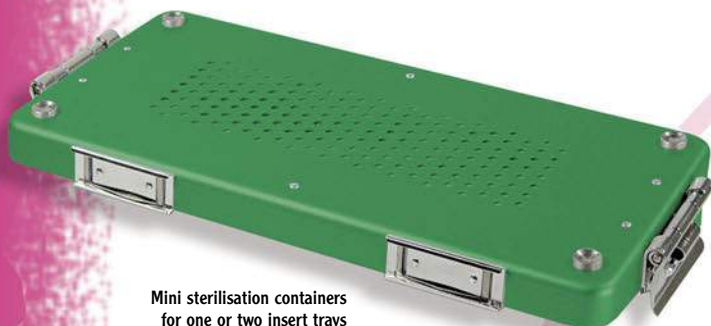
ensures that the protective packaging
can not be opened and closed again -
to rule out any form of manipulation.

STERILISING EQUIPMENT



EZLoad® MINI STERILISATION CONTAINERS

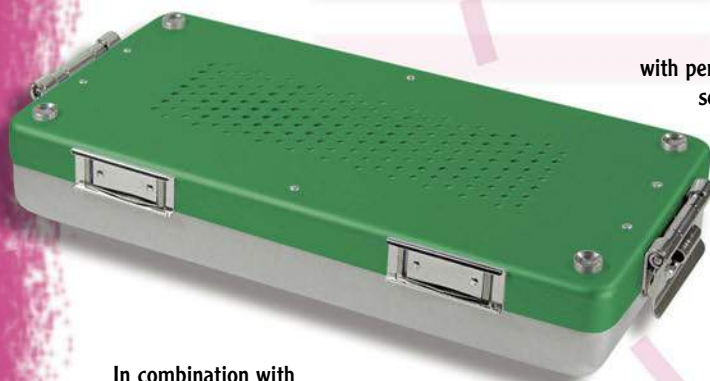
*You can store a maximum in
a minimum of space.*



Mini sterilisation containers
for one or two insert trays



Cleaning Agent
for anodised aluminium
E45-330 300g



In combination with
our stainless steel basket trays
the best way to store, protect and sterilise
an entire set of 15-30 ophthalmic instruments.

Lids
(300 mm x 140 mm)
anodised, lightweight aluminium,
perforated with multiple round holes

E45-300+ colour

- +S
- +Y
- +R
- +A
- +G
- +B

Bottoms
(40 mm and 70 mm heights),
available perforated or unperforated,
see below E45-304 to E45-307

Containers have uniquely raised buttons on the
lid for secure stacking and offer facility for

- easy filter exchange
- sterilisation safety seals
- interchangeable identification plates

Mini Containers
with perforated or unperforated bottom,
see below E45-304+ to E45-307+

- +S
- +Y
- +R
- +A
- +G
- +B

PMS EZLoad® Mini Containers with insert wire trays are ideal for sterilisation, safe transportation and organised storage.

External dimension (mm)	Removable lids, perforated	Bottoms, silver coloured perforated - unperforated	Container, complete with perforated - bottom - unperforated
300 x 140	E45-300+ colour		
300 x 140 x 40		E45-304	E45-304+
300 x 140 x 70		E45-306 E45-307	E45-306+ E45-307+



Securely protects your instruments.

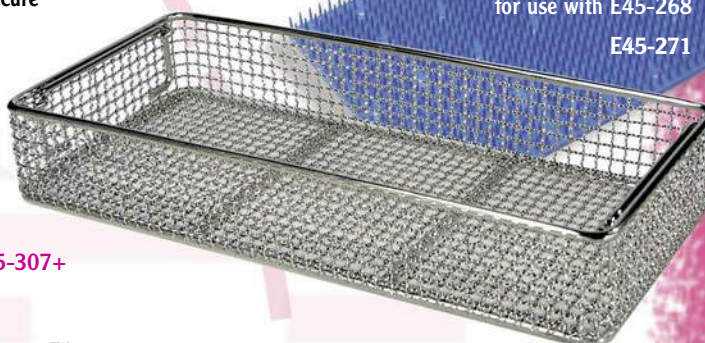
Insert Screen Tray
perforated metal sheet
268 x 124 x 22 mm

E45-268
for use with E45-304+



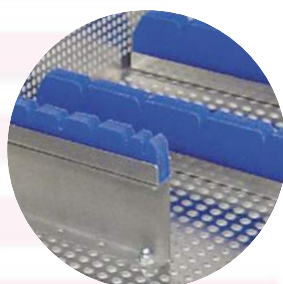
A variety of posts, instrument holding devices and silicone finger mats fit into the insert basket to secure each instrument (illustrated on page 279-281)

Silicone Finger Mats
pre-cut (260 x 120 mm)
for use with E45-268
E45-271



Insert Wire Tray
stainless steel wire mesh,
265 x 120 x 45 mm

E45-265
for use with E45-306+ and E45-307+



Silicone Holding Bars for E45-265 and E45-268 can be adapted to your specific requirements

Paper Filters
with chemical indicator
disposable (pack of 100)

E45-331
for single use



Textile Filters
reusable (set of 2)

E45-332
for frequent use

PTFE Teflon Filters
long-life (set of 2)

E45-333
for permanent use



single use

Drape Retainer
flexible, tension frame
(280 x 125 mm)

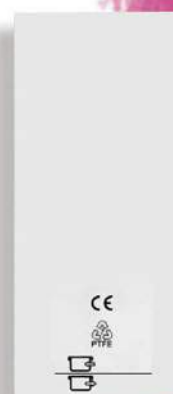
E45-328
to hold woven drapes in place

Identification Plates
see page 283



Classic Woven Drape
reusable, 600 x 400 mm
E45-336B

frequent use
≈ 40 cycles



permanent use
≈ 1200 cycles

STERILISING EQUIPMENT



EZLoad® FLAT STERILISATION CONTAINERS

Up-graded and improved sterilisation containers offer:

- Proven lightweight aluminium, anodised in different colours
- Silicone seals all around for total tightness and sterility.
- Quick-release pressure mechanism for easy filter exchange.
- Perfect arranged perforation for excellent drying properties.



Lid perforated

Lid
(285 mm x 280 mm)

E45-285+ colour

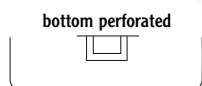
- +S
- +Y
- +R
- +A
- +G
- +B



bottom perforated

Bottoms
(285 x 280 mm x height) silver coloured
see below, E45-286 to E45-289

Choose from 2 standard bottom heights (55 mm and 85 mm);
designed to accommodate a wide variety of instrument sets,
you can mix and match height to optimise tray storage capacity.

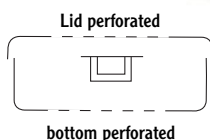


Flat Containers
with perforated or unperforated bottom,
see below, E45-286+ to E45-289+ colour



- +S
- +Y
- +R
- +A
- +G
- +B

please note that only the lid is coloured



With the PMS EZLoad® containers can you well sterilise, rational store, and comfortably transport without contamination.

External dimension (mm)	Removable lids, perforated	Bottoms, silver coloured perforated - unperforated	Container, complete with perforated - bottom - unperforated
285 x 280	E45-285+		
285 x 280 x 55		E45-286	E45-286+
285 x 280 x 85		E45-288 E45-289	E45-288+ E45-289+



A variety of posts, instrument holding devices and silicone finger mats fit into the insert basket to secure each instrument, see page 279/281.

Insert Wire Mesh Basket
stainless steel construction,
crimp square hole wire mesh

E45-253 255 x 245 x 30 mm
to fit with E45-286+

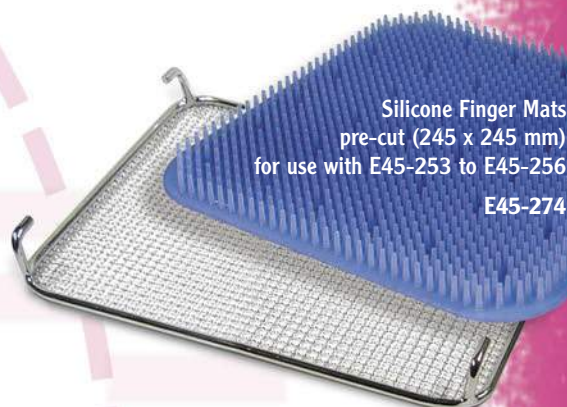
E45-255 255 x 245 x 50 mm
to fit with E45-288+ and -289+



crimp square
hole wire mesh for
extra strength and durability

Insert Wire Mesh Base
255 x 245 x 30 mm
with special feet

E45-256
to fit with flat containers, special feet
provide enough space for instruments



Silicone Finger Mats
pre-cut (245 x 245 mm)
for use with E45-253 to E45-256
E45-274

Paper Filters
with chemical indicator
disposable (pack of 100)

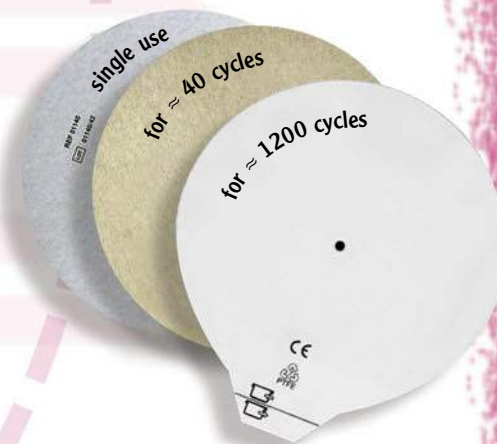
E45-281
for single use

Textile Filters
reusable (set of 2)

E45-282
for frequent use

PTFE Teflon Filters
long-life (set of 2)

E45-283
for permanent use



The filter retainer is locked by pressing down
in center of the filter. The opening of the filter
retainer succeeds by pressing the plate.

Filter Retainer
185 mm dia.
E45-284

Drape Retainer
flexible, tension frame
(255 x 255 mm)

E45-325
to hold woven
drapes in place



Classic Woven Drape
reusable, 900 x 600 mm
E45-339B

The use of reusable wovens can
not guarantee total protection
of the sterile barrier.

STERILISING EQUIPMENT



Reprocessing (cleaning, disinfection, sterilisation) of eye surgical instruments is a critical issue and demands highest requirements in the design of washer/disinfector, sterilisation containers, and associated equipment.

The PMS EZWash Tray-In-Tray System and EZLoad Sterilisation Containers have been used in nearly all modern sterilisation methods with excellent results. They are in conformity with valid quality international standards and master nearly each challenge regarding

- Safety in reprocessing
- Flexibility in preparation
- Systematic organisation
- Functional in packaging
- Simple in operation
- Economical in maintenance

High quality 18/8 stainless steel material and proven anodized aluminium used for the manufacture of our reusable instrument trays, baskets and sterilisation containers will withstand repeated and long-term use, even under difficult conditions.

Precise controlling, functional filling, safety closing and sealing of our reusable containers, and the folding and wrapping of sterilisation drapes, ensure that STERILITY of the instruments is maintained until the point of use as well as aseptic presentation.

Therefore, PMS EZWash Trays and EZLoad Sterilisation Containers are the ideal tandem for perfect reprocessing with regard to optimal cleaning, complete sterilisation, validation of packaging and ease of use of the instruments in the operating room.

AND ALWAYS REMEMBER:

**DELICATE INSTRUMENTS
NEED DELICATE
HANDLING**





Important Note!



Non-sterile product



Single use product only



Do not sterilise by ethylene oxide



Sterile packaged product



Sterilised by ethylene oxide



Sterilise by heat (steam)



Expiration date

STERILISING EQUIPMENT

Non-closed packaging is designated as "preformed sterile barrier systems", e.g. open pouches and containers.
(Forum 2007 - Medical Devices and Processes)

All PMS EZLoad® sterilisation containers are fitted with paper, textile or long-life Teflon filters; cover and bottom are perforated for steam procedures as indicated below.

Explanation of symbols :
+ applicable
- not applicable
0 limited application

Suitability of our sterile containers for steam sterilization procedures¹⁾ as per DIN 58953, part 9 (issue May 1987)

Sterili- zation container	Packing		Steam sterilization procedure acc. to DIN 58946, part I				
	Description	Symbolic representation and packing system	Gravitation procedure	Pre-vacuum procedure	Fractional vacuum procedure	Fractional flow procedure	Steam injection procedure
with filters	Instruments in wire basket acc. to DIN 58952 part III, in sterilization container with filter in lid and bottom acc. to DIN 58952 part I		+	+	+	+	+
	Instruments in wire basket acc. to DIN 58952 part III, in sterilization container with filter in lid and bottom not perforated acc. to DIN 58952 part I		-	+	+	+	+
	Instruments in wire basket acc. to DIN 58952 part III, in sterilization container with filter in bottom acc. to DIN 58952 part I		0	+	+	+	+

1) In order to avoid mistakes with regards to service, operation and/or when loading the sterilizer, please refer to table 1 for correct or wrong combination of sterilization containers for standardized steam sterilization procedures.

2) Only sterilization containers guaranteeing evaporation or discharge of condensate are suitable above.

3) Gravitation procedures having no drying device do not guarantee a sufficient after - drying effect.



EZHold® STAINLESS STEEL INSTRUMENT CASSETTES

Compact design guarantees strength and durability.
Electro polished 18/8 stainless steel material
inhibits rust and staining of the tray.



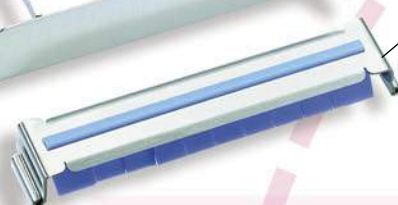
EZHold®
Instrument Holding Racks
frame 180 mm long x 27 mm height

E45-180+ 3 instruments, 64 mm wide

E45-180+ 5 instruments, 95 mm wide

E45-180+ 10 instruments, 136 mm wide

Holding Bars



EZHold®
Instrument Fixation Bars
with silicone "squeeze ledge" for holding racks,
available in 60, 90, 130 mm length

E45-181+ length

EZHold®
Instrument Holding Bars
slotted silicone strip for holding racks,
available for 3, 5 and 10 instruments

E45-182+ number of instruments



clip design closure

EZHold®
Standard Instrument Cassettes
hinged top cover with clip design closure

*E45-205 5 instruments (180 x 60 x 25 mm)

*E45-210 10 instruments (180 x 140 x 25 mm)

KEY BENEFITS

- unique hinge design with clip closure or twist lock
- slotted silicone bar can accommodate instruments with diameters ranging from 2.5 mm to 10 mm
- economical, durable and functional
- on-hand availability



twist lock

EZHold®
Premium Instrument Cassettes
hinged top cover with twist lock

*E45-208 for 8 instruments
(185 x 140 x 35 mm)

*E45-216 for 16 instruments
(280 x 180 x 35 mm)

* also available with silicone finger mats, please add "M" to catalogue no.

