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Cooper Medical

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PMS

KERATOREFRACTIVE

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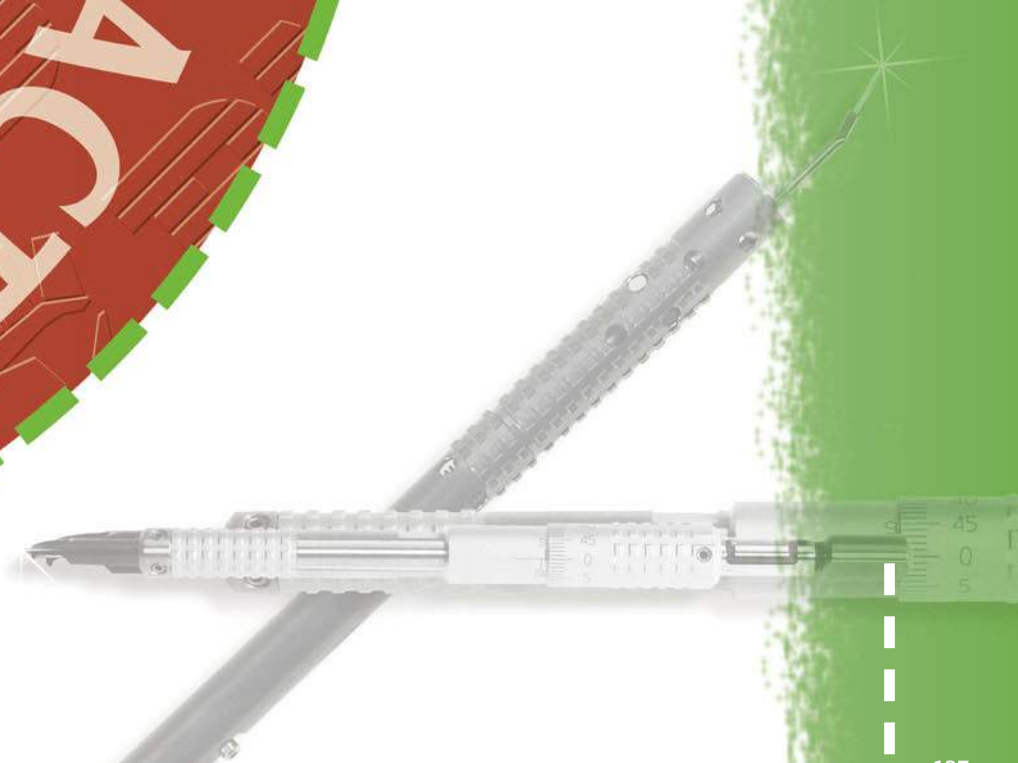


CORNEAL TREPHINE INSTRUMENTS

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

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

E40-531

New

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

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.

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.,

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

10.0 mm to 11.0 mm are placed here

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

E40-533

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

supplied without E40-533 handle

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

E40-541

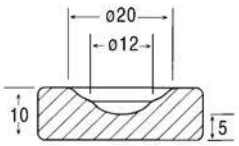
Corneal Transplant Block
(22 mm dia. x 8 mm depth)
for Corneal Punch E40-540

E40-542

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

E40-544

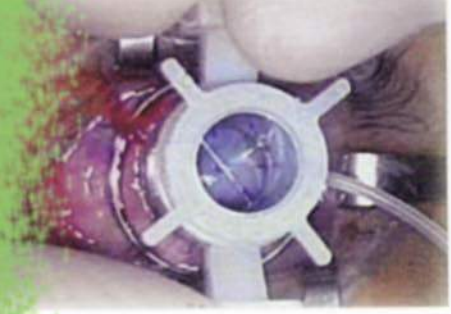
to cover cornea tissue



Large Teflon Cutting Block...
for universal use

E40-543

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



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.

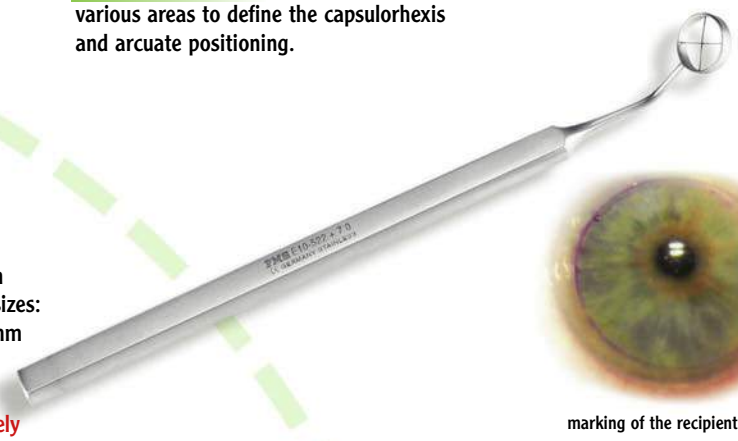
The Barron Donor Marking Punch is a single use, sterile system, designed to make an exact cut of the donor tissue for corneal transplant surgery.

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

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

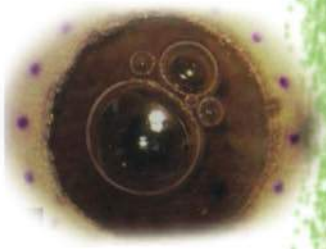
radial incision markers with symmetrical patterns provide orientation lines on the recipient cornea

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

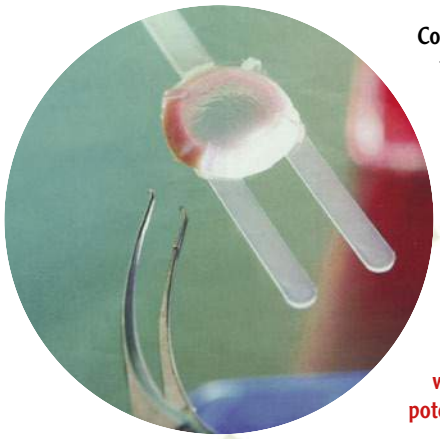
Marking Pad
Gentian violet ink
non-sterile (box of 10)

