Rumex International Co. is one of the leading manufacturers of high precision ophthalmic instruments for hand held surgery. Since 1994, our company has been working closely with honorable surgeons all over the world. We are constantly improving and modernizing manufacturing facilities to offer you the tools you’ll feel confident with.

The continuous aspiration for perfection makes us develop every day and exceed the results of previous periods. The comprehensive approach to what we do brings us concern of each detail, but for almost 18 years the emphasis has been made on QUALITY, INNOVATION and SERVICE.

We are proud to admit that the Rumex vitreoretinal product line is the result of professional experience and manufacturing skills accumulated during these years.

Following the modern tendency of vitreoretinal surgery we launched the production of 27 gauge instruments and disposable accessories for major vitreoretinal machines.

Being an innovative and customer oriented company, Rumex International is always open to new ideas – if your surgical technique (or preference) requires a special instrument – we will create it for you.

Our marketing, engineering, sales, logistic departments and customer service are doing the best to SATISFY YOUR NEEDS – this is OUR AIM and PLEASURE.

The distinguished ergonomic design of an instrument, and high quality materials it was produced of, will make you feel comfortable – and let each surgical manipulation BE GENTLE AND PRECISE.

We respect long term cooperation and are always looking for new partners. The Rumex brand is represented in 40 counties and there are still many areas for us to expand. If you would like to become a distributor or Rumex products, please contact us for further details.

Rumex International Co. manufactures vitreoretinal instruments for other well known brands. Please feel free to contact us if you are interested in OEM business.

In 2014 Rumex International Co. is going to launch a new product line – disposable hand-held instruments for Vitreoretinal surgery!
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Vitreoretinal Instruments

You are welcome to choose among various models of vitreoretinal tips that can be adjusted to Universal Handles (12-001T or 12-003T)*

<table>
<thead>
<tr>
<th>Gauge</th>
<th>Outer Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(inch)</td>
</tr>
<tr>
<td>19g</td>
<td>0.043</td>
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<tr>
<td>20g</td>
<td>0.036</td>
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<tr>
<td>21g</td>
<td>0.032</td>
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<td>23g</td>
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<td>0.014</td>
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<tr>
<td>29g</td>
<td>0.013</td>
</tr>
<tr>
<td>30g</td>
<td>0.012</td>
</tr>
</tbody>
</table>

Color Code System*

To make identification of vitreoretinal instruments easier and faster we have introduced a gauge color code system that will help you recognize the function of a tip and its size.

**FUNCTION**
- Scissors: PINK
- Forceps: GREEN

**GAUGE**
- 17: GREY
- 20: PINK
- 23: GREEN
- 25: BLUE
- 27: YELLOW

**COMPATIBILITY (adjustable to handles)**
- 12-001T: PINK
- 12-001T / 12-003T: BLUE

* Colors of details may differ slightly from those displayed in this catalog.

Manual Cleaning

Proper manual cleaning of the instrument is necessary to preserve its working condition. Rumex manufactures interchangeable microincisional and vitreoretinal instruments to help you clean the tips separately from the handle to expand its useful lifespan and prevent inflammation after the surgery.

* Handles are sold separately!

Flushing Adapter

Provided with each tip free of charge!
12-000T

Product images, including color, may slightly differ from actual product appearance due to the 3D effect applied.
Handles for Vitreoretinal Instruments

Rumex International Co is pleased to provide you with two models of Universal Handles that can be used with interchangeable tips:

- Made of titanium
- Corrosion resistant
- Can be used with tips of any gauge 20/23/25/27 (and other gauges)

**Ergonomic Model**
Two Fingers Control
Squeeze Handle
12-003T

**Classic Model**
One Finger Control
Handle
12-001T

- Safe and easy adjustable mechanism
- Two fingers linear actuation
- Ergonomic handle with specially designed gripping area for amplified control over the instrument
- Optimal diameter round handle allows 360° rotation

Non compatible with the following tips:
12-206, 12-313, 12-321,
12-321-23, 12-335

* Tips are sold separately!

*Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied.
**Standard Scissors**
- Designed for cutting membranes and junction zones of the proliferative tissue

**Vertical Scissors**
- 70 Degrees
- Sharp tips
- 12-202  20 Ga
- 12-202-23  23 Ga

**Horizonal Scissors**
- 55 Degrees
- 12-206  20 Ga

**Klaus Lucke Retinotomy Scissors**
- With bulbous tip
- 12-2020  23 Ga

**Horizontal Scissors**
- Angled 45 Degrees
- Regular blades 2,2 mm in the closed position
- 12-208  20 Ga

**Vertical Scissors**
- 45 Degrees
- 12-2029  25 Ga

**Horizontal Scissors**
- Angled 45 Degrees
- Short blades 1,7 mm in the closed position
- 12-2085  20 Ga

**Straight Scissors**
- Blunt tips
- 12-211  20 Ga

**Curved Subretinal Scissors**
- Curvature radius 12 mm
- 12-209  20 Ga
- 12-209-23  23 Ga
- 12-2099  25 Ga

**Illuminated Scissors**

**Horizontal Scissors**
- Angled 45 Degrees
- With Illumination
- 12-2084  20 Ga

**Side Curved Scissors**
- 12-215  20 Ga

*Handles are sold separately: 12-003T and 12-001T

Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied
Epiretinal Forceps*
- Strong jaws for epiretinal membranes
- Gripping function is enhanced by diamonized/serrated platform or «nails»

**Diamonized Gripping Forceps**
- 12-301 20 Ga
- 12-301-23 23 Ga
- 12-3019 25 Ga

**End Gripping Forceps**
- With serrated micro jaws
- 12-400 20 Ga

**Lucke Multipurpose Forceps**
- 12-3044 20 Ga

**End Gripping Forceps**
- With extended gripping area at the end of the tip
- 12-401 20 Ga
- 12-4012 23 Ga

**< Crocodile > Gripping Forceps**
- 12-304 20 Ga
- 12-304-23 23 Ga
- 12-304-25 25 Ga

**< Nail > End Gripping Forceps**
- 12-402 20 Ga
- 12-402-23 23 Ga
- 12-4089 25 Ga

* Handles are sold separately: 12-003T and 12-001T

*Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied*
Internal Limiting Membrane Forceps*
— Delicate branches for ILM peeling

Eckardt End Gripping Forceps
12-410 20 Ga
12-410-23 23 Ga
12-410-25 25 Ga
12-410-27 27 Ga

Tano Asymmetrical End Gripping Forceps
12-411 20 Ga
12-411-23 23 Ga
12-411-25 25 Ga

End Grasping Forceps
Standard branches, 28 mm tube (23 Ga)
12-420-23 23 Ga
12-420-25 25 Ga
12-420-27 27 Ga
Elongated branches, 30 mm tube
Designed for myopic eyes
12-4202-23 23 Ga
Enhanced visualization!

Tanaka Maculorhexis Forceps
12-414 23 Ga

Kawai ILM Forceps
12-415 25 Ga

* Handles are sold separately: 12-003T and 12-001T

Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied
### VITREORETINAL FORCEPS

#### Pick/Subretinal Forceps*

<table>
<thead>
<tr>
<th>Pick Forceps</th>
<th>Diamonized Angled Gripping Forceps</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-325</td>
<td>12-303</td>
</tr>
<tr>
<td>12-325-23</td>
<td>20 Ga</td>
</tr>
<tr>
<td>12-3259</td>
<td>20 Ga</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>De Juan Pick Forceps</th>
<th>Subretinal Forceps</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-413</td>
<td>3 mm tips</td>
</tr>
<tr>
<td></td>
<td>12-343</td>
</tr>
</tbody>
</table>

#### Foreign Body Removal Forceps

<table>
<thead>
<tr>
<th>Avci Foreign Body Forceps</th>
<th>Spring Gripping Forceps</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-412</td>
<td>12-321</td>
</tr>
<tr>
<td>17 Ga</td>
<td>20 Ga</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vitreoretinal Forceps</th>
<th>Stolyarenko Forceps</th>
</tr>
</thead>
<tbody>
<tr>
<td>With cup jaws 12-313</td>
<td>For large foreign bodies</td>
</tr>
<tr>
<td>20 Ga</td>
<td>12-335</td>
</tr>
</tbody>
</table>

* Handles are sold separately: 12-003T and 12-001T

Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied.
Delicate Membrane Pick
13-097-23  23 Ga
13-0879    25 Ga
13-087-27  27 Ga

Membrane Scratcher
13-092     20 Ga

Ogura PVD Spatula
13-1081-23 23 Ga

BRVO Knife
Designed for performing a lateral CRVO Incision
13-1091    20 Ga
13-1091-23 23 Ga

Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied
23 Gauge*

**Vertical Scissors**
- 70 Degrees
- Sharp tips
- 12-202-23 23 Ga

**Pick Forceps**
- 12-325-23 23 Ga

**Curved Subretinal Scissors**
- Curvature radius 12 mm
- 12-209-23 23 Ga

**End Gripping Forceps**
- With extended gripping area at the end of the tip
- 12-4012 23 Ga

**Diamonized**
- Gripping Forceps
- 12-301-23 23 Ga

**«Nail» EndGripping Forceps**
- 12-402-23 23 Ga

**«Crocodile» Gripping Forceps**
- 12-304-23 23 Ga

**Eckardt EndGripping Forceps**
- 12-410-23 23 Ga

*Handles are sold separately: 12-003T and 12-001T

*Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied*
23 Gauge*

- **Tano Asymmetrical End Gripping Forceps**
  - 12-411-23 23 Ga

- **End Grasping Forceps**
  - Expanded Space between Branches
  - 12-4013 23 Ga
  - Enhanced visualization!

- **End Grasping Forceps**
  - 12-420-23 23 Ga
  - Enhanced visualization!

- **Spring Gripping Forceps**
  - 12-321-23 23 Ga

- **End Grasping Forceps**
  - Elongated branches, 30 mm
  - Designed for myopic eyes
  - 12-4202-23 23 Ga
  - Enhanced visualization!

* Handles are sold separately: 12-003T and 12-001T

*Product images, including color, may slightly differ from actual product appearance due to the 3D effect applied*
25 Gauge*

**Vertical Scissors**
45 Degrees
Sharp tips
12-2029  25 Ga

**«Nail» End Gripping Forceps**
12-4089  25 Ga

**Curved Subretinal Scissors**
Curvature radius 12 mm
12-2099  25 Ga

**Eckardt End Gripping Forceps**
12-410-25  25 Ga

**Diamonized Gripping Forceps**
12-3019  25 Ga

**Tano Asymmetrical End Gripping Forceps**
12-411-25  25 Ga

**«Crocodile» Gripping Forceps**
12-304-25  25 Ga

**End Grasping Forceps**
12-420-25  25 Ga (Enhanced visualization!)

**Pick Forceps**
12-3259  25 Ga

---

*Handles are sold separately: 12-003T and 12-001T

*Product images, including color, may slightly differ from actual product appearance due to the 3D effect applied*
27 Gauge*

Eckardt End Gripping Forceps
12-410-27  27 Ga

End Grasping Forceps
12-420-27  27 Ga
Enhanced visualization!

Universal Handle + Interchangeable Tips (non-rotatable) *

Eckardt End Gripping Forceps
J-410  20 Ga
J-410-23  23 Ga

Fine End Gripping Forceps
J-4089  25 Ga

Tano Asymmetrical End Gripping Forceps
J-411-23  23 Ga
J-411-25  25 Ga

Curved Subretinal Scissors
Curvature radius 12 mm
J-209-23  23 Ga
J-2099  25 Ga

* Handles are sold separately: 12-003T and 12-001T

Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied.
Reusable Two Step Trocar Systems

Two Step
Reusable Trocar System with closure plugs

Package includes:
1. Trocar Cannula – 3 pcs
2. Trocar Cannula Plug – 3 pcs
3. Loading Forceps – 1 pc
4. Fixation Plate – 1 pc
5. Blunt Cannula Inserter – 3 pcs
6. Universal Infusion Line – 1 pc
7. Sterilizing Tray - 1 pc (not shown)

12-5173 23 Ga

Two Step
Reusable Trocar System with closure valves

Package includes:
1. Trocar Cannula with closure valves – 3 pcs
2. Loading Forceps – 1 pc
3. Fixation Plate – 1 pc
4. Blunt Cannula Inserter – 3 pcs
5. Universal Infusion Line – 1 pc
6. Sterilizing Tray - 1 pc (not shown)

12-5173-1 23 Ga

Accessory

Loading Forceps
12-5186

Fixation Plate
12-5188

Instrument Cannula Inserter
12-5187

Universal Infusion Line
Sterile
5 per box
12-5202

The best choice for the 23 Ga transconjunctival sutureless vitrectomy!