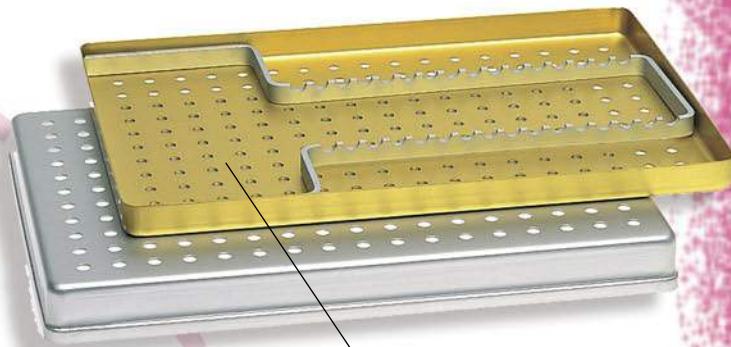


EZHold®
Instrument Sterilising Box
anodised aluminium, 280x180x19 mm,
perforated lid and bottom, complete with
instrument holder for 16 instruments

E45-226+ colour

- +Silver
- +Yellow
- +Red
- +Azur
- +Green
- +Turquoise

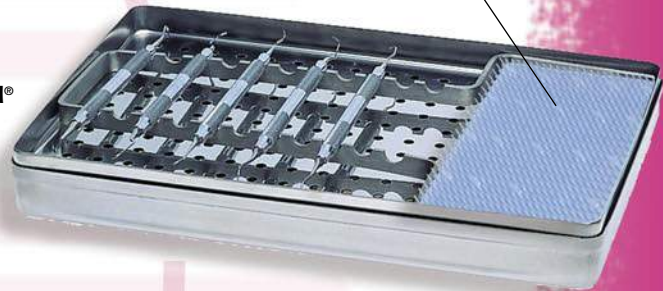
please note that only the bottom is coloured



Storage space for bipolar cords, I/A accessories, etc.
accommodates also silicone finger mats and silicone
nap plates for best protection of instruments

EZHold®
Instrument Sterilising Box
18/8 stainless steel, 280 x 180 x 19 mm,
perforated lid and bottom, complete with
instrument holder for 11 instruments

E45-221



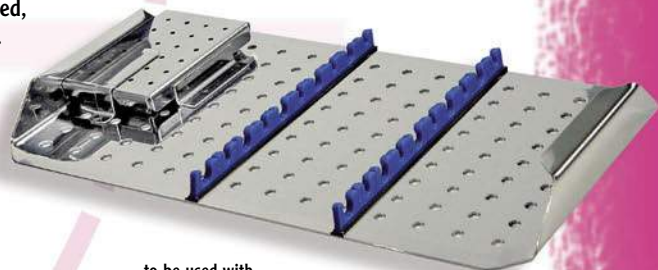
supplied without instruments
and silicone finger mat

EZHold®
Insert Instrument Tray
18/8 stainless steel, perforated,
complete with needle case and...

E45-246 silicone instrument bars

E45-247 silicone finger mat

E45-248 silicone nap plate



to be used with
E45-245 instrument box

EZHold®
Instrument Sterilising Box
18/8 stainless steel, 245 x 134 x 35 mm,
perforated lid and bottom

E45-245



instrument box to hold
E45-246 to E45-248 instrument tray

STERILISING EQUIPMENT



Stainless steel guarantees a solid exterior -wear-resistand surface - and even after long-term use stainless steel shows inself at its best.



Instrument Box
(165 x 90 x 35 mm)
lid with variable aperture,
with silicone instrument rack

E45-160 complete

E45-161 box only

E45-162 rack only

for Hot Air Sterilisation



Instrument Sterilising Case
(210 x 125 x 20 mm)
perforated lid and base,
with silicone finger mat

E45-150 complete

E45-151 case only

E45-152 mat only

Designed to protect a set of 8-12 microsurgical instruments.
When the lid is closed, the tips of the cone shaped nubbins
contact the inside of the lid preventing the instruments
from moving within the case.

Medicine Cup
graduated inside

E45-172 25 ml

E45-175 50 ml



Solution Bowls
stainless steel, rounded corners

	ø x h	
E45-882	40 x 19 mm	(0.05 l)
E45-883	61 x 30 mm	(0.07 l)
E45-884	80 x 40 mm	(0.14 l)
E45-885	128 x 55 mm	(0.45 l)
E45-886	147 x 65 mm	(0.70 l)
E45-887	167 x 75 mm	(1.10 l)
E45-888	187 x 85 mm	(1.60 l)



for solution and sponge material



Kidney Dishes
stainless steel, curled edges

E45-817 170 x 100 x 30 mm (0.25 l)

E45-825 250 x 140 x 40 mm (0.50 l)

E45-827 275 x 150 x 50 mm (0.75 l)

for solution and dressing material

EZHold® SILICONE RACKS AND NAP PLATES

PMO



Silicone racks and soft silicone nap plates with wide spaced, coarse pins are ideal for safe storage and positioning of delicate surgical instruments in sterilising trays.

Silicone Instrument Rack
(160 x 85 x 20 mm)

E45-162

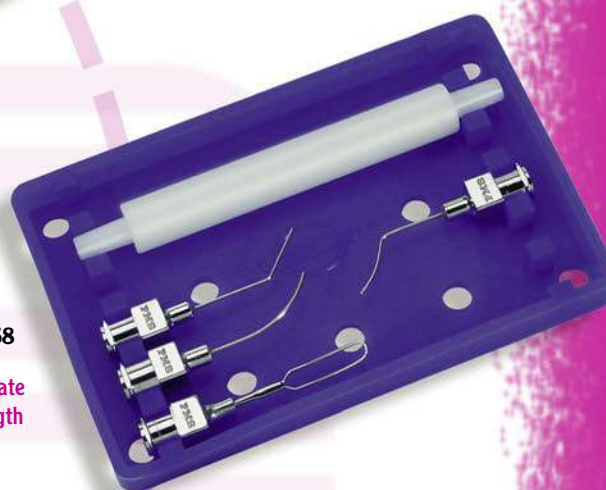
holds 10 single-armed instruments of
100 to 120 mm total length, can be
used with E45-161 sterilisation tray



Silicone Cannula Rack
(85 x 55 x 8 mm)

E45-168

for conventional cannulae and delicate
instruments of max. 80 mm total length



all racks supplied without instruments

Silicone Nap Plates
soft material with wide spaced coarse pins;
for standard eye surgical instruments

E45-136 for E45-131

E45-137 for E45-132

E45-138 for E45-133

E45-139 600 x 300 mm
can be cut to size



STERILISING EQUIPMENT

Each instrument should be placed carefully
in the silicone racks or on nap plates
to prevent movement and possible
damage during handling.



LIGHT WEIGHT INSTRUMENT STERILISATION TRAYS

PolyVac® Minitainer are made of autoclavable plastic Radel® and intended for the protection, organisation and the delivery of surgical instruments to the sterile field. They are designed to facilitate the sterilisation process when used in conjunction with soft wrapping material or a rigid sterilisation container, which allow air removal, steam penetration/evacuation (drying) & maintain the sterility of the internal components.



Minitainer Sterilisation Tray
with silicone holding bar for:

E45-001 1 instrument

E45-002 2 instruments

E45-003 3 instruments

*safely stores
micro instruments*

Micro Instrument Sterilisation Tray
with silicone finger mat to hold:

E45-004 180 x 50 x 18.5 mm
(up to 4 instruments)

E45-005 180 x 75 x 18.5 mm
(3 to 5 instruments)

E45-008 190 x 102 x 19 mm
(5 to 8 instruments)

E45-015 267 x 160 x 16 mm
(10 to 15 instruments)

E45-025 267 x 160 x 35 mm
double level tray
(20+ instruments)

STEAM

Base, lid and mat are perforated
for steam penetration.

PREPARATION & LOADING

When preparing sterilisation trays it is important to remember that the sterilant must be able to contact the instrument, so there must be space between the instrument and holding device.

Once cleaned, prepared and packaged the trays are ready to be sterilised.



AVAILABLE ON REQUEST

Instrument sterilisation trays with customised teflon inserts.



Sometimes you find partners who have products that work really well with your products. In our efforts to help our customers we have partnered with some of the best. On request, we can offer you an interesting range of speciality products for cleaning, disinfection, lubrication, storage and sterilisation.

CLEANING AND DISINFECTION

OPTIM® 33TB surface cleaner and disinfectant for medical products is the optimal choice in infection control. Ready-to-use wipes and liquid (with spray applicator for 1l bottles) are your ideal partner for proper care and cleaning of surgical instruments.

ULTRASONIC CLEANING DEVICES

SONOREX® ultrasonic cleaners and cleaning/disinfection agents are best suitable for intensive cleaning of stainless steel surgical instruments. Trust SONOREX® for all your ultrasonic cleaning needs, we do.

LUBRICATION

Our master instrument makers prefer special oil spray -free of silicone- for lubricating joints, box locks and ratches. RS-SPRAY No. 2820 rust preventing spray (see page 26) and DR. WEIGERT neodisher® IP Spray are best to avoid stains, crusts and rust-growth on instrument surfaces.

INSPECTION

After each cleaning all instruments should be carefully checked for cleanliness and inspected -if necessary under the microscope- for correct operation. We have access to a broad range of stereo microscopes, magnifying loops and spectacles manufactured by M/s Eschenbach Optik GmbH, a German specialist of Vision Technology Products

STERILISATION

PMS EZWash® trays and EZLoad® sterilisation containers and accessories have been used in nearly all modern sterilisation methods with excellent results. They are in conformity with valid quality standards with regard to materials, sterilisation, handling, transportation and storage. For typical steam autoclave cycles, the following are recommended times and temperatures developed from outside testing:

		132°/134° C 270°/273° F
≥ 10 Min. 	≥ 4 Min. 	
(EN) Unwrapped only, in sterilization tray, gravity displacement steam sterilization cycle		(EN) Prevacuum steam sterilization cycle, in sterilization tray, wrapped or unwrapped

Regardless of which sterilisation method is used, always follow instructions supplied by the manufacturer of the steriliser.



NOTES

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INDEX

ALPHABETICAL INDEX 298-310

NUMERICAL INDEX 311-317



ALPHABETHICAL INDEX

PRODUCT DESCRIPTION PAGE

A

Absorbing Sponge	27, 155
Adaptor, Luer & Luer-Lok	20, 111, 118
Adson Dissecting Forceps	266
Adson-Brown Fixation Forceps	266
Adson-Graefe Fixation Forceps	266
Agricola Lacrimal Sac Retractor	262
Air Injection Cannula, Rycroft	20
Akahoshi Nucleus Splitter/Completer	96
Akahoshi Nucleus Sustainer	96
Akahoshi Phaco Prechopper	97
Akahoshi Universal Micro Forceps	60
Alcohol Funnel, LASEK	158
Alexander Soft IOL Cutter	133
AlfaSIL® Silicone Oil	214
Alfonso Infant Child Wire Speculum	226
Alfonso-Hoffman Nucleus Fragment Cannula	100
Algerbrush II Corneal Rust Ring Remover	264
Alio LASIK Wire Speculum	227
Alio Micro Capsulorhexis Forceps	121
Alio Micro Iridectomy Scissors	121
All Glass Syringe	20
Alpha-Chymotrypsin Cannula, Troutman	53
Aluminium Handle	66, 94, 130, 192
Aluminium Sterilizing Box	291
Aluminium Sterilizing Container	282-286
Anel Lacrimal Cannula	260
Anesthesia Needle, Atkinson	52
Anis Needle Holder	46
Anis Suture Placement Marker	141
Anterior Chamber Irrigating Cannula	73
Anterior Chamber Irrigator, Bishop-Harmon	72
Anterior Chamber Maintainer	72
Apt's Muscle Resection Clamp	254
Arcuate Incision Diamond Knife, Thornton.....	161
Arcuate Incision Marker (see LRI Marker)	162-163
Arneodo Nucleus Manipulator	238
Artery Forceps, Mosquito.....	16, 266
Aspirating Cannula, Backflush	194-195, 203
Aspirating Cannula, Bimanual	103
Aspirating Cannula, Cortex	81, 83, 102-103
Aspirating Cannula, Subretinal	216
Aspirating Cannula, Vitreoretinal	216
Aspirating Eyelid Retractor, Jaffe	228
Aspirating Eye Speculum	54-55, 148, 228
Aspirating Handpiece, Backflush	194-195, 203
Aspirating Handpiece, Bimanual	113, 239
Astigmatic Keratometer, Maloney	160
Astigmatic Keratotomy Instrument	160
Astigmatism Axis & LRI Marker	160-164
Astigmatism Diamond Knife	161
Atkinson Anesthesia Needle	52
Auffahrt MICS Capsulorhexis Forceps	233
Axis Gauge	160
Axis Marker	160

B

Baby Jones Towel Clamp	16
Backflush Cannula	194-195, 203
Backflush Handpiece	194-195, 203
Backflush Reservoir, Silicone	194, 203
Backflush Tubing Kit, Silicone	194
Backhaus Towel Forceps.....	266
Banaji LASIK Cannula	154

PRODUCT DESCRIPTION PAGE

Bandage Scissors, Universal.....	281
Bangerter Eye Speculum	254
Bangerter Probe Cannula	258
Barraquer Cilia Forceps	256
Barraquer-Colibri Forceps	23, 44, 61
Barraquer Iris Repositor	80
Barraquer Iris Scissors	22
Barraquer Iris Spatula.....	246
Barraquer Needle Holder	25, 46, 241
Barraquer Needle Holder, French Style	237
Barraquer Needle Holder, Titanium	46, 235
Barraquer Wire Speculum	17, 54, 226-227, 245
Barrett Micro Mushroom Manipulator.....	80, 95
Barron Corneal Marking Punch	140
Barron Corneal Trephine, Hessburg-	140
Base Plug, Corneal	139
Base Plug Shield, Corneal	139
Basic Eye Instrument Set	28
Basic PRK Instrument Set	156
Battery Powered Cautery.....	269
Bayonet Dressing Forceps	266
Bechert Nucleus Rotator, Jaffe-	47, 80, 95, 246
Bechert-McPherson Forceps.....	232, 250
Beehler Small Pupil Dilator	106
Berke Ptosis Forceps.....	256
Berrod MVR Forceps	207
Beyer Bone Rongeur.	262
Bimanual I/A System	112-114
Bipolar Cord.....	269
Bipolar Forceps.....	269
Bishop-Harmon AC Irrigator	72
Bishop-Harmon AC Cannula	72
Bishop-Harmon Forceps	23
Blade Breaker & Holder	18
Blade Collet, Chuck Handle	18
Blade, Disposable	18, 58
Blade, Lamellar	58
Blade, Miniature Edge.....	18
Blade, Razor.....	18
Blade, Sapphire	67
Blade, Scalpel.....	261
Blade, Scleral	58
Blade, Trephine	138-139
Blade Handle, Chuck	18
Blade Handle, Scalpel	261
Blade Handle, Trephine	138
Blade Holder, Trephine.....	139
Blaydes Lens Holding Forceps	122
Blumenthal Conjunctiva Dissector	230
Blumenthal Fixation Ring	150
Bodkins DCR	259
Boat Hook Manipulator, Rentsch	35, 131
Bonaccolto Conjunctiva Forceps	256
Bone Rongeur, Beyer.....	262
Bonn Iris Scissors.....	265
Bonn Micro Iris Hook	35, 80, 246
Bonn Orbital Retractor	211
Bonn Forceps,	
-French Style	236
-Italian Design	240
-Jaffe (Bonn)	250
-Klassik Eye	232
-Original	249
-Titanium	45
Bores Axis Marker	160