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**

CORNEAL TRANSPLANT FORCEPS



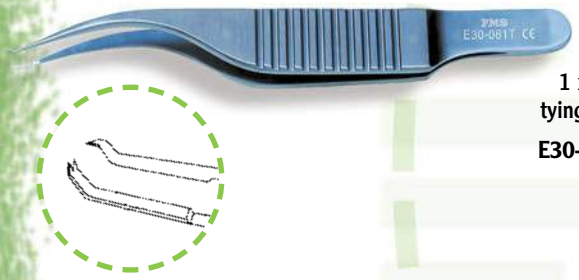
Corneal Donor Tissue is of great value to the recipient. Thus, it should be controlled and selected by specialists, stored with utmost care and only handled using **P**recision **M**icro **S**urgical instruments of superior quality material. Using the double-armed forceps, you can stabilise the corneal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

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

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

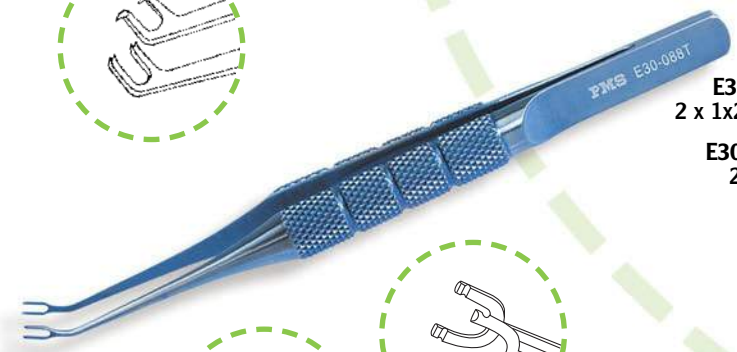


Harms
Corneal Suturing Forceps
1 x 2 teeth, 0.12 mm/45°, tying platform, 7.5 cm

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

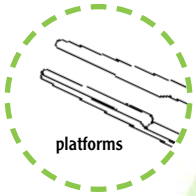
Blade sizes and average lengths in millimetres, measured from **mid screw** and **aperture angle***

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

CORNEAL SUTURE FORCEPS

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



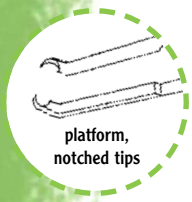
Hoskin
Suture Tying Forceps
8.5 cm, ultra fine jaws with

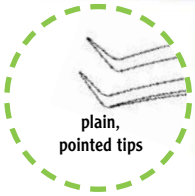
E30-028T plain, notched 0.25 mm tips

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

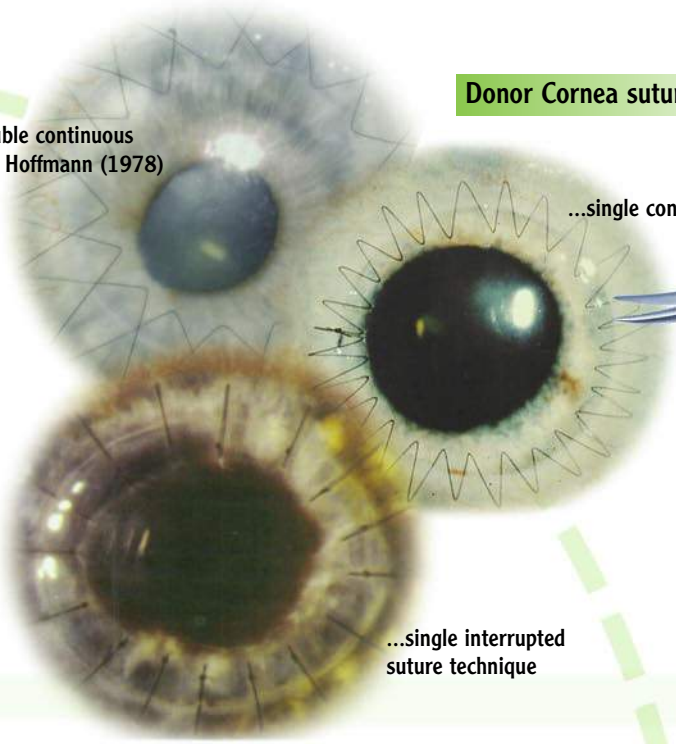
Troutman-Barraquer
Corneal Suture Forceps
ultra fine jaws, 4.5 mm platform,
1 x 2/0.12 mm teeth, 8.5 cm

E30-045T oblique 45°

E30-047T straight 90°

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

CORNEAL SUTURE FORCEPS

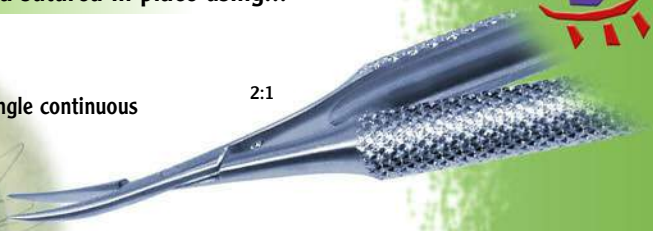


...double continuous
acc. to F. Hoffmann (1978)

...single continuous

...single interrupted
suture technique

Donor Cornea sutured in place using...



2:1

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

Paufique
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

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

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

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

CORNEAL TRANSPLANT SURGERY SET

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

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

E25-070

FOR CORNEAL SECTION ADD

E25-070 Troutman Right Corneal Section Scissors, page 147

E25-071 Troutman Left Corneal Section Scissors, page 147

E30-411

FOR CORNEAL SUTURING ADD

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

E30-418 Paufique Universal Suture Forceps, page 145

E35-211 Barraquer Micro Needle Holder, page 145

37-405

MISCELLANEOUS PRODUCTS

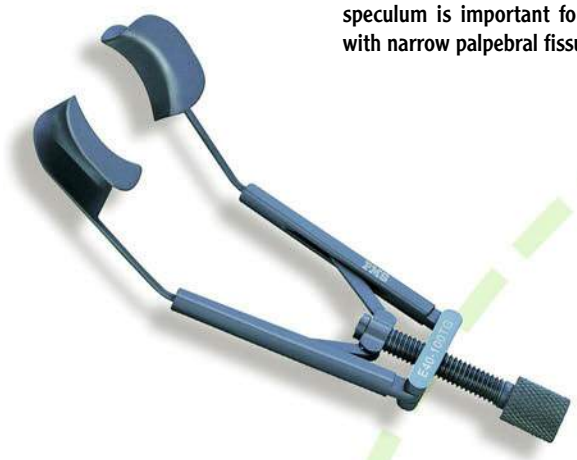
37-405 PVA Eye Spears, page 155

52-100 Ink Marking Pen, page 151

EZWash® Sterilising Trays, see section

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

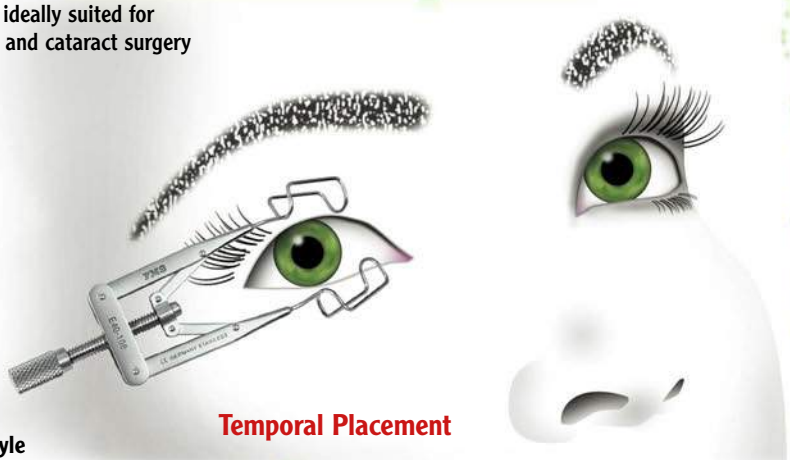
Retracting the lids – many surgeons prefer the adjustable Lieberman style speculum which retracts the lids sufficiently to provide unobstructed access for the microkeratome suction ring (see page 157).

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

LASIK INSTRUMENTS

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 moment 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 INSTRUMENTS

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

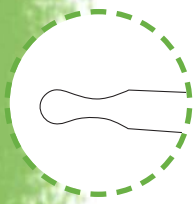
LASIK INSTRUMENTS

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

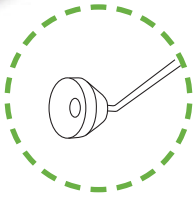
Buratto
Flap Retractor & Protector
angled 8 x 5mm blade with narrow lip, 11.5 cm
E15-381T

used to retract and protect nasally hinged flap (left & right eye)

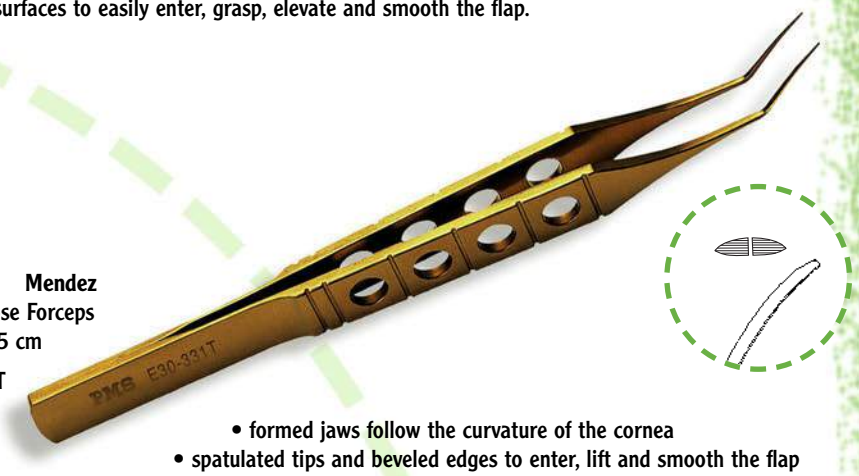
Caro
Flap Smoother
angled, hemispherical tip, 11.5 cm
E15-383T

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.

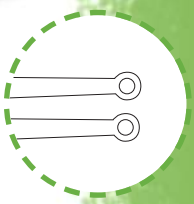


Mendez
LASIK Multipurpose Forceps
11.5 cm

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

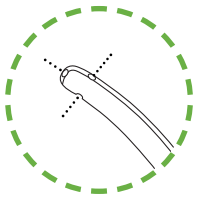
used to manipulate the flap with minimal risk of tearing and trauma

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

LASIK INSTRUMENTS



Irrigation Cannulae – are used for irrigarting 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

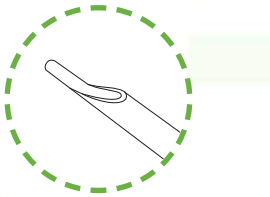
spatulated tip allows easy entry under the flap, and three ports provide equal flow in 3 directions

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

All Glass Syringe (LL cone)

E20-801 1 ml

E20-802 2 ml

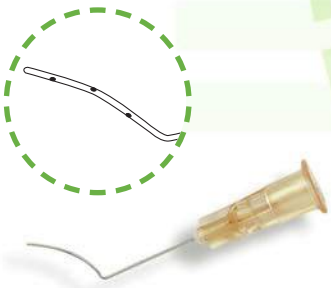


Slade
LASIK Cannula
26GA/0.45 x 25 mm tube, formed 9 mm
thin spatulated tip with recessed end port

***613-26** disposable

E20-526 reusable

to easily locate and lift the flap edge, and effectively irrigate the lamellar interface

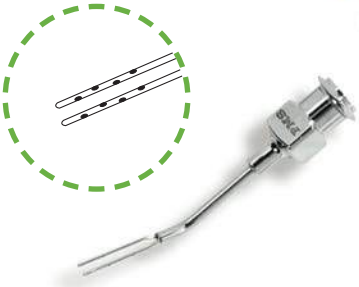


Banaji
LASIK Cannula
25GA/0.5 mm x 25 mm tube, formed
12 mm bullet-shaped tip with 6 ports