PRODUCT DESCRIPTION PAGE

Bores Optic Zone Marker	173
Bores Meridian Marker	162
Bowman Lacrimal Probe	258
Box, Instrument Sterilization	291-292
Braunstein Fixed Sclerotomy Caliper	208
BSS Subretinal Injection Needle	219
Bunge Evisceration Spoon	267
Buratto Flap Retractor & Protector	152
Buratto IOL Manipulating Hook	242
Buratto LASIK Cannula	154
Buratto Lens Insertion Forceps	124-125
Buratto Nucleus Spatula	242
Buratto Tying Forceps	240
Buratto-Sinskey IOL Hook	238
Burr, Corneal	264
Burr, Pterygium Diamond	265
Busin Endothelial Grasping Forceps	175
Busin Endothelial Implantation Guide	175

C

Caliper, Eye	33, 57
Caliper, Incision	57
Caliper, Sclerotomy	208
Camellin LASEK Instruments	158
Canaloplasty Instrument, Visco	104
Cannula Adaptor, Luer & Luer-Lok	111
Cannula Holder	279
Cannula Inserter, Trocar	200, 204-205
Cannula Kit, Replacement	201
Cannula Loading Forceps	200
Cannula Plug	200
Cannula Rack, Silicone	73, 83, 293
Cannula System, Trocar	200-205
Cannula, AC Infusion	108
Cannula, AC Irrigating	20, 72-73
Cannula, AC Maintainer	72, 108, 174
Cannula, Air Injection	73
Cannula, Alpha-Chymotrypsin	53
Cannula, Anesthesia	53
Cannula, Backflush Needle	194-195, 203, 206
Cannula, Capsule Polisher	84
Cannula, Cortex Aspirating	81-84
Cannula, High Viscosity Infusion	198
Cannula, Hydrodissection	88-89
Cannula, Hydroelination	88
Cannula, I/A Perfluorocarbon	218-219
Cannula, I/A Simcoe	20, 82
Cannula, Irrigating Cystotome	74
Cannula, Irrigating Lens Loop	108
Cannula, Irrigating Nuclear Fragment	100
Cannula, Irrigating Vectis	81, 102
Cannula, Lacrimal	260
Cannula, Lacrimal Probe	258
Cannula, LASIK	154
Cannula, Silicone Oil	216-217
Cannula, Subretinal	216
Cannula, Sub-Tenon's	53
Cannula, Trocar	200
Cannula, Viscoelastic Injection	102
Cannula Vitreofluid Injection	198, 203, 215-216
Cannula, Vitreoretinal	216
Capsular Tension Ring	134
Capsule Polisher Cannula	84
Capsulorhexis Forceps	
- French Style	236
- Italian Design	240
- Klassik Eye	232
- Micro	121

PRODUCT DESCRIPTION PAGE

- MICS	233, 251
- Perfect	233
- Standard	76-77, 251
- Titanium	41, 233, 251
Capsulotomy Scissors	78-79, 235
Caro LASIK Flap Smoother	152
Caro-Avalos LASIK Flap Conformer	152
Carter Sphere Introducer and Holder	267
Cartridge Lens Injection System	126-128
Cartridge Loading Forceps, ICL®	169
Cartridge Loading Forceps, IOL	126
Case, Instrument Sterilizing	292
Castroviejo-Colibri Forceps	145
Castroviejo Corneal Forceps	24, 45, 145, 250
Castroviejo Corneal Scissors	143, 248
Castroviejo Eye Caliper	33, 57
Castroviejo Eye Speculum	17
Castroviejo Fixation Forceps	253
Castroviejo Lacrimal Dilator	258
Castroviejo Needle Holder	25, 46, 237, 241
Castroviejo Suturing Forceps	24, 145, 250
- French Style	236
- Italian Design	240
- Klassik Eye	232
- Titanium	45, 145
Catalogue, PMS Eye Instruments	270
Cataract Clear Corneal Surgery Set	48
Cataract (ECCE) Surgery Set	86-87
Cataract (Phaco) Surgery Set	98-99
Catford Micro Needle Holder	46
Cautery	269
Cautery Handle	269
Cautery Tip	269
Cellulose Eye Spear	27
Chalazion Curette, Meyhoefer	257
Chalazion Forceps	256-257
Chalazion Surgery Set	257
Chamber Maintainer, Anterior	72, 102, 108, 174
Chang Nucleus Manipulator Tip	95
Chang Phaco Chopper	37
Charleux Cortex Aspirating Cannula	83
Chayet LASIK Marker	151
Child Wire Speculum	17, 54, 226
Chisel, Lacrimal	261
Chopper, Phaco	36-37, 95, 171, 235, 246
Chopper, Phaco Irrigating	239
Chu Aspirating Eye Speculum	228
Chuck, Algerbrush II	264
Chuck Handle	18, 58
Cilia Forceps	256, 264
Citelli Sphenoidal Punch Forceps	263
Clamp, Muscle Resection	254
Clamp, Towel	16, 266
Clayman Lens Holding Forceps	122
Cleaning Accessory, Diamond Knife	70
Cleaning Accessory, VR Instrument	183
Cleaning Adaptor	118, 183
Cleaning Agent, Aluminum	284
Cleaning Block, Diamond Knife	70
Cleaning Syringe	183
Clear Corneal Diamond Knife	68, 92
Clear Corneal Sapphire Knife	33, 64
Clear Corneal Surgery Set	48
Clip Applying Forceps	230
Closure Valve Set, Disposable	201
Coagulation Forceps, Bipolar	269
Coaxial I/A Cannula, Perfluorocarbon	218-219
Coaxial I/A System	110-111
Colibri Forceps (see Corneal Forceps)	



Conjunctiva Dissector, Blumenthal	230
Conjunctiva Forceps	60, 247, 256-257
Conjunctiva Scissors	59
Conner Wand Nucleus Manipulator	34, 95
Conway Lid Retractor	17
Cook Eye Speculum	226, 265
Corbin Sub-Tenon's Cannula	53
Corcelle Eye Speculum	238
Corneal Base Plug	139
Corneal Base Plug Shield	139
Corneal Burr	264
Corneal Caliper, Castroviejo	57
Corneal Dissector	172
Corneal Donor Marking Punch	140
Corneal Forceps,	
- Barraquer-Colibri.....	44, 61
- Castroviejo	250
- Double Fixation	142
- French Style	236
- Girard	44-45
- Harms-Colibri	44, 249
- Hoskin Style	144
- Italian Design	240
- Klassik Eye	232
- Maumenee-Colibri	234, 249
- Polack	142
- Remky-Polack	142
- Tennant	45, 250
- Titanium	44-45, 142-144, 233
- Troutman	61, 250
- Troutman-Barraquer	144
Corneal Knife, Gill	265
Corneal Marker	141, 151, 162-164
Corneal Pencil (Eye Magnet and FB Loop)	264
Corneal Punch	139
Corneal Rust Ring Remover, Algerbrush II.....	264
Corneal Scarifier, Kuhnt	265
Corneal Scissors	143, 248
Corneal Spatula & Spoon, Paton	142
Corneal Suture Placement Marker, Anis	141
Corneal Suturing Forceps (see Corneal Forceps)	
Corneal Transplant Block	139
Corneal Transplant Scissors	143, 248
Corneal Transplant Surgery Set (Keratoplasty)	146-147
Corneal Transplant System	140
Corneal Trephine Blade	138-139
Corneal Trephine Handle	138
Corneal Trephine Holder	139
Corneal Trephine Punch	139
Corneoscleral Forceps	44-45, 249-250
Corneoscleral Punch, Gass	263
Corneoscleral Scissors	143, 248
Cortex Aspirating Cannula	81-84
Corydon Capsulorhexis Forceps	236, 240
Crawford Intubation Set	259
Crawford Retrieval Hook	259
Crozafon Capsulorhexis Forceps	240
Crozafon Nucleus Rotator	238
Crozafon Soft IOL Holding Forceps	236, 240
Curette, Chalazion	257
Cutter, Soft IOL	132-133
Cutting Block, Trephine	139
Cutting Platform, Nucleus	100
Cutting Punch, Corneal Trephine	139
Cutting Scissors, Osher IOL	132
Cystotome, Irrigating	74

D

DCR Bodkins	259
DCR Instrument	261-262
DCR Intubation Set	259
DCR Instrument Set, Lacrimal Surgery &	261
Degree Gauge, LRI	160-163
Deitz ICL® Manipulator	171
Depressor, Scleral	210
Descemet's Membrane Hook	172
Descemet's Membrane Punch	104, 263
Desmarres Chalazion Forceps	256
Desmarres Lid Retractor	17, 245
Diamond Burr, Pterygium	265
Diamond Knife,	
- AK Micrometer.....	161
- Arcuate Incision	161
- Clear Corneal	68
- Glaucoma	105
- LRI	164-165
- Micro Incision	69
- Micrometer	161
- Phaco	68
- Step	165
- Subretinal.....	182
- Trapezoid	68
- Tunnel.....	68
Dieffenbach Serrefine (Bulldog Clamp)	16, 266
Dilator, Lacrimal	258
Dilator, Small Pupil	106
Disposable Absorbing Sponge	27, 155
Disposable Blade	18, 58, 261
Disposable Cannula	52, 72-74, 81-84, 195, 198
Disposable Corneal Punch	140
Disposable Diamond Knife Cleaning Block	70
Disposable Eye Shield	27
Disposable Instrument Wipe	70
Disposable Iris Retractor	107
Disposable Knife	62-63
Disposable Marking Pad	141
Disposable Marking Pen	151
Disposable Vitrectomy Lens.....	221
Dissecting Forceps	247, 266
Dissector, Conjunctiva	230
Dissector, Corneal	172
Dissector, Epithelial	159
Divider, Lens Nucleus	101
DLEK Instrument	172-173
DLEK Scissors	173
Donnenfeld LRI Diamond Knife	164
Donor Marking Punch, Barron	140
Donor Tissue Insertion Forceps	173
Donor Tissue Insertion Spatula	172
Donor Tissue Manipulator	172
Double Fixation Corneal Forceps	142
Dressing Forceps	23, 247, 266
Drill Pterygium	265
Drysdale Nucleus Manipulator	34, 95
DSEK Instrument	172-175
Durrie LASIK Wire Speculum	227

E

Eckhardt ILM Forceps	185-186, 202, 207
EcoLine® Titanium Instrument, PMS-	47
Economy Magnifying Loupe	70
Elevator & Repositor, LASIK	156
Elevator, Intralase Flap	156
Elevator, LASIK Flap	152



PRODUCT DESCRIPTION PAGE

Elevator, Periosteal	261
Elschnig Fixation Forceps	247
Endothelial Grasping Forceps, Busin	175
Endothelial Implantation Guide, Busin	175
Endothelial Insertion Forceps	175
Endothelial Irrigating Stripper	175
Enucleation Scissors	267
Enucleation Snare, Foster	267
Enucleation Spoon, Wells	267
Enucleation-Evisceration Surgery Set	267
Epithelial Dissector	159
Epithelial Flap Repositor	158
Epithelial Micro Hoe	158
Epithelial Peeler	159
Epithelial Spatula	158
Epithelium Removal Knife	157
Ernest-McDonald IOL Forceps	124-125
Evisceration Spoon, Bunge	267
Excision Scissors, DLEK	173
Explantation Instrument, Lens	132-133
Eye Caliper, Castroviejo	33, 57
Eye Knife, disposable	62
Eye Lid Retractor, Jaffe	54, 227-228
Eye Magnet and FB Loop	264
Eye Point, Cellulose	27
Eye Scissors, Ring Handle	
-Enucleation	267
-Iris	262, 265
-Pterygium	265
-Standard	16
-Strabismus	16
-Tenotomy	59
-Universal	262
Eye Shield	27, 155
Eye Spear	27, 155
Eye Speculum,	
-Aspirating	54-55, 148, 228-229
-Bangerter	254
-Barraquer	17, 54, 226
-Castroviejo	17, 242
-Chu Aspirating	228
-Cook	226, 265
-Corcelle	238
-Corcelle-Legrand	238
-Glaucoma	105, 230-231
-Innovative	226-229
-Kershner Reversible	149
-Kratz-Barraquer	17, 54, 227
-LASIK	148, 227-228
-Lancaster	28
-Lieberman	32, 55, 245
-Phaco	17, 91
-Pley	238
-Shapira, DSEK	174
-SuperDrainer Suction	229
-Takeda Infant Child	226
-Thorlakson, LASIK	228
-Titanium	32, 148, 168
Eye Sphere	267
Eye Thermocauter	212

F

Fascia Needle, Wright	256
Faulkner Lens Holding Forceps	43, 123
Fechtner Conjunctiva Forceps	60, 230
Filter Retainer	287
Filter Sterilization	283, 285, 287
Finder Hook, Helveston	252

PRODUCT DESCRIPTION PAGE

Fine Tying Forceps	252
Fine Universal Lens Folder	124
Fine-Ikeda Micro Capsulorhexis Forceps	121
Fine Irrigating Phaco Chopper	239
Fine-Thornton Fixation Ring/Incision Guide	162
Fine-Thornton Globe Fixation Ring	56, 168
Fishkind Phaco Speculum	17
Fixation Forceps,	
- Conjunctiva	60, 247, 256-257
- Corneal	44, 61, 142-146, 249-250
- Globe	253
- Muscle	211
- Muscle Resection	254
- Paracentesis	60
- Scleral	61, 247, 253
- Strabismus	211
- Superior Rectus	254
- Suture	23, 44, 61, 142-145, 249-250
Fixation Hook, Gillies Skin	262
Fixation Pick, Scleral Depressor-	210
Fixation Plate, Trocar	200
Fixation Ring, Globe	56, 150, 162, 168
Fixation Ring, Scleral	150
Fixed Sclerotomy Caliper, Braunstein	208
Flap Conformer, LASIK	152
Flap Elevator, Intralase	156
Flap Elevator, LASIK	152
Flap Forceps, LASIK	153
Flap Lifter, Intralase	156
Flap Manipulator, Intralase	156
Flap Repositioner, Intralase	156
Flap Repositioner, LASEK	158
Flap Retractor & Protector, LASIK	152
Flap Separator, LASIK	152
Flap Smoother, LASIK	152
Flap Spatula, Intralase	156
Flap Spatula, LASIK	152, 156
Flat Sterilization Container	286
Flexible Iris Retractor	107
Flieringa Scleral Fixation Ring	150
Foldable Lens Injection System	126-128
Foldable Soft Lens Insertor	123-125
Forceps, Artery	16, 266
Forceps, Bipolar Coagulation	269
Forceps, Capsulorhexis	41, 76-77, 121, 232-233, 251
Forceps, Chalazion	256-257
Forceps, Cilia	256, 264
Forceps, Coagulation	269
Forceps, Conjunctiva	60, 230, 247, 256-257
Forceps, Corneal (see Corneal Forceps)	
Forceps, Dissecting	23, 247, 266
Forceps, Dressing	23, 247, 266
Forceps, DSEK	173-175
Forceps, English pattern	257
Forceps, Epithelial Flap	153
Forceps, Fixation	144-145, 247, 249-250, 253
Forceps, Fixation Titanium	40, 44-45, 142, 145, 234
Forceps, Foldable Lens	42, 123-124
Forceps, Foreign Body	187, 264
Forceps, French Style	236
Forceps, Globe Fixation	253
Forceps, Inamura Capsulorhexis	41, 77, 251
Forceps, Iris	23, 247
Forceps, Italian Design	240
Forceps, Jeweler's	264
Forceps, Klassik Eye	232
Forceps, LASIK	153
Forceps, Lens Holding	43, 122-123
Forceps, Lid	256-257



Forceps, Lister's	257
Forceps, MICS	120-121, 233, 251
Forceps, Mosquito	16, 266
Forceps, Muscle	211
Forceps, Nucleus	101
Forceps, Paracentesis	60
Forceps, Phakic IOL	169
Forceps, Pickup & Folding Forceps	123
Forceps, Ptosis	256
Forceps, Retinal Nail Holding	209
Forceps, Scleral Fixation	247, 253
Forceps, Scleral Plug	199
Forceps, Sleeve Spreading	223
Forceps, Soft Lens Folding	123
Forceps, Soft Lens Insertion	124-125
Forceps, Soft Lens Loading	42, 123
Forceps, Sphenoidal Punch	263
Forceps, Strabismus	211
Forceps, Subretinal	182
Forceps, Superior Rectus	254
Forceps, Suture Removal	144
Forceps, Suture (see Suturing Forceps)	
Forceps, Tension Ring	134
Forceps, Tissue	23, 247, 266
Forceps, Titanium	40-45, 142-145, 153, 234
Forceps, Towel	266
Forceps, Tying	43, 144, 232, 250
Forceps, Utility	256
Forceps, Vitrectomy Lens	221
Forceps, Vitreoretinal	180-182, 185-186, 202, 207
Foreign Body Forceps	187, 264
Foreign Body Gouge	264
Foreign Body Lever	264
Foreign Body Magnet, Intraocular	187
Foreign Body Needle	264
Foreign Body Pencil (Magnet and FB Loop)	264
Foreign Body Spud	264
Foster Enucleation Snare	267
Francis Chalazion Forceps	257
Freeman Aspirating LASIK Speculum	148
Freer Periosteal Elevator	261
French Style Cataract Instrument	236-239
Fukasaku Epithelium Removal Knife	157
Fukasaku LASIK Flap Spatula	157
Fukasaku Phaco Splitter & Iris Pusher	36, 95
Fukasaku Sub-Tenon's Cannula	53
Fyodorov Phaco Fixation Ring	33, 56

G

Galand Incision Marker	57
Galezowski Lacrimal Cannula	260
GasMate® Kit	220
GasMate® Tamponade	220
Gass Retinal Detachment Hook	211
Gass Corneoscleral Punch	263
Genisi LASIK Speculum	148
Gerzog Surgical Mallet	262
Giannetti MICS Capsulorhexis Forceps	236, 240, 251
Gill Corneal Knife	265
Gillies Skin Hook	256
Gills Cortex Aspirating Cannula	81
Gills-Vannas Capsulotomy Scissors	78
Gills-Welsh Capsulotomy Scissors	79
Gimbel LASIK Stabilisation Ring	56
Girard Corneoscleral Forceps	44-45, 234
Gispel DSAEK AC Maintainer	174
Glass Syringe, All	20, 74
Glaucoma Diamond Knife	105

Glaucoma Speculum	105, 230-231
Glaucoma Punch	104-105, 263
Glaucoma Surgery Set	268
Globe Fixation Ring	33, 56, 150
Gouge, Foreign Body	264
Graefe Strabismus Hook	211
Greene LASIK Wire Speculum	227
Gross Sub-Tenon's Cannula	108
Guide, Endothelial Implantation	175

H

Haefliger Phaco Cleaver	238
Halstead Mosquito Artery Forceps	16, 266
Handle, Aluminum	66, 94, 130, 192-193
Handle, Cautery	269
Handle, Chuck	18, 58
Handle, Scalpel Blade	261
Handle, Trephine Blade	138
Handpiece, Backflush	194-195, 203
Handpiece, Bimanual I/A	112-114, 239
Handpiece, Coaxial I/A	110, 239
Handpiece, Teflon	20, 83
Handpiece, Titanium	100
Harms-Colibri Forceps	44, 249
Harms Trabeculotome	263
Harms Tying Forceps	24
Hartmann Mosquito Artery Forceps	266
Hartmann-Halle Nasal Speculum	262
Helsinki Nucleus Hydrodissector	88
Helveston Finder Hook	252
Helveston Fixation Forceps	253
Helveston Muscle Hook	252
Helveston Scleral Ruler	252
Helveston Strabismus Surgery Set	252
Helveston "Teaser" Hook	252
Helveston Tissue Retractor	252
Helveston Tying Forceps	252
Hersh LASIK Retreatment Forceps	153
Heslin Anterior Chamber Maintainer	72
Hessburg Barron Vacuum Trephine	140
High-Flow Fluid Filter, Disposable	217
High Viscosity Infusion Cannula	198, 215
Hoffer Optical Zone Marker	141, 160
Hofman-Polack Corneal Forceps	142
Holder & Introducer, Sphere	267
Honan Balloon (Intraocular Pressure Reducer)	268
Hook, DLEK	172
Hook, Finder	252
Hook, Fixation	262
Hook, IOL	21, 35, 131, 246
Hook, Iris	21, 35, 80, 246
Hook, Lens Manipulating	21, 35, 131, 246
Hook, Muscle	211, 252, 267
Hook, Muscle Resection	254
Hook, Retinal Detachment	211
Hook, Strabismus	211, 246, 252
Hook, "Teaser"	252
Hoskin Corneal Forceps	144
Hunt Chalazion Forceps	257
Hybrid Phaco Prechopper, Akahoshi	39, 97
Hydrodissection Cannula	88-89
Hydroelineation Cannula	88

I

I/A Cannula, Perfluorocarbon	218-219
I/A Cannula, Simcoe	20, 82
I/A Handpiece, Bimanual	112-114, 239



PRODUCT DESCRIPTION PAGE

I/A Handpiece, Coaxial	110, 239
I/A System, Bimanual.....	112-114, 239
I/A System, Coaxial.....	110-111, 239
ICL® Instruments	168-171
Identification Plate, Steri-Container	283
Ikeda II Micro Capsulorhexis Forceps	121
Implant, Scleral Sponge	224
Implant, Silicone Retinal	222-223
Inamura MICS Capsulorhexis Forceps	41, 77, 251
Incision Caliper, Osher.....	57
Incision Gauge, Memmen	57
Incision Guide, Lu-Mendez.....	162
Incision Marker, Galand.....	57
Incision Marker, Thornton	141
Infant Wire Speculum	17, 54, 226
Infusion Cannula, AC	72, 108
Infusion Cannula, VFI	191, 198, 203, 216-217
Infusion Handle, McIntyre	83, 100
Injection Cannula, Air	20, 73
Injection Cannula, Perfluorocarbon	217-218
Injection Cannula, VFI	102, 216
Injection Needle, Anesthesia	52
Injection Needle, Subretinal BSS	219
Injector, Soft Lens	126-128
Injector, Tension Ring	134
Injector, Viscous Fluid Pressure.....	217
Ink Marking Pad	141
Ink Marking Pen	151
Innovative Eye Speculum	226-229
Insert Cannula Holder	279
Insert Instrument Rack	279
Insert Instrument Tray	285, 291
Insert Wire Tray.....	279, 285
Inserting Forceps, Soft Lens	42, 124-125
Insertion Forceps, Donor Tissue	173, 175
Insertion Spatula, Donor Tissue	172
Instrument Basket	275, 287
Instrument Box	291-292
Instrument Case	291-292
Instrument Cassette	290
Instrument Container.....	282-286
Instrument Fixation Bar	277, 290
Instrument Holding Bar	275, 281, 290
Instrument Holding Rack	290, 293
Instrument Support, Silicone	277
Instrument Tip Protector	26, 183
Instrument Tray	275-279, 285, 294
Instrument Wipe	70
Instrument Set by surgical discipline,	
-Basic Eye	28
-Cataract Clear Corneal	48
-Cataract (ECCE)	86-87
-Cataract (Phaco)	98-99
-Chalazion	257
-Corneal Transplant (Keratoplasty)	146-147
-Enucleation-Evisceration	267
-Implantable Contact Lens.....	170
-Lacrimal (DCR & Intubation)	261
-LASEK	159
-LASIK.....	157
-Lid-Conjunctiva/Trichiasis-Ptoxis	256
-Limbal Relaxing Incision	164
-Phaco Manual Fracture	100-101
-Phaco Posterior Capsule Rupture	108
-Phaco-Trabeculectomy	105
-Phakic Lens	170
-Primary LASIK	157
-PRK Basic.....	156
-Pterygium.....	265

PRODUCT DESCRIPTION PAGE

-Retinal Detachment	212
-Strabismus	252
-Vitrectomy	213
Internal Incision Caliper	57
Internal Incision Gauge	57
Intralasik Flap Elevator	156
Intralasik Flap Lifter	156
Intralasik Flap Manipulator	156
Intralasik Flap Spatula	156
Intraocular Foreign Body Forceps	187
Intraocular Foreign Body Magnet	187
Intraocular Pressure Reducer, Honan Balloon	268
Intrastromal Corneal Ring, MicroKer®.....	167
Intrastromal Corneal Dissector.....	172
Introducer, Carter Sphere Holder &	267
IOL Cutter.....	132-133
IOL Cutting Scissors, Osher	132
IOL Folding Forceps	123-125
IOL Holding Forceps	43, 122
IOL Hook	21, 35, 131, 246
IOL Injection System	126-128
IOL Insertion Forceps.....	42, 124-125
IOL Instrument Tip, removable	131
IOL Manipulator	21, 35, 131, 246
IOL Toric/LRI Marker	163
Iridectomy Forceps, Micro	120-121
Iridectomy Scissors, Micro	120-121
Iris & IOL Manipulator	21, 35, 131, 246
Iris Dilator, Small Pupil	106
Iris Forceps.....	23, 247
Iris Hook & Lens Manipulator	21, 35, 131, 246
Iris Hook, Micro	35, 80, 246
Iris Pusher & Phaco Splitter	36, 95
Iris Repositor	80, 246
Iris Retractor & Lens Manipulator	35, 131
Iris Retractor, Flexible	107
Iris Scissors, Barraquer	22
Iris Scissors, Bonn	265
Iris Spatula	80, 246
Irrigating Cannula	73, 81, 102-103
Irrigating Cystotome	74
Irrigating Handpiece, Bimanual.....	112, 239
Irrigating Handpiece, Teflon	83
Irrigating Handpiece, Titanium	100
Irrigating Lens Loop	108
Irrigating Nucleus Fragment Cannula	100
Irrigating Nucleus Hydrodissector	88-89
Irrigating Nucleus Manipulator, Neuhann	239
Irrigating Phaco Chopper.....	239
Irrigating Silicone Bulb	20, 72
Irrigating Silicone Sleeve.....	110, 239
Irrigating Stripper, Endothelial.....	174
Irrigating Syringe, Glas	20, 74
Irrigating Vectis.....	81, 102
Irrigator System, AC	20, 72
Italian Design Eye Instruments	240-243

J

Jaeger Lid Plate	256
Jaffe-Bechert Nucleus Rotator	34, 80, 95
Jaffe (Bonn) Suture Tying Forceps.....	45, 232, 250
Jaffe Eyelid Retractor Set	54, 227
Jaffe Aspirating Eyelid Retractor	228
Jaffe Capsulorhexis Forceps	232
Jaffe Stitch Scissors	59
Jaffe Tying Forceps.....	43, 232, 250
Jameson Muscle Forceps	211
Jameson Muscle Hooks	267



Janach-Colibri Corneal Forceps	240
Janach Micro Capsulotomy Scissors	79
Jansen Bayonet Dressing Forceps	266
Jayle's Corneal Suture Forceps	257
Jensen-Lu Capsule Polisher	84
Jeweler's Forceps	264

K

Kansas-Alfonso Cutting Platform	100
Kansas-Alfonso Nucleus Bisector	100
Kansas-Alfonso Nucleus Trisector	100
Kansas Lens Nucleus Loop	235
Kansas Nucleus Removal Forceps	101
Karate Phaco Prechopper, Akahoshi	39, 97
Katzen LASIK Flap Separator	152
Katzin Corneal Transplant Scissors	143, 248
Keener Lens Nucleus Divider	101
Kellan Hydrodissection Cannula	88
Kellan Hydroelineation Cannula	88
Kelly Descemet's Membrane Punch	104, 263
Kelman-McPherson Forceps	43, 232, 250
Keratometer, Astigmatic	160
Keratoplasty Surgery Set (Corneal Transplant)	146-147
Kerrison Sphenoidal Punch Forceps	263
Kershner Micro Capsulorhexis Forceps	120
Kershner Reversible Eye Speculum	149
Kidney Dish	292
Kinoko Glaucoma Lid Retractor	231
Klassik Eye Forceps	232
Knapp Lacrimal Retractor	262
Knapp Strabismus Scissors	16
Knife, Corneal	265
Knife, Diamond	68-69, 164-165, 182
Knife, Disposable	58, 62-63
Knife, Epithelium Removal	157
Knife, Membrane Spatula-	192
Knife, Micrometer Diamond	161
Knife, PRK/LASIK Spatula	159
Knife, Sapphire	64, 67
Knife, Scleral	58
Knife, Stiletto MVR	62, 201
Koch II Nucleus Spatula	34, 80, 246
Koch Fixation Forceps	60
Koch Phaco Chopper	95, 238
Kraff-Moria Corneal Colibri Forceps	236
Kraff-Lieberman Eye Speculum	168
Kraff Suturing Forceps, Bonn-	236
Kratz Capsule Polisher	84
Kratz-Barraquer Wire Speculum	17, 54, 227, 245
Kroll Vitrectomy Scissors	179
Krumeich Intrastromal Corneal Ring	167
Kuglen Lens Manipulator	21, 35, 131, 246
Kuhnt Corneal Scarifier	265

L

Labarre Lacrimal Cannula	260
Lacrimal Cannula	260
Lacrimal Chisel, West	261
Lacrimal Dilator	258
Lacrimal Intubation Set	259
Lacrimal Probe	258
Lacrimal Probe Cannula	258
Lacrimal Retractor, Knapp	262
Lacrimal Sac Retractor	262
Lacrimal Surgery Set	261
Lambert Chalazion Forceps	257
Lancaster Eye Speculum	28