***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

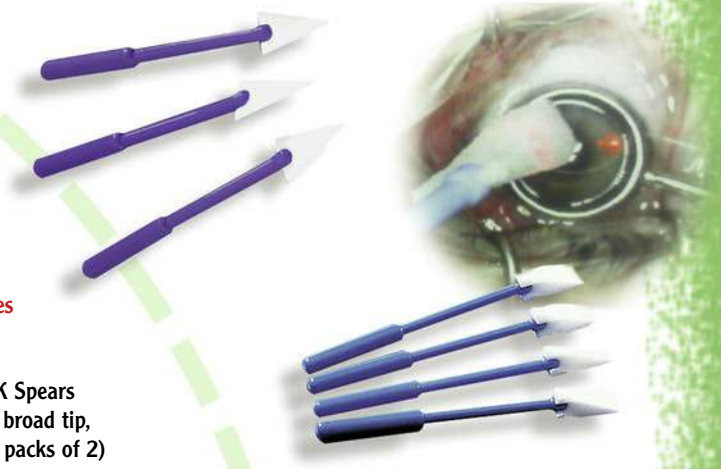
E20-522 reusable

to simultaneously irrigate both sides of the flap and stromal bed, for controlled flap manipulation

*** disposable cannulae, sterile 10 per box**

DISPOSABLE LASIK PRODUCTS

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)

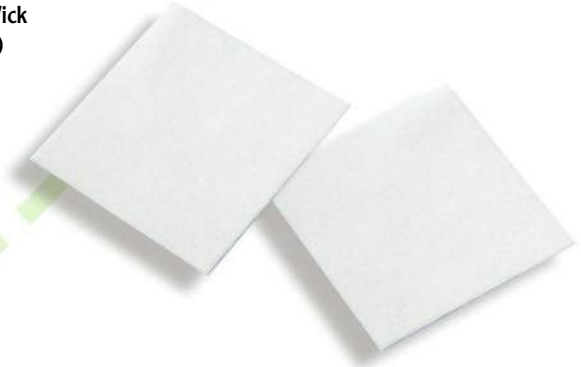
37-822 4 mm dia. (8 mm edge)

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



photographs do not correspond to the actual size

PRK INSTRUMENT SET

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

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

Intralasik Flap Spatula/Elevator
vaulted, semi-sharp 1 x 12 mm
spatula with a jag on the tip,
12.0 cm

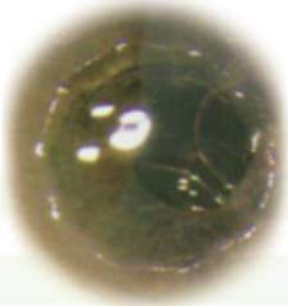
E15-375T

to detach the flap edge
and to open the flap

Incisional and ablative corneal procedures

LASEK using alcohol solution

epi-LASIK
with mechanical microkeratome



fs-LASIK with femtosecond laser

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 handlel

3 mm sharp front edge used to strip the epithelial layer; and semi-sharp 6 mm bottom edge to remove residual epitheliun

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

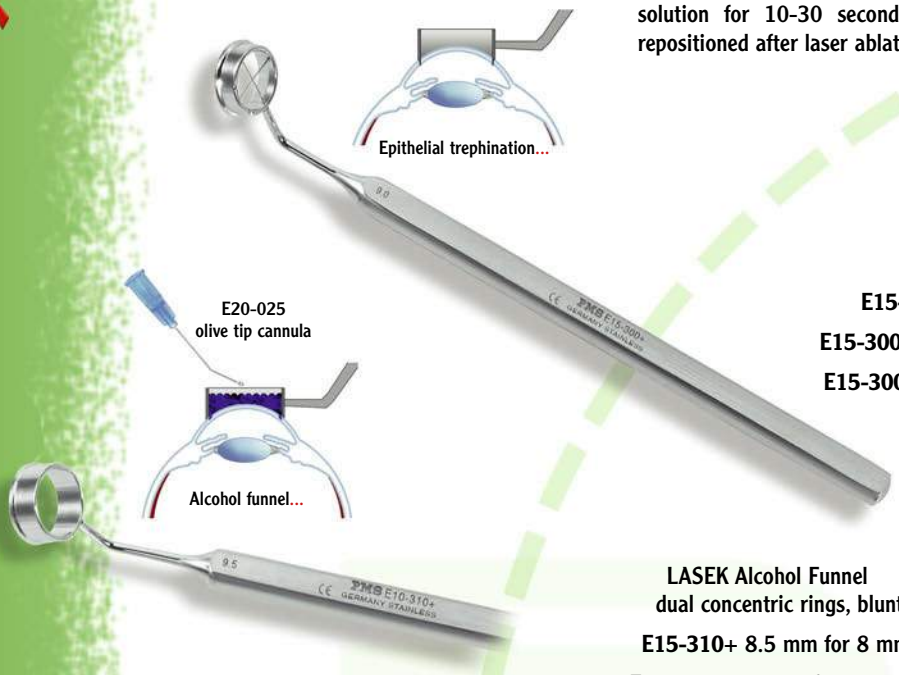
E42-124 PRIMARY LASIK SET
complete, consisting of the following:

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

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

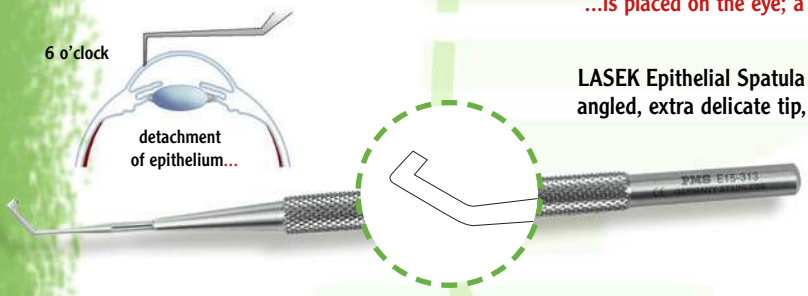
LASEK Alcohol Funnel
dual concentric rings, blunt, 11.0 cm