Landers Vitrectomy Lens Forceps	221
LASEK Alcohol Cannula	158
LASEK Alcohol Funnel	158
LASEK Epi Dissector	159
LASEK Epi Flap Repositor	158
LASEK Epi Micro Hoe	158
LASEK Epi Peeler	159
LASEK Epi Spatula	158
LASEK Instruments	158-159
LASEK Instrument Set, Camellin Style	159
LASEK Trephine	158
LASIK Aspirating Speculum	148, 228
LASIK Cannula	154
LASIK Drain Ring	155
LASIK Eye Kit	155
LASIK Femtosecond Instruments	156, 228
LASIK Fixation Ring	150
LASIK Flap Elevator & Repositor	156
LASIK Flap Separator	152
LASIK Flap Smoother	152
LASIK Flap Spatula/Elevator	152
LASIK Forceps	153
LASIK Hinge Protector	150
LASIK Instruments	148-157
LASIK Marker	151
LASIK Primary Instrument Set	157
LASIK Shield, PVA	155
LASIK Spear, PVA	155
LASIK Speculum	148-149, 227-228
LASIK Stabilizing Ring	56, 150
LASIK/PRK Fixation Ring	150
LASIK/PRK Hockey Knife	157
LASIK/PRK Spatula	156
LASIK/PRK Spatula Knife	159
Legrand Eye Speculum, Corcelle-	238
Lens Crushing Knife	235
Lens Cutter	132-133
Lens Folding Forceps	123-125
Lens Holding Forceps	122-123
Lens Injector System	126-128
Lens Insertion Forceps	123-125
Lens Loop, Irrigating	108
Lens Manipulator, Kuglen	21, 35, 131, 246
Lens Manipulator, Neuhann Irrigating	239
Lens Nucleus Divider	96-97, 101
Lens Nucleus Rotator, Jaffe-Bechert ..	21, 34, 80, 95, 246
Lens Pusher & Manipulator, IOL	21, 35, 131, 246
Lens Vitrectomy, disposable	221
Lester Fixation Forceps	247
Lester Lens Pusher & Manipulator ..	21, 35, 131, 246
Lever, Plange Foreign Body	264
Lewicky Anterior Chamber Maintainer	20, 72
Lewicky Lens Manipulating Hook	131
Lid Forceps	256-257
Lid Plate, Jaeger	256
Lid Retractor, Desmarres	17, 245
Lid Retractor, Glaucoma	230-231
Lid Retractor, Jaffe Eye	54, 227-228
Lid Speculum, Schott	105
Lid Surgery Set	256
Lieberman, Eye Speculum	32, 55, 228, 245
Liebrich Lacrimal Probe	258
Ligabue Scraper & Nucleus Manipulator	242, 246
Lindstrom PRK/LASIK Spatula	156
Lister's Conjunctiva Forceps	257
Livorno IOL Folding Forceps	123
Livisolo ICL® Loading Forceps	169
Livisolo ICL® Removal Forceps	169
Loop, Irrigating Lens	108



PRODUCT DESCRIPTION PAGE

Loop, Snare Wire	101, 267
LRI Diamond Knife	164-165
LRI Fixation/Degree Ring	162
LRI Guide/Fixation Ring	162
LRI Marker	163
LRI Marker/Degree Gauge	163
LRI Marker/Toric IOL	163
LRI Slit Lamp Diamond Knife	164
LRI Slit Lamp Gravity Marker	164
LRI Surgery Set	164
Lucae Bayonet Dressing Forceps	266
Luer & Luer-Lok Cannula Adaptor	111
Luer-Lok Cleaning Adaptor	118, 183
Lu LASIK Marker	151
Lu-Mendez LRI Guide/Fixation Ring	162
Luntz-Dodick Trabeculectomy Punch	105, 263

M

Machat LASIK Speculum	148
Maeda Eye Speculum for Glaucoma	231
Maeda SuperDrainer Surgical Aspirator	229
Maeda SuperDrainer Suction Speculum	229
Magnetic Probe, Intraocular Foreign Body	187
Magnifying Loupe, illuminated	70
Magnifying Vitrectomy Lens	221
Mallet, Gerzog Surgical	262
Maloney Astigmatic Keratometer	160
Manche LASIK Flap Forceps	153
Manipulating Hook, IOL	21, 35, 131, 246
Manipulating Hook, DLEK	172
Manipulator, Flap	152, 156, 158
Manipulator, ICL®	171
Manipulator, Intralase	156
Manipulator, Iris	21, 35, 80, 95, 246
Manipulator, IOL	21, 35, 131, 246
Manipulator, Nucleus	34, 37, 80, 95, 246
Manual Phaco Fracture Instrument	100-101
Manual Small Incision Cataract Set	235
Marker, Arcuate Incision	162-163
Marker, Astigmatism	162-163
Marker, Axis	160
Marker, Corneal	140-141, 151
Marker, Descemet's Membrane	174
Marker, Flap Alignment	151
Marker, Incision	57
Marker, LASIK	151
Marker, LRI	162-164
Marker, LRI Slit Lamp	164
Marker, Meridian	162
Marker, Optic Zone	141, 160, 173
Marker, Radial Incision	141
Marker, Scleral	210
Marker, Sclerotomy	208
Marker, Suture Placement	141
Marking Pad	141
Marking Pen	151
Marking Punch, Donor Corneal	140
Markomanolakis Suction Speculum	229
Masket Capsulorhexis Forceps	41, 232-234, 251
Masket Phaco Spatula	37
Maumenee-Colibri Forceps	234, 249
Maumenee Tying Forceps	234
McIntyre Anterior Chamber Cannula	73
McIntyre Infusion Handle	83, 100
McPherson Forceps,	250
- Bipolar Coagulation	269
- French Style	236
- Italian Design	240

PRODUCT DESCRIPTION PAGE

- Klassik Eye	232
- Titanium	43
McPherson-Westcott Conjunctiva Scissors	59
McReynolds Pterygium Scissors	265
Medicine Cup	292
Meibomian Gland Compressor (MGC)	255
Mellinger Phaco Speculum	91
Membrane Instrument, Vitreoretinal	192-193
Memmen Incision Gauge	57
Mendez Degree Gauge	160
Mendez LASIK Forceps	153
Mendez LASIK Marker	151
Meridian Marker, Bores Two-Ray	162
Metal Ruler	26
Meyhoefer Chalazion Curette	257
Micro Capsulorhexis Forceps	120-121
Micro Capsulotomy Scissors, Spring Handle.....	78-79
Micro Capsulotomy Scissors, Squeeze Handle	120-121
Micro Corneal Scissors	143, 248
Micro Hoe, LASIK	158
Micro Incision Diamond Knife	69
Micro Instrument Tray	294
Micro Iris Hook, Bonn	35, 80
Micro Iris Scissors	22, 248
Micro Membrane Punch	104
Micro Needle Holder	145, 241
Micro Needle Holder, French Style	237
Micro Needle Holder, Titanium	46, 145, 235
Micro Nucleus Spatula	34, 246
Micro Scissors Tip, removable	120-121
Micro Vitreoretinal Knife, Stiletto	201
MICS Bimanual I/A System	239
MICS Coaxial I/A System	239
MICS Capsulorhexis Forceps	233, 251
MICS Diamond Knife	69
MICS Iridectomy Forceps	120-121
MICS Iridectomy Scissors	120-121
MICS Irrigating/Aspirating Handpiece	239
MICS Sapphire Knife	65
Miniature Edged Blade	18, 58
Mini Container, Aluminium	284
Minitainer Instrument Sterilizing Tray	294
Moody Fixation Forceps	253
Moorfield's Conjunctiva Forceps	257
Mosquito Forceps	16, 266
Muscle Forceps, Jameson	211
Muscle Hook	246, 252, 267
Muscle Recession Hook	254
Muscle Resection Clamp	254
Muscle Surgery Set, Helveston	252
MVR Knife, Stiletto	201

N

Nagahara Karate Phaco Chopper	246
Nagahara Phaco Chopper	21, 36, 95, 246
Nagahara Phaco Chopper, Irrigating	239
Nagahara/Sinskey Phaco Spatula	37
Nasal Speculum, Hartmann-Halle	62
Needle,	
- Anesthesia	52
- Backflush	194
- Fascia, Wright	256
- Foreign Body	264
- Peribulbar	52
- Phaco	117
- Retrobulbar	52
- Subretinal BSS Injection	219
Needle Holder,	



- Anis	46
- Barraquer	25, 46, 145, 241
- Castroviejo	25, 46, 237, 241
- Catford	46
- French Style	237
- Titanium	46, 145, 235
- Troutman	241
- Troutman-O'Brien	237
Needle & Gouge, Foreign Body	264
Neuhann Irrigating Nucleus Manipulator	239
Nevyas Capsulorhexis Forceps	232-233
Nevyas Soft IOL Manipulator	131
New Trephine Blade	138
New Trephine Handle	138
Nichamin Irrigating Chopper	116
Nichamin LRI Diamond Knife	165
Nichamin LRI Fixation/Degree Ring	162
Nichamin Nucleus Hydrodissector	89
Nichamin Phaco Chopper	235, 246
Nishi Schlemm's Canal Scissors	104
Nucleus Bisector	100
Nucleus Chopper	21, 36-37, 95, 235, 246
Nucleus Chopper, Irrigating	116, 239
Nucleus Cracking Forceps	101
Nucleus Cutting Platform	100
Nucleus Divider	101
Nucleus Fragment Cannula	100
Nucleus Fragment Forceps	101
Nucleus Hydrodissector	88-89
Nucleus Manipulator	21, 80, 246
Nucleus Manipulator, Irrigating	239
Nucleus Manipulator, Titanium	34-37, 235
Nucleus Prechopper, Akahoshi	39, 97
Nucleus Removal Cannula	81
Nucleus Removal Forceps, Kansas	101
Nucleus Ring Sustainer, Akahoshi	38
Nucleus Rotator, Jaffe-Bechert	21, 47, 80, 95, 246
Nucleus Spatula	34, 37, 80, 246
Nucleus Splitter/Completer	39, 96
Nucleus Splitter Forceps, Salz	31
Nucleus Sustainer	38, 96
Nucleus Trisector	100
Nucleus Vectis, Irrigating	81, 100
Nugent Utility Forceps	256
Nurse Scissors	212, 281

O

O'Brien Micro Needle Holder, Troutman-	237
O'Connor Scleral Depressor-Marker	210
Ocular Stick, Pro-ophta®	27
Oculo Pressor Pressure Reducer	268
Oftalblu® Trypan blue	77
Ong Capsulotomy Scissors	78, 241
Operating Scissors	212, 266
Ophthalmic Basic Instrument	16-28
Ophthalmic Drill, Pterygium	265
Ophthalmic Titanium Instruments	29-48, 234-235
Optic Zone Marker	141, 160, 173
Orbital Retractor	211
O-Ring Replacement Set	111
Osher Incision Caliper	57
Osher IOL Cutting Scissors	132
Osher Needle Guide	135
Osher Y-Hook Manipulator	242

P

Pad, Marking	141
Pannu-Kratz Aspirating Wire Speculum	228
Paper Filter	283, 285, 287
Paper Label/Indicator	283
Paracentesis Fixation Forceps	60
ParsMate® 23G Trocar Kit	205
Paton Corneal Spatula & Spoon	142
Paufique Suture Forceps	145, 249
Pearce Nucleus Hydrodissector	88
Pediatric Eye Speculum	226
Pediatric Scleral Depressor, Spaide	210
Peeler, LASEK Epithelial	159
Pen, Marking	151
Peribulbar Needle, Atkinson	52
Periosteal Elevator, Freer	261
Perone LASIK Flap Forceps	153
Peyman Silicone Oil Cannula	216
Phaco-Cataract Surgery Set	98-99
Phaco Chopper	21, 95, 246
Phaco Chopper, Irrigating	239
Phaco Chopper, Karate	246
Phaco Chopper, Phaconit	235, 246
Phaco Chopper, Titanium	36-37, 235
Phaco Cleaver, Haefliger	238
Phaco Quick-Chopper	235, 246
Phaco Diamond Knife	68-69
Phaco Disposable Knife	62-63
Phaco Eye Speculum	17, 91
Phaco Fixation Ring	33, 56
Phaco Instruments	88-109
Phaco Instrument Tip, removable	95
Phaco Manipulator	34, 80, 95, 246
Phaco Manual Fracture Instrument	100-101
Phaco Posterior Capsule Rupture Instrument	108
Phaco Sapphire Knife	64-67
Phaco Spatula	37, 80, 246
Phaco Splitter	36, 95, 246
Phaco-Trabeculectomy Surgery Set	105
Phaconit Quick-Chopper	235, 246
Phakic IOL Forceps	169
Phakic Lens Set	170
Pick, Membrane	193, 207
Pick, Scleral Fixation	210
Pierse Corneal Forceps	232, 236
Pigtail Probe, Worst	262
Pisacano Nucleus Rotator	238
Plange Foreign Body Lever	264
Plastic Eye Shield	27
Plastic Safety Seal	283
Plastic Sterilization Tray	294
Plate, Identification	283
Plate, Jaeger Lid	254
Plate, Silicone Nap	280, 293
Plate, Trocar Fixation	200
Platform, Nucleus Cutting	100
Platinum-Iridium Cautery Tip	269
Pley Eye Speculum	238
Plug, Cannula	200
Plug, Scleral	199
Plug Forceps, Scleral	199
PMS EcoLine® Titanium Instruments	47
PMS Registered Trademark	136
Polack Double Fixation Corneal Forceps	142
Posterior Capsule Polisher	84
Posterior Capsule Rupture Instruments	108
Prechopper, Phaco	39, 97
Precision Magnetic Probe, IOFB	187



PRODUCT DESCRIPTION PAGE

Pressure Injector, Viscous Fluid	217
Pressure Reducer	268
Primary LASIK Surgery Set	157
PRK/LASIK Basic Instrument Set	156
PRK/LASIK Fixation Ring	150
PRK/LASIK Flap Elevator & Repositor	156
PRK/LASIK Flap Lifter & Manipulator	156
PRK/LASIK Flap Removal Knife (Hockey Style)	157
PRK/LASIK Flap Spatula	157
PRK/LASIK Flap Spatula & Elevator	156
PRK/LASIK Spatula-Knife	159
Probe Cannula, Lacrimal	258
Probe, Lacrimal	258
Probe, Pigtail	262
Probe, Trabeculotomy	263
Protective Cap	183
Protective Eye Shell	255
Protector, Instrument Tip	26
Protector, VR Instrument Tip	183
Protector, LASIK Hinge	150
Protector & Retractor, Flap	152
Pterygium Diamond Burr	265
Pterygium Diamond Wheel	265
Pterygium Drill	265
Pterygium Instruments	265
Pterygium Surgery Set	265
Ptosis Forceps, Berke	256
Punch Forceps, Sphenoidal	263
Punch, Corneal Trephine	139
Punch, Corneoscleral	263
Punch, Descemet's Membrane	104, 263
Punch, Donor Corneal Marking	140
Punch, Trabeculectomy	104, 263
Punctum Dilator, Sisler	258
Pupil Dilator	106-107
Pusher, Fukasaku Phaco Splitter & Iris	36, 95
Pusher, Lester Lens	21, 35, 131, 246
Putterman Muscle Resection Clamp	254
PVA LASIK Absorbing Sponge	155

Q

Quick-Chopper, Phaco	246
Quickert Lacrimal Intubation Probe	259

R

Rack, Insert Instrument	279
Rack, Instrument Holding	290
Rack, Silicone Cannula	73, 293
Rack, Silicone Instrument	293
Radial Incision Marker, Thornton	141
Rainin Irrigating Cannula	81
Rainin Suturing Cannula Set	72
Ramley Sponge Holding Forceps	266
Razor Blade	18
Razor Blade Breaker & Holder	18
Recession Muscle Hook	254
Reinforced Lacrimal Cannula	260
Remky-Polack Double Fixation Corneal Forceps	142
Rentsch Manipulator & Iris Retractor	35, 131
Repositor & Elevator, LASIK	156
Repositor, Iris	80, 246
Repositor, Epithelial Flap	158
Resection Muscle Clamp	254
Reservoir, Silicone Backflush	194, 203
Retinal Detachment Hook, Gass	211
Retinal Detachment Surgery Set	212
Retinal Nail	209

PRODUCT DESCRIPTION PAGE

Retinal Nail Holding Forceps	209
Retractor, Eyelid	54, 227-228
Retractor, Flexible Iris	107
Retractor, Iris & Lens Manipulator	21, 35, 131, 246
Retractor, Lacrimal Sac	262
Retractor, LASIK Flap	152
Retractor, Lens Manipulator & Iris	21, 35, 131, 246
Retractor, Lid	17, 245
Retractor, Orbital	211
Retractor, Scleral Flap	230
Retractor, Tissue	252
Retrieval Hook, Crawford	259
Retrolbulbar Needle, Atkinson	52
Reversed Simcoe I/A Cannula	82
Reversed Sinskey Hook, DLEK	172
Reversible Eye Speculum, Kershner	149
Ring, Capsular Tension	134
Ring, Corneal	167
Ring, Degree Gauge	160, 162
Ring, Flieringa Scleral Fixation	150
Ring, Globe Fixation	56, 150
Ring, LASIK Drain	155
Ring, LRI Fixation/Degree	162
Ring, Scleral Fixation	150
Rongeur, Bone	262
Rosen Irrigating Chopper	239
Rosen Phaco Splitter	36, 95, 242, 246
Rotator, Jaffe-Bechert Nucleus	80, 95, 246
Rotator, Titanium Nucleus	34, 235
Rowen Phaco Spatula	37
Rubber Suction Cup	255
Ruedemann Lacrimal Dilator	258
Ruler, Metal	26
Ruler, Scleral Marking	252
Rust Prevention Spray	26
Rust Ring Remover, Corneal	264
Rycroft Air Injection Cannula	73

S

Salz Nucleus Cracking Forceps	101
Sapphire Blade, Cataract	67
Sapphire Knife, Cataract	64
Sautter Nucleus Hydrodissector	88
Scalpel Blade	261
Scalpel Handle	261
Schepens Orbital Retractor	211
Schiotz Tonometer	268
Schlemm's Canal Scissors, Nishi	104
Schocket Scleral Depressor	210
Schott Lid Speculum	105
Scissors, Bandage	281
Scissors, Capsulotomy	78-79
Scissors, Conjunctiva	59
Scissors, Corneal	143, 248
Scissors, DLEK	173
Scissors, Enucleation	267
Scissors, Eye	16, 262
Scissors, IOL Cutting	132
Scissors, Iridectomy	120-121
Scissors, Iris	22, 248, 265
Scissors, Janach Style	79
Scissors, Lamellar	173
Scissors, Micro Capsulorhexis	120-121
Scissors, Micro Iridectomy	120-121
Scissors, Nurse	212, 281
Scissors, Operating	212
Scissors, Pterygium	265
Scissors, Side Port Capsulotomy	120-121



Scissors, Standard Eye	16
Scissors, Stitch	22, 59
Scissors, Strabismus	16
Scissors, Stainless Steel-Titanium	22, 235
Scissors, Subretinal	182
Scissors, Surgical	266
Scissors, Suture Removal (Stitch)	22, 59
Scissors, Tenotomy	22, 59
Scissors, Universal	262
Scissors, Utility	281
Scissors, Vitreoretinal	179, 184, 186, 202, 207
Scissors, Worst Micro Capsulotomy	237
Scissors Tip, Removable VR	184, 186
Scissors Tip, Removable MICS	120-121
Scleral Blade, disposable	58
Scleral Depressor	210
Scleral Fixation Ring	150
Scleral Flap Retractor	230
Scleral Forceps, Girard Corneo-	44-45, 234
Scleral Knife	58
Scleral Planer, USC	104
Scleral Plug	199
Scleral Plug Forceps	199
Scleral Punch, Gass Corneo-	263
Scleral Ruler, Helveston	252
Scleral Shaver, USC	104
Scleral Sponge Implant	224
Sclerotomy Caliper, Braunstein Fixed	208
Seibel Phaco Chopper	36, 95
Seibel Foldable Lens Loader	123
Serrefine, Dieffenbach	16, 266
Shaaf Cilia & Foreign Body Forceps	264
Shahinian Lacrimal Cannula	260
Shapira Eye Speculum, DSEK	174
Sheets Irrigating Vectis	81
Shield, Base Plug	139
Shield, Eye	27
Shield, LASIK	155
Shinja Hara Scleral Depressor	210
Side Port Capsulotomy Scissors	120-121
Silicone Bulb	72
Silicone Cannula Rack	73, 293
Silicone Finger Mat	280
Silicone Finger Strip	279
Silicone Instrument Holder	281
Silicone Instrument Holding Bar	281
Silicone Instrument Rack	293
Silicone Instrument Support	277
Silicone Instrument Tray	159
Silicone Irrigation Sleeve	110, 239
Silicone Nap Plate	280
Silicone Oil	214-215
Silicone Oil Cannula	216-217
Silicone Oil Syringe	217
Silicone Reservoir, Backflush Handle	194, 203
Silicone Retinal Implant	222-223
Silicone Scleral Sponge Implant	224
Silicone "Squeeze Ledge"	277
Silicone Tip Backflush Cannula	195, 203, 206
Silicone Tubing, Replacement	26
Silicone Tubing Kit, Backflush	194
Simcoe Capsule Polisher	84
Simcoe Cortex Extractor	83
Simcoe I/A Cannula	82
Simpel LASIK Flap Elevator & Repositor	156
Sinsky II IOL Hook	21, 35, 131, 246
Sinsky Phaco Spatula, Nagahara-	37
Sinsky Reversed Hook, DLEK	172
Sisler Punctum Dilator	258

Slade LASIK Cannula	154
Slade LASIK Flap Spatula/Elevator	152
Slade LASIK Speculum	148, 227
Sleeve Spreading Forceps, Watzke	223
Slit Lamp Diamond Knife, Donnenfeld	164
Slit Lamp Gravity Marker, LRI	164
Slit Lamp Marker, LRI/Toric	164
Small Incision Pupil Dilator, Beehler	106
Smith US Army Utility Scissors	280
Snare Enucleation, Foster	267
Snare Wire, Twisted	267
Soft IOL Cutter	132-133
Soft IOL Manipulator, Nevyas	131
Soft Lens Folding Forceps	123-125
Soft Lens Holding Forceps	43, 123
Soft Lens Insertion Forceps	124-125
Solish Conjunctiva Forceps	60
Solution Bowl	292
Spaide Pediatric Scleral Depressor	210
Spaleck Lens Inserting Forceps	124-125
Spatula, Donor Tissue Insertion	172
Spatula, Iris	80, 246
Spatula, Epithelial	158
Spatula, Flap	157
Spatula, Membrane	207
Spatula, Nucleus	34, 80, 246
Spatula, Orbital	211
Spatula, Phaco	37, 246
Spatula, PRK/LASIK	156, 159
Spatula/Elevator, Intralase Flap	156
Spatula/Elevator, LASIK Flap	152
Spatula/Knife, Vinciguerra	159
Spatula & Spoon, Paton Corneal	142
Spear, Absorbing Eye	27, 155
Speciality Ophthalmic Instruments	226-269
Speciality Eye Instruments Catalogue	270
Speculum, Aspirating	54-55, 148, 228
Speculum, DSEK	174
Speculum, Eye	17, 54-55
Speculum, Glaucoma	105, 230-231
Speculum, Innovative Eye	226-229
Speculum, LASIK	148-149, 227-228
Speculum, "Little People"	226
Speculum, Nasal	262
Speculum, "Oriental Eye"	227
Speculum, Phaco	17, 91
Speculum, Titanium	32, 148, 168
Speculum, Wire	17, 54, 226-228
Sphere, Eye	267
Sphere Introducer & Holder, Carter	267
Splitter, Fukasaku Iris Pusher & Phaco	36, 95
Splitter, Rosen Universal Phaco	36, 95, 242
Sponge Absorbing	27, 155
Sponge Implant, Scleral	224
Spoon, Enucleation	267
Spoon, Evisceration	267
Spray, Instrument	26
Spud, Foreign Body	264
Steinert Soft Lens Holding Forceps	123
Step Knife, Diamond LRI	165
Step Knife, Diamond USC	105
Sterilizing Basket, Instrument	275, 278
Sterilizing Box, Instrument	291-292
Sterilizing Case, Instrument	292
Sterilizing Cassette, Instrument	290
Sterilizing Container, Instrument	282-287
Sterilizing Tray, Instrument	275-277, 294
Stern-Castroviejo Fixation Forceps	253
Stern-Gills Capsulotomy Scissors	79, 235



PRODUCT DESCRIPTION PAGE

Stevens Sub-Tenon's Cannula	53
Stevens Tenotomy Scissors	59
Stevenson Lacrimal Sac Retractor	262
Stiletto MVR Knife, Disposable	201
Stitch Scissors	22, 59
St. Martin's Suture Forceps	145
Strabismus Forceps	211
Strabismus Hook	246, 252, 267
Strabismus Scissors	16
Strabismus Surgery Set, Helveston	252
Subretinal BSS Injection Needle	219
Subretinal Cannula	216
Subretinal Diamond Knife	182
Subretinal Forceps	182
Subretinal Scissors	182
Sub-Tenon's Cannula	53, 108
Sulfur Hexafluoride Tamponade, SF6	220
SuperDrainer Surgical Aspirator	229
SuperDrainer Suction Speculum	229
Superior Rectus Forceps, Troutman	254
Surgical Mallet, Gerzog	262
Surgical Scissors	266
Suturing Forceps,	
- Conjunctiva	60, 231, 257
- Corneal	44, 142, 144-145, 249-250
- English Pattern	257
- French Style	236
- Italian Design	240
- Klassik Eye	232
- Titanium	40, 44-45, 234-235
Suture Placement Marker, Anis	141
Suture Removal Forceps	144
Suture Removal Scissors (Stitch)	22, 59
Syringe, All Glass	20, 74
Syringe, Aspirating	82
Syringe, Cleaning	183
Syringe, Disposable	82
System, Bimanual I/A	112-114
System, Coaxial I/A	110-111
System, Sterilization Container	282-287
System, Tray-in-Tray Sterilization	273-277
System, Trocar Cannula System	200-205

T

Tagawa IOFB Magnetic Probe	187
Takeda Infant Child Wire Speculum	226
Tanna-Lieberman Glaucoma Speculum	230
Tano Vitreoretinal Micro Forceps	202
"Teaser" Hook, Helveston	252
Teflon Cutting Block	139
Teflon Filter, Steri-Container	283-287
Teflon Holding Post	275
Teflon Infusion Handpiece, McIntyre	83
Temporal Eye Speculum	32, 54-55, 148, 168, 245
Tennant Suture Tying Forceps	43, 45, 250
Tenotomy Scissors	22, 59
Tension Ring Injector	134
Textile Filter, Steri-Container	283, 285, 287
Thibaut-Nagahara Phaco Chopper	238
Thomas Lens Injector, Soft Lens	126-127
Thorlakson LASIK Speculum	228
Thornton Arcuate Diamond Knife	161
Thornton Radial Incision Marker	141
Thornton (Fine-) Globe Fixation Ring	56
Thorpe Fixation Forceps, Titanium	234
Tip, Backflush Cannula	194, 195, 203, 206
Tip, Cautery	269
Tip, Coaxial I/A	110-111, 239

PRODUCT DESCRIPTION PAGE

Tip, IOL Instrument	131
Tip, Membrane Instrument	192-193
Tip, Phaco Instrument	95
Tip, Protector	26, 183
Tip, Sapphire Blade	67
Tip, VR Forceps	185-186
Tip, VR Scissors	184-187
Tissue Forceps	23, 247, 266
Tissue Insertion Spatula, DLEK	172
Tissue Retractor, Helveston	252
Titanium Eye Instrument by surgical discipline,	
-Astigmatic Keratotomy	160-161
-Cataract	29-48
-Cataract, Think Pink	234-235
-Corneal Transplant	142-145
-DLEK & DSEK	172-173
-DSAEK	174-175
-ICL®	168-171
-LASEK	158-159
-LASIK	148-151
-LRI	162-165
-Manual Fracture	100-101
-Muscle Resection	254
-Phaco	34-39, 96-97
-Phaco-Trabeculectomy	104-105
-PRK	156-157
-Strabismus	252-253
-Vitreoretinal	179-187
Titanium Eye Instruments by product family,	
-Caliper	33, 208
-Forceps	40-45, 142-145, 233, 235, 251
-Forceps, Vitreoretinal	180-182, 185-187, 202, 207
-Fixation Ring	33, 56
-Keratometer	33, 160
-Knife, Diamond	68-69, 164-165
-Lens Cutter	132-133
-Lens Injector	128
-Marker, LRI	163-164
-Needle Holder	46, 144, 235
-Manipulator, IOL and Nucleus	34-35, 235
-Nucleus Sustainer	38
-Phaco Chopper	36, 235
-Phaco Spatula	37
-Prechopper, Akahoshi	39
-Punch, Trabeculectomy	104-105, 263
-Scissors, Stainless Steel-Titanium	22, 235
-Scissors, Vitreoretinal	179, 184, 186, 207
-Speculum	32, 148, 168
Tonometer, Schioetz	269
Toric IOL/ LRI Marker	163
Toric Lens, MicroSiIR	166
Toric/LRI Slit Lamp Marker	164
Towel Clamp	16, 266
Towel Forceps	266
Trabeculectomy Instrument, Phaco-	104-105
Trabeculectomy Punch	104-105
Trabeculectomy Probe, Harms	263
Tray, Insert Instrument	291
Tray, Insert Screen	285
Tray, Insert Wire	279, 285
Tray, Instrument Sterilization	276
Tray, Micro Instrument Sterilization	294
Tray, Silicone Instrument	159, 293
Tray-in-Tray Sterilization System	274-277
Trephine Blade, Corneal	138-139
Trephine Blade Handle	138
Trephine Blade Holder	139
Trephine Punch, Corneal	139
Trephine, LASEK	158



PRODUCT DESCRIPTION PAGE

Trephine, Vacuum	140
Trisector, Nucleus	100
Trocar Cannula	200
Trocar Cannula Kit	201
Trocar Cannula Inserter	200
Trocar Cannula System	200-205
Trocar Fixation Plate	200
Troutman Alpha-Chymotrypsin Cannula	53
Troutman Corneal Section Scissors	147, 235, 248
Troutman Needle Holder	241
Troutman Superior Rectus Forceps	254
Troutman Suturing Forceps	250
Troutman Tying Forceps	250
Troutman-Barraquer Corneal Forceps	144
Troutman-Chris Blade Breaker & Holder	18
Troutman-O'Brien Micro Needle Holder	237
Tubing Kit, Backflush Handle	194
Tubing, Silicone	26
Tunnel Knife, Diamond	68
Tunnel Knife, Sapphire	64, 67
Tying Forceps	250
- French Style	236
- Italian Design	240
- Klassik Eye	232
- McPherson	250
- Titanium	43, 234