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



LASEK Epithelial Spatula
angled, extra delicate tip, 10.5 cm

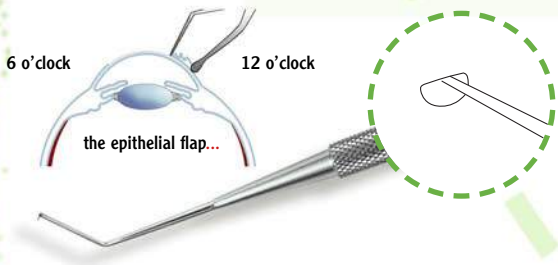
E15-313

...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

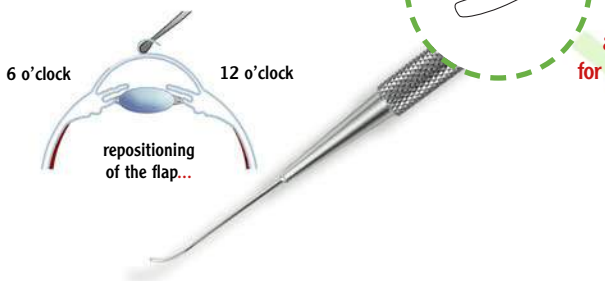
...is gently detached and folded over to the 12 o'clock position



LASEK Epithelial Flap Repositor
curved, blunt tip
with smooth edges,
10.5 cm

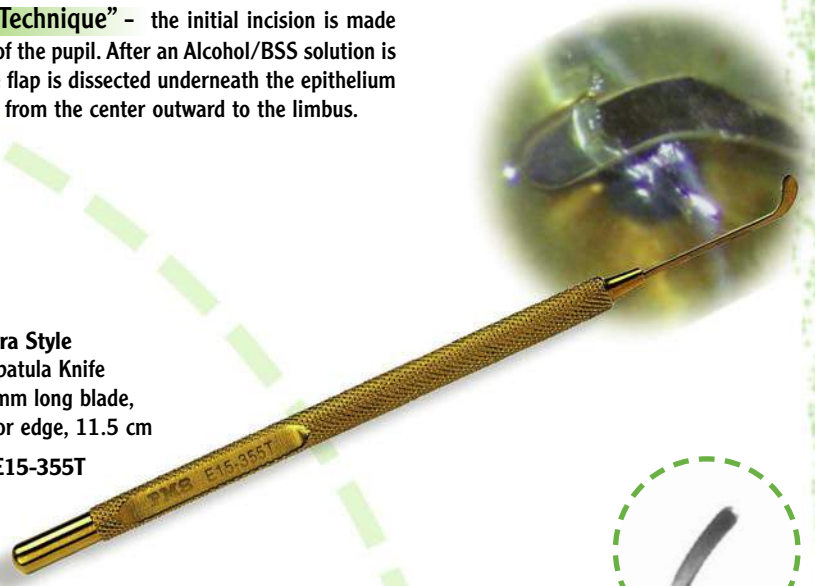
E15-317

...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.



LASEK INSTRUMENTS FOR VINCIGUERRA TECHNIQUE

"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

ASTIGMATIC KERATOTOMY INSTRUMENTS

Maloney
Astigmatic Keratometer

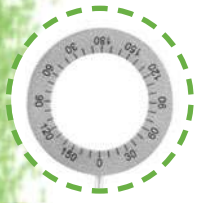
E10-690T

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

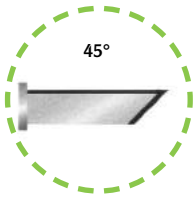
***E10-572**

fits inside the Mendez Degree Gauge to precisely mark the steepest meridian

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

AK MICROMETER DIAMOND KNIVES

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.

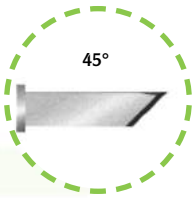


Back & Front Cutting Knife
vertical and 45° cutting edges

***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

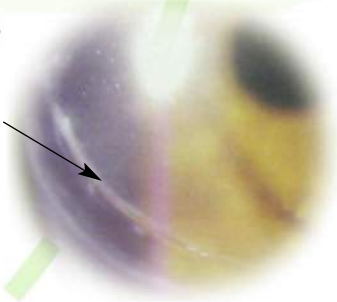
perfect for arcuate incisions, because it easily follows the curvature of the arc

Footplates of PMS micrometer diamond knives are highly polished and coated with titanium nitride for smooth gliding on the corneal surface.

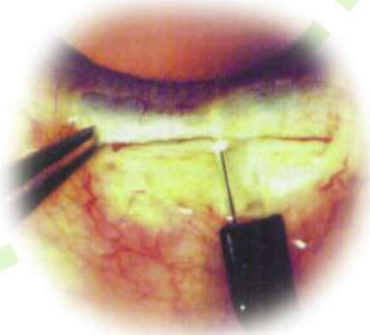
CURRENT INCISIONAL AK TECHNIQUES

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**

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

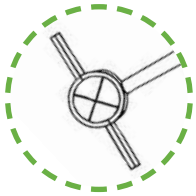
E10-563

when used with the Bores Two-Ray Meridian Marker the system delivers simplicity and acuity with precision engineering performance

Bores
Two-Ray Meridian Marker
low-profile 3 mm ring with cross hair, 12 mm OD, 11.5 cm

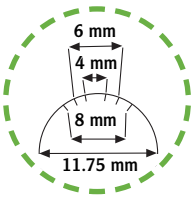
E10-573

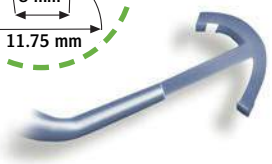
fits with degree gauge of max. 13.0 mm ID



LRI INSTRUMENTS

LRI Markers - with patient laying down - are used with the degree gauge to mark the limbus in a symmetrical pattern for correcting astigmatism.





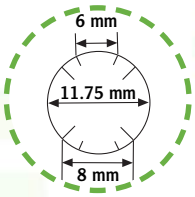
LRI Marker
single marking blade for
4, 6 and 8 mm chord length

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

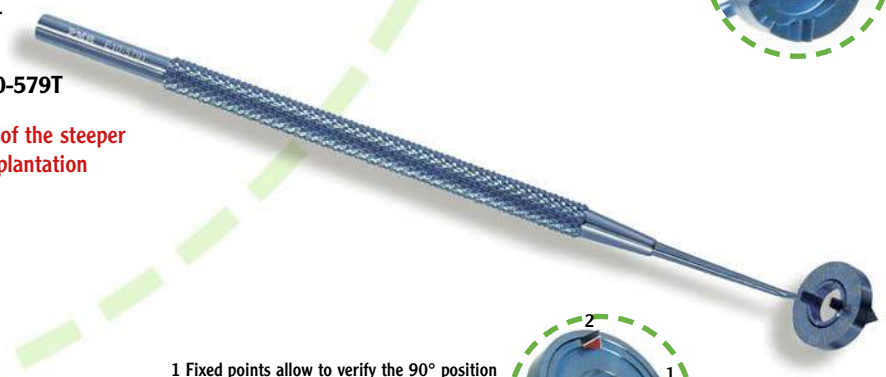
E10-576T for 6 & 8 mm chord length

E10-578T for 40-60-80 degrees
marks incision size by degrees instead of
chord length; corrects up to 2.5 D of astigmatism

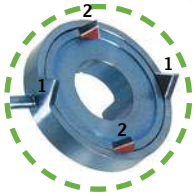
Toric IOL/LRI Marker
low-profile degree gauge,
with adjustable inner
points, 13.0 cm

E10-579T

allows precise marking of the steeper
meridian prior to IOL implantation

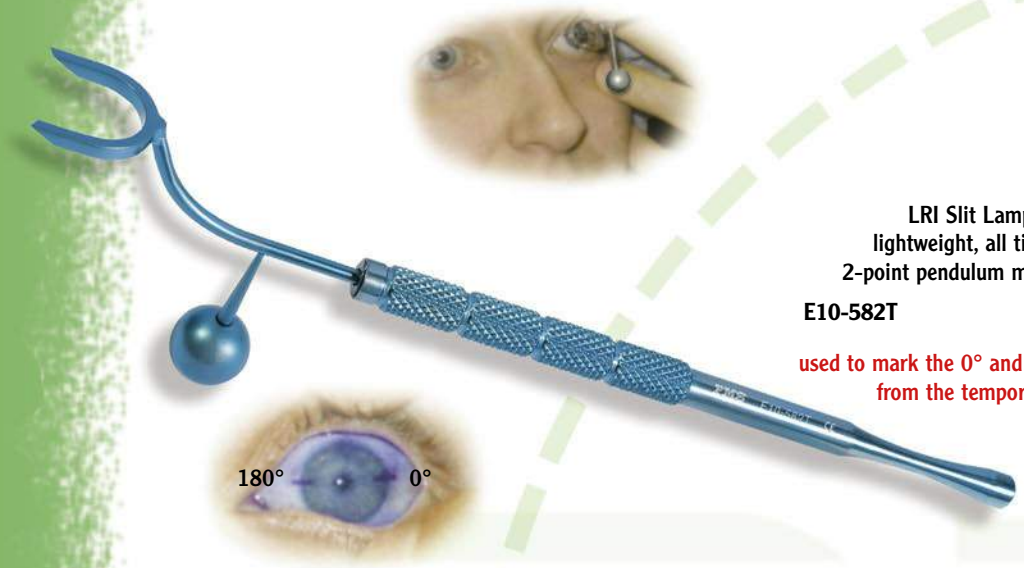


1 Fixed points allow to verify the 90° position as previously marked
2 Inner points are adjustable to align the steepest axis



LRI INSTRUMENTS

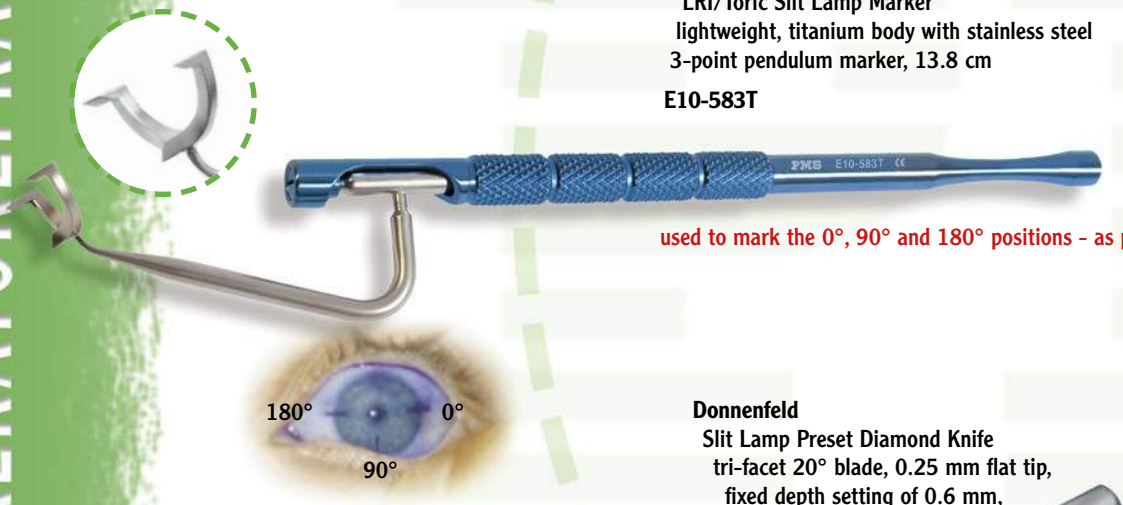
LRI Markers – to make LRI at slit lamp – are designed to mark the astigmatic axis on the cornea for a correct alignment of the lens.



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

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.