U

Universal Corneal Scissors	248
Universal Eye Scissors	262
Urrets-Zavalía Scleral Depressor-Fixation Pick	210
US Army Utility Scissors, Smith	280
USC Scleral Planer	104
USC Scleral Shaver	104
Uthoff-Vannas Capsulotomy Scissors	79
Utility Forceps, Barraquer-Colibri	23
Utility Forceps, Nugent	256
Utility Scissors	281
Utrata Capsulorhexis Forceps,	
- French Style	236
- Italian Design	240
- Klassik Eye	232
- Micro	120-121
- MICS	233, 251
- Standard	76-77, 251
- Titanium	41, 234, 251

V

Vacuum Trephine, Hessburg-Barron Corneal	140
Vannas Capsulotomy Scissors	78
Vectis, Irrigating	81, 102
Vidaurri LASIK Cannula	154
Vinciguerra Spatula/Knife	159
Vinzenz Infant Wire Speculum	226
Viscoelastic Injection Cannula	102
Viscous Fluid Delivery System	216-217
Viscous Fluid Pressure Injector	217
Vitrectomy Lens, disposable	221
Vitrectomy Lens Forceps	221
Vitreo Cleaning Adaptor	183
Vitreo Flushing Tube	183
VR Backflush Instrument	194-196, 203
VR Forceps Standard 20G	180-181, 185
VR Forceps Micro 23G	186, 202
VR Forceps Miniature 25G	207
VR Forceps Tip, removable	185-187, 209
VR Foreign Body Instrument	187

PRODUCT DESCRIPTION PAGE

VR Foreign Body Magnetic Probe	187
VR GasMate® Gas Tamponade	220
VR Illuminated Instrument	190-191
VR Membrane Instrument	192-193
VR Membrane Tip, removable	192-193, 207
VR Miscellaneous Instrument	208-211
VR Perfluorocarbon Liquid	218-219
VR Purified Silicone Oil	214-215
VR Scissors Standard 20G	179
VR Scissors Micro 23G	186-202
VR Scissors Miniature 25G	207
VR Scissors Tip, removable	184
VR Subretinal Cannula	216
VR Subretinal Diamond Knife	182
VR Subretinal Forceps	182
VR Subretinal Scissors	182
VR Surgical Instrument Set	213
VR Trocar Cannula System	200-205
Vukich ICL® Manipulator	171

W

Wagner Silicone Oil Cannula	216
Waring Suture Forceps, Castroviejo-	236
Watzke Sleeve Spreading Forceps	223
Wells Enucleation Spoon	267
West Lacrimal Cannula	260
West Lacrimal Chisel	261
Westcott Conjunctiva Scissors, McPherson-	59
Westcott Stitch Scissors	22
Westcott Tenotomy Scissors	22, 59
Wide Field Vitrectomy Lens	221
Wilder Lacrimal Dilator	258
Williams Soft IOL Cutter	132
Wire Speculum	17, 54, 226-227
Wire Speculum, Aspirating	54-55, 148, 228
Wire, Snare	101, 267
Worst Micro Capsulotomy Scissors	237
Worst Pigtail Probe	262
Woven Drape, Classic	283, 285, 287
Wright Fascia Needle	256
Wright Muscle Recession Hook	254

Y

Yamakawa Scleral Flap Retractor	230
Yoshitomi Meibomian Gland Compressor (MGC)	255

Z

Zaldivar Diamond Knife	69
Zaldivar Iridectomy Scissors	107, 120, 170
Zaldivar Sapphire Blade	67
Zaldivar Sapphire Knife	65, 168
Zaldivar Soft Lens Insertion Forceps	125
Z-Hook Manipulator, DLEK	172

NUMERICAL INDEX

PMO



INDEX

CAT.-NO.	PAGE	CAT.-NO.	PAGE	CAT.-NO.	PAGE
09-401	269	E10-253	67	E10-675	151
09-402	269	E10-254	67	E10-677	151
09-501	269	E10-260	161	E10-690T	160
09-502	269	E10-262	161	E15-002	26
09-505	269	E10-263	161	E15-003	26
1001/15	268	E10-270	67	E15-022	183
1001/GB	268	E10-271	67	E15-023	183
51-917	259	E10-272	67	E15-100AB	94
51-918	259	E10-281	67	E15-214	230
51-922	259	E10-291	67	E15-221T	104
51-923	259	E10-292	67	E15-222T	104
80100025	269	E10-293	67	E15-300	158
81807000	269	E10-301SR	182	E15-310+	158
81807010	269	E10-302SR	182	E15-313+	158
81811100	269	E10-322	68	E15-315	158
81811110	269	E10-323	68	E15-316	159
A4947	268	E10-324	68	E15-317	158
A4947ARM	268	E10-342	68	E15-318	159
A4948	268	E10-343	68	E15-331	172
BU-1S	264	E10-344	68	E15-333	172
BU-5S	264	E10-352	68	E15-335	172
E10-001B	270	E10-353	68	E15-341	172
E10-001C	270	E10-354	68	E15-343	172
E10-001E	270	E10-360	69	E15-344	175
E10-001K	270	E10-361	69	E15-344T	175
E10-001S	270	E10-362	69	E15-347R	192
E10-001T	270	E10-367	105	E15-350R	192
E10-001V	270	E10-380	164	E15-353	157
E10-003BC	18	E10-381	69	E15-353T	157
E10-003K	18	E10-383	165	E15-355R	192
E10-010T	184	E10-384	165	E15-355T	159
E10-042	33	E10-385	165	E15-363	157
E10-043	33	E10-386	165	E15-363R	193
E10-044	33	E10-387	165	E15-365R	192
E10-064	18	E10-391	68	E15-365T	156
E10-065	18	E10-392	68	E15-366T	156
E10-067	18	E10-511T	56	E15-371R	193
E10-069	18	E10-511TM	150	E15-371S23	207
E10-112	65	E10-512B	150	E15-371S25	207
E10-113	65	E10-512TB	150	E15-371T	152
E10-114	65	E10-513	56	E15-372	152
E10-116	65	E10-513F	162	E15-372T	152
E10-121	65	E10-513G	150	E15-373P23	207
E10-122	64	E10-513T	56	E15-373P25	207
E10-123	64	E10-513TG	150	E15-373R	193
E10-124	64	E10-516	56	E15-373T	156
E10-142	64	E10-516F	162	E15-375T	156
E10-143	64	E10-516T	56	E15-381T	152
E10-144	64	E10-517	56	E15-383T	152
E10-152	64	E10-521+	173	E15-385T	152
E10-153	64	E10-522+	141	E15-400T	34
E10-154	64	E10-529	174	E15-408	246
E10-170	65	E10-530+	141	E15-409	246
E10-171	65	E10-548	141	E15-418	246
E10-172	65	E10-561	162	E15-418T	34
E10-181	65	E10-562	160	E15-423	246
E10-191	64	E10-563	162	E15-423P	171
E10-192	64	E10-572	160	E15-423R	95
E10-200AB	66	E10-573T	163	E15-423T	34
E10-222	67	E10-574T	163	E15-429	246
E10-223	67	E10-576T	163	E15-431T	100
E10-224	67	E10-578T	163	E15-432T	100
E10-242	67	E10-579T	163	E15-433T	100
E10-243	67	E10-582T	164	E15-442T	100
E10-244	67	E10-583T	164	E15-443T	100
E10-252	67	E10-673	151	E15-450	101



E15-452	101
E15-464R	95
E15-465	246
E15-465R	95
E15-465T	34
E15-466	80
E15-466R	95
E15-467R	95
E15-467T	34
E15-500	21
E15-500R	131
E15-501	246
E15-501P	171
E15-501R	131
E15-501T	35
E15-516P	171
E15-517P	171
E15-518P	171
E15-552	21
E15-553	21
E15-557R	131
E15-558R	131
E15-560R	131
E15-560T	35
E15-561	246
E15-561P	171
E15-561R	131
E15-561T	35
E15-562R	131
E15-562T	35
E15-564	21
E15-564R	131
E15-565	21
E15-565P	171
E15-565R	131
E15-565T	35
E15-567	246
E15-571	106
E15-572	106
E15-573	106
E15-602	80
E15-602T	35
E15-603	80
E15-603T	35
E15-607	246
E15-610	246
E15-611	246
E15-613	246
E15-653R	95
E15-653T	36
E15-655R	95
E15-655T	36
E15-656	246
E15-656P	171
E15-656R	95
E15-656T	36
E15-657R	95
E15-659	246
E15-659P	171
E15-659R	95
E15-659T	36
E15-660T	38
E15-661T	38
E15-662T	38
E15-669R	95
E15-669T	36
E15-673T	37
E15-675T	37
E15-676T	37

E15-677T	37
E15-727	200
E20-001	20
E20-002	20
E20-003	20
E20-004	20
E20-018SF	72
E20-020SR	174
E20-020ST	72
E20-023AT	108
E20-023FT	72
E20-023PT	72
E20-023TT	72
E20-025	158
E20-030	20
E20-031	20
E20-032	20
E20-033	81
E20-034	81
E20-043	73
E20-045	73
E20-046	73
E20-047	73
E20-048	73
E20-049	73
E20-055	102
E20-064	102
E20-065	102
E20-066	102
E20-089	53
E20-141	84
E20-142	84
E20-145	84
E20-151	83
E20-152	83
E20-153	83
E20-154	83
E20-164	81
E20-167	81
E20-169	81
E20-201	88
E20-203	88
E20-205	88
E20-211	88
E20-213	88
E20-231	81
E20-242	100
E20-243	100
E20-300	20
E20-301	20
E20-325	218
E20-400	239
E20-400EL	110
E20-401EL	110
E20-402EL	110
E20-403ELA	110
E20-403ELI	110
E20-403ELS	110
E20-404EL	110
E20-405EL	111
E20-406EL	111
E20-410	111
E20-413	239
E20-414	239
E20-415	239
E20-423	239
E20-425	239
E20-426	239
E20-427	239

E20-428	239
E20-429	239
E20-431EF	103
E20-432EF	103
E20-433EF	103
E20-434EF	103
E20-435EF	103
E20-437	239
E20-438	239
E20-439	239
E20-440	112
E20-441	112
E20-442	112
E20-445	112
E20-446	112
E20-447	112
E20-450	113
E20-451	113
E20-452	113
E20-453	113
E20-454	113
E20-455	113
E20-457	117
E20-480	239
E20-481	174
E20-482	239
E20-485	239
E20-486	239
E20-489	239
E20-522	154
E20-523	154
E20-525	154
E20-526	154
E20-529	154
E20-600	260
E20-601	260
E20-602	260
E20-612	260
E20-613	260
E20-615	260
E20-617	260
E20-622	260
E20-623	260
E20-630	260
E20-631	260
E20-642	260
E20-643	260
E20-645	260
E20-646	258
E20-647	258
E20-672	52
E20-673	52
E20-674	52
E20-683	53
E20-685	53
E20-687	108
E20-689	53
E20-700	194
E20-704	194
E20-710	194
E20-716	217
E20-719	217
E20-720	194
E20-720K	201
E20-720NS	209
E20-723C	200
E20-723K	201
E20-723P	200
E20-723R	201



CAT.-NO.	PAGE	CAT.-NO.	PAGE	CAT.-NO.	PAGE
E20-723S	201	E25-415	78	E25-605R	184
E20-723T	200	E25-430	79	E25-605R23	186
E20-723U	200	E25-431	79	E25-605RK	184
E20-730	194	E25-433	79	E25-605S	179
E20-731	194	E25-435	79	E25-605S23	202
E20-731LL	195	E25-440	78	E25-605S25	207
E20-731LM	195	E25-442	78	E25-605SK	179
E20-731XL	203	E25-451	241	E25-607R	184
E20-732	194	E25-453	241	E25-607R23	186
E20-732XL	203	E25-460	78	E25-608S	179
E20-740	194	E25-460R	78	E25-609R	184
E20-741	194	E25-461	78	E25-620R	107
E20-741LL	195	E25-461R	78	E25-620Z	107
E20-741LM	195	E25-462	78	E25-621N	104
E20-742	194	E25-462R	78	E25-621NR	104
E20-743	194	E25-466	132	E25-621Z	170
E20-752	198	E25-471	173	E25-621ZR	170
E20-754	198	E25-472	173	E25-623A	121
E20-756	198	E25-473	173	E25-623R	121
E20-801	20	E25-500	265	E25-623S	121
E20-802	20	E25-501	265	E25-714	281
E20-805	20	E25-510	16	E25-715+	281
E20-820	217	E25-511	16	E25-718+	281
E20-821	217	E25-512	16	E25-816	280
E20-880	83	E25-513	16	E25-818	280
E20-881	83	E25-514	16	E25-820	280
E20-882T	100	E25-515	16	E30-006T	45
E20-883T	100	E25-530	262	E30-008T	44
E25-002	248	E25-531	262	E30-028T	144
E25-003	248	E25-532	262	E30-030T	144
E25-004	248	E25-533	262	E30-032T	144
E25-005	248	E25-534	262	E30-034T	144
E25-006	248	E25-535	262	E30-036T	144
E25-007	248	E25-556	16	E30-038T	144
E25-011	248	E25-557	16	E30-044T	144
E25-013	248	E25-561	265	E30-045T	144
E25-015	248	E25-564	59	E30-046T	144
E25-019	143	E25-565	59	E30-047T	144
E25-040	143	E25-566	59	E30-051	23
E25-041	143	E25-567	59	E30-051T	44
E25-050	143	E25-571	267	E30-052T	44
E25-051	143	E25-573	267	E30-061	61
E25-060	143	E25-574	266	E30-061T	44
E25-061	143	E25-576	266	E30-063	61
E25-062	248	E25-578	266	E30-081	249
E25-063	248	E25-580	212	E30-081T	44
E25-070	147	E25-581	212	E30-085	249
E25-071	147	E25-582	212	E30-085T	44
E25-100	248	E25-583	212	E30-087T	142
E25-101	248	E25-584	212	E30-088T	142
E25-200	22	E25-585	212	E30-089T	142
E25-250	22	E25-600R	184	E30-093	249
E25-251	22	E25-600S	179	E30-094	249
E25-311	59	E25-600T	78	E30-100	247
E25-313	59	E25-602R	184	E30-103	247
E25-315	22	E25-602R23	186	E30-106	247
E25-315T	22	E25-602S	179	E30-110	247
E25-331	59	E25-602S23	202	E30-112	247
E25-333	59	E25-602S25	207	E30-114	247
E25-334	22	E25-603R	184	E30-120	247
E25-334T	22	E25-603R23	186	E30-122	247
E25-335	22	E25-603S	179	E30-124	247
E25-400	22	E25-603S23	202	E30-130	266
E25-401	22	E25-603S25	207	E30-132	266
E25-402	22	E25-603SI	190	E30-140	266
E25-403	22	E25-604R2	184	E30-142	266
E25-405	78	E25-604R4	184	E30-146	266
E25-410	78	E25-604S	179	E30-147	266
E25-411	78	E25-604SR	182	E30-213T	253



E30-214	253
E30-214T	253
E30-216	253
E30-217	253
E30-223	254
E30-232	247
E30-233	247
E30-238	256
E30-239T	60
E30-240T	60
E30-241T	60
E30-242T	60
E30-244	247
E30-286	256
E30-287	256
E30-290	264
E30-291	264
E30-330T	175
E30-331T	153
E30-332T	153
E30-333T	153
E30-335T	153
E30-341	257
E30-343	257
E30-347	257
E30-348	257
E30-349	257
E30-385	257
E30-386	257
E30-410	249
E30-411T	145
E30-412	61
E30-413	249
E30-413T	145
E30-415	249
E30-415T	145
E30-418	249
E30-418T	145
E30-422	24
E30-423	24
E30-426	252
E30-427	252
E30-428	250
E30-429	250
E30-430	249
E30-431	24
E30-432	24
E30-433	24
E30-438	250
E30-446	250
E30-446T	43
E30-447	250
E30-447T	43
E30-448	250
E30-448T	43
E30-449	250
E30-449T	43
E30-450	250
E30-450T	145
E30-451	250
E30-451T	145
E30-452	250
E30-452T	145
E30-453	253
E30-453T	145
E30-455	253
E30-456	250
E30-456T	45
E30-458	250

E30-458T	45
E30-460	250
E30-460T	43
E30-461	250
E30-461T	43
E30-463	250
E30-463T	43
E30-465	250
E30-465T	122
E30-503	264
E30-504	264
E30-505	264
E30-506	264
E30-507	264
E30-513	264
E30-541	173
E30-541T	173
E30-549T	175
E30-562T	101
E30-563T	101
E30-564T	97
E30-565T	97
E30-566T	97
E30-567	101
E30-567T	97
E30-567TA	101
E30-567TK	101
E30-568T	97
E30-569T	97
E30-572T	96
E30-581	233
E30-581S	24
E30-581T	233
E30-583	251
E30-583S	24
E30-583T	251
E30-585	233
E30-585T	233
E30-589	233
E30-589T	233
E30-590	251
E30-590T	251
E30-591	251
E30-591T	251
E30-597	251
E30-598	233
E30-599	233
E30-601	169
E30-601T	169
E30-602	169
E30-602T	169
E30-604T	169
E30-605T	169
E30-621R	120
E30-621U	120
E30-622	122
E30-623	122
E30-623A	121
E30-623K	120
E30-623R	121
E30-623S	121
E30-624F	121
E30-624R	121
E30-624S	121
E30-625I	121
E30-625R	121
E30-625S	121
E30-630T	132
E30-631T	132

E30-632T	132
E30-633	125
E30-633T	125
E30-636T	133
E30-643	123
E30-645	123
E30-645T	43
E30-646	125
E30-646T	124
E30-648	125
E30-648T	124
E30-650LC	127
E30-650LP	126
E30-651LC	127
E30-651LF	126
E30-651LM	127
E30-651LP	126
E30-652T	128
E30-653T	128
E30-654T	128
E30-655N	134
E30-655S	134
E30-655T	134
E30-658T	135
E30-659	135
E30-661	123
E30-663	125
E30-663T	124
E30-665T	124
E30-666T	124
E30-667T	123
E30-672R	185
E30-672R23	186
E30-672S	180
E30-672S23	202
E30-672S25	207
E30-672SI	190
E30-672T	180
E30-673R	185
E30-673R23	186
E30-673S	181
E30-673S23	202
E30-673S25	207
E30-673T	181
E30-674S	180
E30-674T	180
E30-676S	181
E30-678S	181
E30-679R	185
E30-679S	180
E30-679T	180
E30-681R	185
E30-681S	180
E30-681SR	182
E30-682SR	182
E30-683S	180
E30-683SR	182
E30-687R	185
E30-687R23	186
E30-687S	181
E30-687S23	202
E30-687S25	207
E30-687SI	190
E30-687T	181
E30-689S23	202
E30-690N	209
E30-690R	209
E30-692F18	187
E30-692F20	187



CAT.-NO. PAGE

E30-692R18	187
E30-692R20	187
E30-693F	187
E30-693R	187
E30-693S	187
E30-700	211
E30-701	211
E30-732	254
E30-733	254
E30-736T	254
E30-773	256
E30-774	230
E30-777T	199
E30-778T	199
E30-779T	200
E30-808	257
E30-812	257
E30-814	257
E30-821	256
E30-822	256
E30-827	255
E30-827G	255
E30-827T	255
E30-832	256
E30-833	256
E30-835	223
E30-837T	221
E30-900	266
E30-902	266
E30-909	266
E30-913	266
E30-914	266
E30-916	266
E30-918	266
E30-925	266
E30-934	266
E30-950	266
E30-965	16
E30-970	266
E30-981	263
E30-982	263
E30-983	263
E30-991	262
E30-993	263
E30-994	263
E30-995	263
E35-001	18
E35-010	18
E35-100	237
E35-101	237
E35-102	237
E35-103	237
E35-130	25
E35-130T	46
E35-131	25
E35-131T	46
E35-132	25
E35-132T	46
E35-133	25
E35-133T	46
E35-211T	145
E35-213T	145
E35-230	25
E35-231	25
E35-232	25
E35-233	25
E35-250	241
E35-251	241
E35-251T	46

CAT.-NO. PAGE

E35-253	241
E35-253T	46
E35-271T	46
E35-273T	46
E35-301T	46
E35-303T	46
E40-001	105
E40-003	226
E40-004	226
E40-005	226
E40-007	226
E40-008	226
E40-009	226
E40-010	226
E40-011	245
E40-012	245
E40-013	54
E40-013B	227
E40-013J	227
E40-013K	227
E40-014	17
E40-015	245
E40-015A	229
E40-016	54
E40-016A	229
E40-017	54
E40-018	245
E40-030A	227
E40-030D	227
E40-030G	227
E40-030S	227
E40-031	245
E40-032	245
E40-032A	54
E40-033	245
E40-033A	228
E40-034	245
E40-036L	231
E40-036R	231
E40-039	231
E40-041	54
E40-041A	228
E40-042	54
E40-050	230
E40-056	91
E40-057	91
E40-060	91
E40-064	226
E40-066	254
E40-067	254
E40-071	265
E40-072	265
E40-074	226
E40-078	17
E40-079	17
E40-080	17
E40-086	28
E40-100	55
E40-100A	55
E40-100AC	228
E40-100AL	228
E40-100AS	55
E40-100AT	228
E40-100P	174
E40-100S	55
E40-100T	32
E40-100TF	148
E40-100TG	148
E40-100TL	148

CAT.-NO. PAGE

E40-100TM	148
E40-100TO	228
E40-100TP	174
E40-100TR	148
E40-100TS	32
E40-101	55
E40-101S	55
E40-101T	32
E40-101TS	32
E40-102	55
E40-103T	32
E40-103TS	32
E40-104	55
E40-104S	55
E40-104T	168
E40-104TS	32
E40-105	149
E40-105T	149
E40-106	149
E40-107	230
E40-108	17
E40-110	245
E40-111	245
E40-112	245
E40-128	256
E40-203	261
E40-211	261
E40-215	261
E40-341	265
E40-361	265
E40-411	264
E40-412	264
E40-413	264
E40-414	264
E40-415	264
E40-420	264
E40-421	264
E40-422	264
E40-424	264
E40-425	264
E40-426	264
E40-433	265
E40-434	265
E40-435	265
E40-436	265
E40-437	265
E40-442	264
E40-450	257
E40-451	257
E40-452	257
E40-453	257
E40-454	257
E40-530L+	138
E40-530N+	138
E40-530S+	139
E40-531	138
E40-532	138
E40-533	139
E40-540	139
E40-541	139
E40-542	139
E40-543	139
E40-544	139
E40-552	57
E40-552T	33
E40-554	57
E40-554T	33
E40-555	19
E40-557T	252



CAT.-NO.	PAGE	CAT.-NO.	PAGE	CAT.-NO.	PAGE
E40-559	26	E40-894	258	E45-122	276
E40-560+	57	E40-896	258	E45-123	276
E40-561+	57	E40-916	259	E45-126	277
E40-571T	208	E40-917	259	E45-127	277
E40-573T	208	E40-918	259	E45-128	277
E40-574T	208	E40-921	262	E45-129	277
E40-611S	210	E40-922	262	E45-131	276
E40-611T	210	E40-923	259	E45-132	276
E40-611U	210	E40-924	259	E45-133	276
E40-612C	210	E40-928	263	E45-136	280
E40-612S	210	E40-929	263	E45-137	280
E40-613	210	E40-934	262	E45-138	280
E40-613T	210	E40-972	261	E45-139	280
E40-614	160	E40-974	261	E45-150	292
E40-615	160	E40-982	262	E45-151	292
E40-616	160	E40-983	262	E45-152	292
E40-617	160	E40-991	256	E45-160	292
E40-618	160	E40-992	263	E45-161	292
E40-619	160	E40-992T	104	E45-162	293
E40-620	160	E40-994T	104	E45-168	293
E40-622	160	E40-995	105	E45-172	292
E40-628	160	E40-995T	105	E45-175	292
E40-662	80	E40-996	263	E45-180+	290
E40-682	142	E42-100	28	E45-181+	290
E40-682T	142	E42-110	86	E45-182+	290
E40-708	267	E42-113	98	E45-205	290
E40-712	267	E42-114	105	E45-208	290
E40-721	267	E42-115T	48	E45-210	290
E40-722	267	E42-117	108	E45-216	290
E40-723	267	E42-118	235	E45-221	291
E40-730	267	E42-120	146	E45-226+	291
E40-754	256	E42-123	156	E45-245	291
E40-756	256	E42-124	157	E45-246	291
E40-771	246	E42-125	159	E45-253	287
E40-772	246	E42-127	164	E45-255	287
E40-773	246	E42-128	170	E45-256	287
E40-777	211	E42-129	170	E45-259	280
E40-779T	212	E42-130	257	E45-265	285
E40-782	267	E42-131	256	E45-268	285
E40-783	267	E42-132	252	E45-271	280
E40-784T	254	E42-133	261	E45-274	280
E40-785T	254	E42-135	265	E45-279	280
E40-786T	254	E42-136	267	E45-281	287
E40-790	252	E42-138	268	E45-282	287
E40-791	252	E42-140	212	E45-283	287
E40-792	252	E42-141	213	E45-284	287
E40-793	252	E45-001	294	E45-285+	286
E40-795	252	E45-002	294	E45-286	286
E40-796	252	E45-003	294	E45-286+	286
E40-807	252	E45-004	294	E45-288	286
E40-809	252	E45-005	294	E45-288+	286
E40-811	252	E45-008	294	E45-289	286
E40-812	262	E45-015	294	E45-289+	286
E40-813	211	E45-025	294	E45-300+	284
E40-815	211	E45-085	73	E45-304	284
E40-820	262	E45-102	275	E45-304+	284
E40-823	262	E45-103	275	E45-306	284
E40-839	259	E45-104	275	E45-306+	284
E40-840	259	E45-105	275	E45-307	284
E40-841	259	E45-106	275	E45-307+	284
E40-842	259	E45-111	276	E45-310+	282
E40-843	259	E45-112	276	E45-312/4	282
E40-844	259	E45-113	276	E45-312/6	282
E40-850	258	E45-115	277	E45-312/8	282
E40-860	258	E45-116	277	E45-313/4	282
E40-888	258	E45-117	277	E45-313/6	282
E40-891	258	E45-118	277	E45-313/8	282
E40-892	258	E45-119	277	E45-314+	282
E40-893	258	E45-121	276	E45-316+	282



CAT.-NO.	PAGE	CAT.-NO.	PAGE	CAT.-NO.	PAGE
E45-318+	282	FS13227	238	IRIS-1000	107
E45-324+	282	FS13228	238	IRIS-2000	107
E45-325+	287	FS13239	236	KE51800	232
E45-326+	282	FS13240	236	KE51900	232
E45-328	285	FS13241	236	KE51902	232
E45-328+	282	FS13242	236	KE52020	232
E45-330	284	FS13243	236	KE52300	232
E45-330+	283	FS13244	237	KE52500	232
E45-331	283	FS13246	236	KE52510	232
E45-332	283	FS13247	236	KE55000	232
E45-333	283	FS13261	236	KE55010	232
E45-334	283	FS13265	236	KE55030	232
E45-335	283	FS17000	237	KE55049	232
E45-336	283	FS17001	237	KE55081	232
E45-336B	285	FS17005	237	KE55083	232
E45-337	287	FS17151	236	KE55084	232
E45-338	283	FS17157	238	KE55088	232
E45-339B	287	FS17160	236	KE55200	232
E45-351	283	FS17161	236	KE55210	232
E45-361	283	FS17162	236	NO. 2820	26
E45-410	279	FS17163	236	S/1002/GB	268
E45-411	279	FS17165	236	SP20340	229
E45-412	279	FS18039	238	SP20341	229
E45-413	279	FS18105	238	TP15423	235
E45-414	279	FS18210	238	TP15561	235
E45-415	279	FS18216	238	TP15565	235
E45-420	278	FS18219	238	TP15611	235
E45-430	278	FS18227	238	TP15613	235
E45-434	279	FS18228	238	TP15615	235
E45-435	279	FS18259	236	TP25011	235
E45-437	279	FS18292	239	TP25070	235
E45-441	279	FS19078	238	TP25071	235
E45-442	279	FS19079	238	TP25315	235
E45-512	281	HB02055	268	TP25334	235
E45-520	281	HB02150	268	TP25400	235
E45-521	281	HB02210	268	TP25401	235
E45-522	281	HB02400	268	TP25411	235
E45-523	281	HB02701	268	TP25435	235
E45-524	281	I.O-1000	187	TP30093	234
E45-525	281	ID2180.2	242	TP30236	234
E45-526	281	ID2180.4	242	TP30430	234
E45-531	281	ID2180.6	242	TP30440	234
E45-535	281	ID2180.9	242	TP30441	234
E45-536	281	ID2182.2	242	TP30443	234
E45-555	281	ID2185.2	242	TP30450	234
E45-556	281	ID2186.4	240	TP30466	234
E45-817	292	ID2188.4	240	TP30467	234
E45-825	292	ID2192.2	242	TP30469	234
E45-827	292	ID2192.7	242	TP30567	235
E45-882	292	ID2192.9	242	TP30583	234
E45-883	292	ID2193.1	242	TP30590	234
E45-884	292	ID2193.6	242	TP35201	235
E45-885	292	ID2407.1	242	TP35203	235
E45-886	292	ID2407.2	242	TP35251	235
E45-887	292	ID3131.0	240	TP35253	235
E45-888	292	ID3131.1	240		
FS00393	238	ID3133.0	240		
FS07252	237	ID3135.1	240		
FS07253	237	ID3161.0	240		
FS07699	238	ID3207.0	240		
FS07820	238	ID3207.1	240		
FS07825	238	ID3272.2	240		
FS08113	238	ID3272.4	240		
FS09911	237	ID3272.6	240		
FS09960	237	ID3272.8	240		
FS09961	237	ID3276.1	240		
FS13160	236	ID3276.5	240		
FS13161	236	ID3276.6	240		
FS13225	238	ID3276.8	240		



NOTES



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