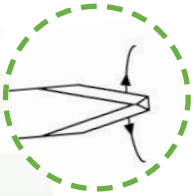
LRI Preset Diamond Knives
tri-facet 20° blade, flat 0.4 mm tip,
one fixed depth setting of:

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

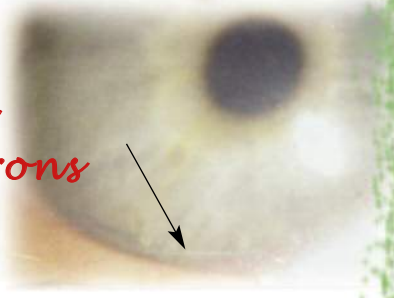
E10-383

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

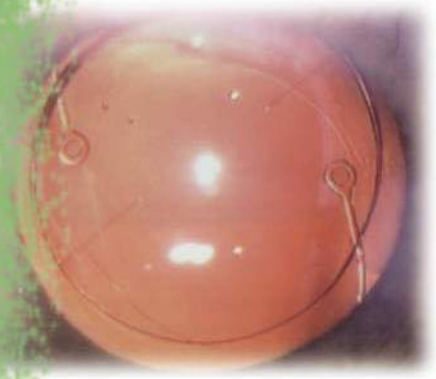
excellent blade visualisation
while performing the incision

the preferred depth of the LRI procedure is 600 microns



limbal relaxing incision (arrow)
performed with a diamond knife

MicroSil® TORIC LENSES



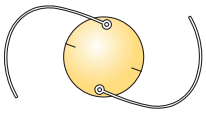
Hydrophobic, 3-Piece Toric IOL MS 6116 TU implanted

for more information visit
www.dr-schmidt-iol.de

MATERIAL

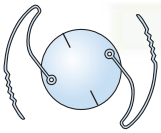
- Hydrophobic Silicone Elastomer
- With UV-Absorber and
- High Molecular PMMA haptics

FEATURES



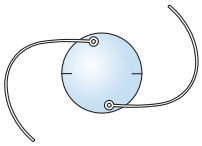
- Three-piece posterior chamber lens
- 360° sharp posterior optic edge
- Blue light protection
- Optic size 6.0 mm
- Haptic angulation 0°

LENS STYLES

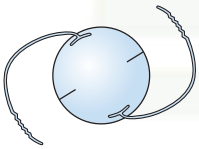


- Z-shaped haptics for implantation into capsular bag
- extended C-loop for implantation into ciliary sulcus
- undulated extended C-loop for piggyback implantation into the ciliary sulcus

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)

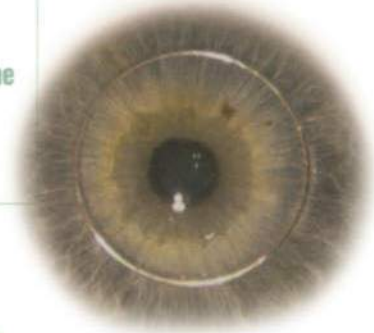
(special production up to 30 D cylinder)

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.

* Manufacturer:
Dr. Schmidt
Intraocularlinsen GmbH
St. Augustin, Germany

> "In the eyes where the ring was implanted, the immune rejection rate was significantly lower than in the control group."
> — Jörg H. Krumeich, MD



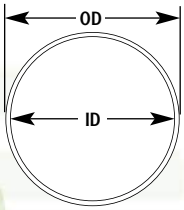
Krumeich ring in place

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



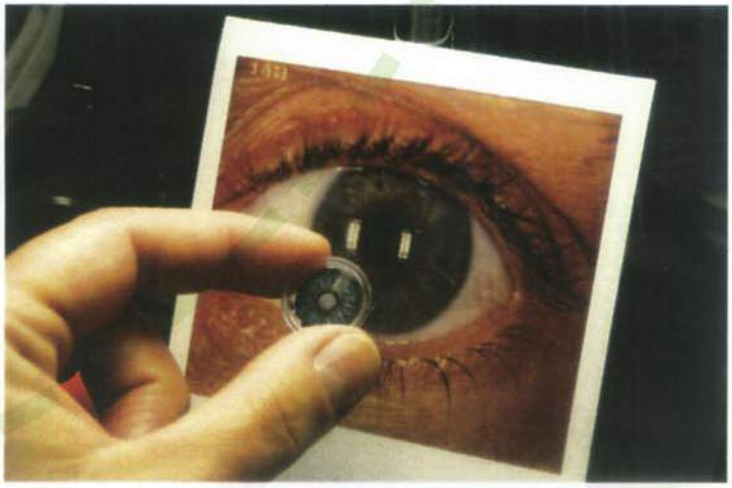
MATERIAL Ceralloy-Ti made from an alloy of
- 69% cobalt
- 24% steel
- 4,5% molybdenum
- 2% titanium

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.

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

* Manufacturer:
Dr. Schmidt
Intraocularlinsen GmbH
St. Augustin, Germany

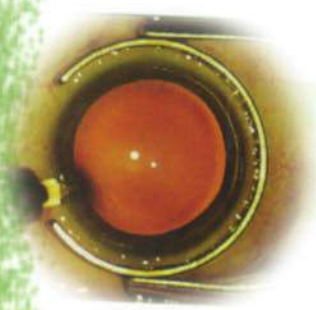
IMPLANTABLE CONTACT LENS INSTRUMENTS

Kraff-Lieberman
Temporal Eye Speculum
solid 15 mm blades, 8.0 cm

E40-104T titanium

E40-104 stainless steel

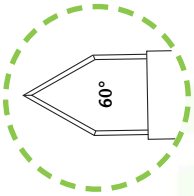
facilitates unobstructed access
for temporal approcach, adjusts
easily to comfort patient's eye



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

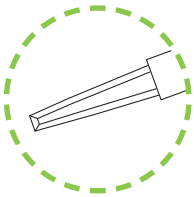
E10-513T 13 mm ID for clear cornea incision

E10-516T 16 mm ID for scleral tunnel incision



*EZ*Cut®
Clear Cornea Sapphire Knife
angled, keratome shaped 60° blade,
3.2 mm width (4 cutting edges), 13.0 cm

***E10-144**



*EZ*Cut®
Zaldivar Style Sapphire Knife
angled, trapezoid shaped blade,
0.55-1.0 mm width, 13.0 cm

***E10-181**

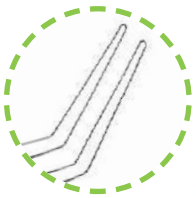
ideal for making the side port incision

*EZ*Cut®
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

IMPLANTABLE CONTACT LENS INSTRUMENTS



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 ot 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

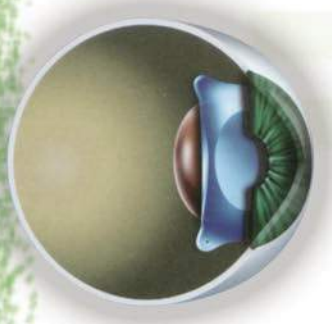
Foldable Phakic Lens Implantation

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

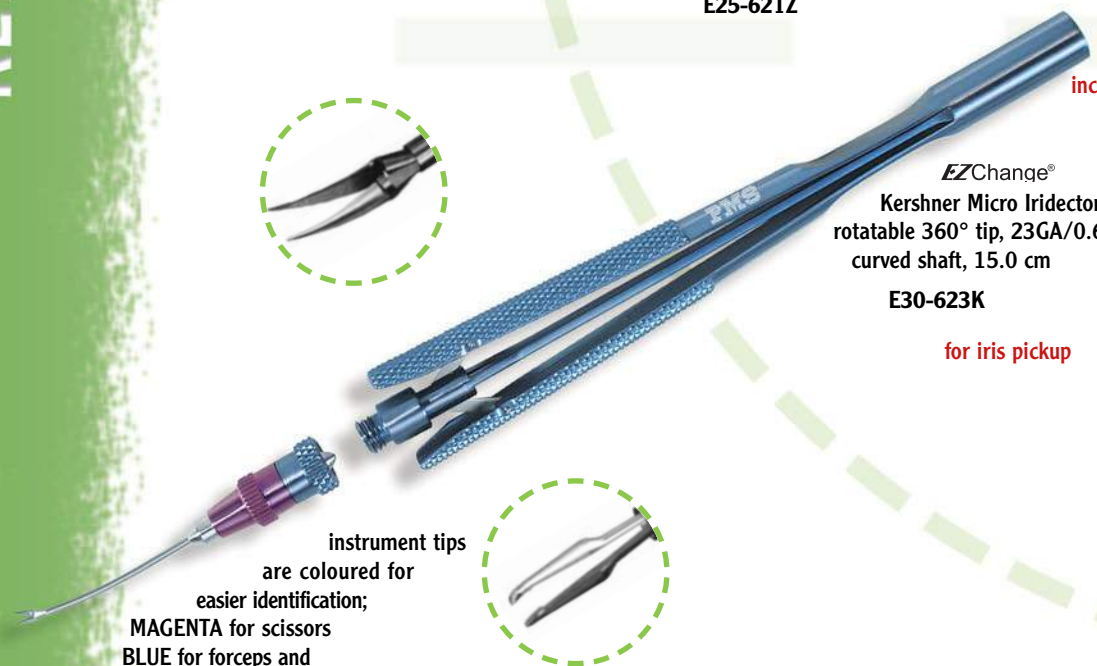
E10-381 Zaldivar Style Diamond Knife, page 69

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.

New

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:**

PROTECTION
Instruments have an integrated retractable shield specifically designed to protect health care workers from accidential sharp injuries.

PERFOMANCE
The built-in shield protects the quality and consistancy 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.

AND THE MOST POPULAR INSTRUMENT TIPS

E15-423P

E15-561P

E15-501P

E15-656P

E15-565P

also available on round handle - made of:
- stainless steel, page 21
- titanium, page 34
- aluminum, page 94

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.**

DLEK INSTRUMENTS

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

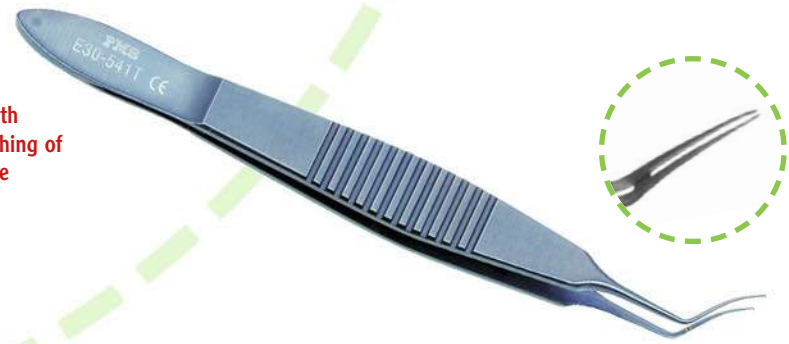
E25-472 medium curved
for enlargement of excision 8 & 4 o'clock

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



DSAEK INSTRUMENTS

for patient preparation

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

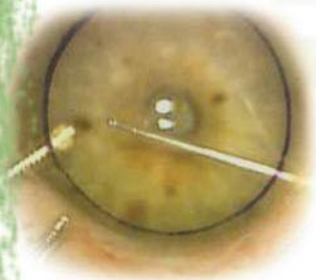
E10-529

for marking the Decement'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

DSAEK INSTRUMENTS

for insertion & positioning

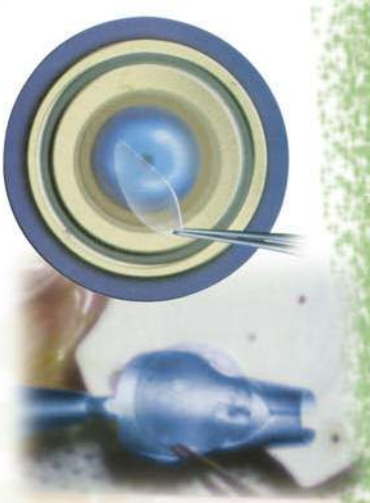
EZSert®
DSAEK Insertion Forceps
angled jaws, spatulated tips
with smooth, bevelled edges,
11.5 cm

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



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

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

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.

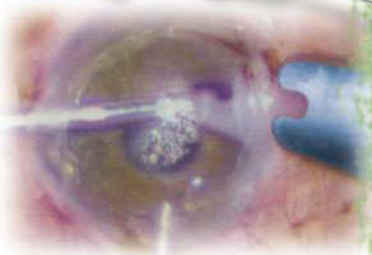
the donor lamella is pulled into the funnel-shaped part of the insertion guide using E30-549T forceps

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

NOTE:
The medical information is not intended as instructional materials for the performance of the demonstrated procedures or techniques.



donor lamella is grasped and pulled into the A.C.