Can be ordered separately

Product images, including color, may slightly differ from actual product appearance due to the 3D effect applied
Trocar Cannula Set
The set includes:
Instrument Cannula – 2 ea
Cannula Plugs – 2 ea
Sterile
12-5189  23 Ga - 1 set per box
12-5190  23 Ga - 5 sets per box

Closure Valves
For Trocar Cannulas
The set includes:
Closure Valves – 4 ea
Sterile, 1 set per box
12-5209  23 Ga

Angled
MVR Blade
Sterile, 6 per box
12-5184  23 Ga

Scleral plugs
Ergonomically designed holder
Sterile, 5 holders per box
12-5085  19 Ga - 4 ea, 20 Ga - 4 ea
12-5078  19 Ga - 2 ea, 20 Ga - 2 ea

Scleral Plugs Forceps
Cross action mechanism reduces hand fatigue
1 forceps per package
12-5086S  20 Ga
Disposable Trocar Systems

One Step Trocar System

Each package includes:
1. Trocar knife with preloaded trocar cannula – 3 ea
2. Self-sealing trocar cannula (preloaded) – 3 ea
3. Infusion line (for BSS) – 1 ea

Sterile, 5 sets per box
# VITRECTOMY CUTTERS

## Reusable / Anterior

### 12-5050

<table>
<thead>
<tr>
<th>Alcon® Legacy™, STTO™, STTM™, Universal™</th>
<th>AMO® Sovereign™, Signature™, AMO Plus™, Prestige™</th>
<th>Staar Surgical® Wave™</th>
<th>Surgical Design® Ocusystem™</th>
<th>American Optisurgical® Horizon™</th>
<th>Nidek® CV-12000™, CV-6000™, CV-7000™</th>
</tr>
</thead>
<tbody>
<tr>
<td>800 CPM</td>
<td>20 PSI</td>
<td>20 Ga</td>
<td>With Irrigation Sleeve</td>
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</table>

### 12-5102

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<tr>
<td>800 CPM</td>
<td>25 PSI</td>
<td>20 Ga</td>
<td>Without Irrigation Sleeve</td>
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### 12-5070

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<th>AMO® Sovereign™, Signature™, AMO Plus™, Prestige™</th>
<th>Staar Surgical® Wave™</th>
<th>Surgical Design® Ocusystem™</th>
<th>American Optisurgical® Horizon™</th>
<th>Nidek® CV-12000™, CV-6000™, CV-7000™</th>
</tr>
</thead>
<tbody>
<tr>
<td>800 CPM</td>
<td>20 PSI</td>
<td>20 Ga</td>
<td>Without Irrigation Sleeve</td>
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### 12-5119

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</tr>
</thead>
<tbody>
<tr>
<td>800 CPM</td>
<td>25 PSI</td>
<td>20 Ga</td>
<td>With Irrigation Sleeve</td>
<td></td>
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</tr>
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</table>

### 12-5143

<table>
<thead>
<tr>
<th>Alcon® Accurus™, Infiniti™ – Anterior Vitrectomy Pack</th>
<th>DORC® Harmony Total TTC™</th>
</tr>
</thead>
<tbody>
<tr>
<td>800 CPM</td>
<td>25 PSI</td>
</tr>
</tbody>
</table>

Sterile
One per package

*™ All trademarks are property of their respective owners

*Product images, including color, may slightly differ from actual product appearance due to the 3D effect applied.
Reusable / Posterior

12-5026
Alcon® STTO™, Ocutome 800/8000™
Nidek® CV-12000™

800 CPM  20 PSI  20 Ga  Without Irrigation Sleeve

12-5065
Alcon® Accurus™
DORC® Harmony Total TTC™

800 CPM  30 PSI  20 Ga  Without Irrigation Sleeve

12-5100
AMO® Gemini™
B&L® Premiere™, Millennium™, Daisy™
Optikon® Pulsar 2™, Assistant™
Carl Zeiss MeditecOL Tech.®Pentasy™
Fritz Ruck® Pentasy™
Croma PharmaCorneal® Open Phaco™
Alcon® Microtome™, MVS™, STTO Dx™
Nidek® CV-24000™, VT-5000™
MID Labs® MVS™, SupraVit™
Syntec® VitMan™

800 CPM  25 PSI  20 Ga  Without Irrigation Sleeve

Sterile
One per package

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Product images, including color, may slightly differ from actual product appearance due to the 3D effect applied
Disposable / Anterior

12-5045
Alcon<sup>®</sup> Legacy<sup>™</sup>, STTO<sup>™</sup>, STTM<sup>™</sup>, Universal<sup>™</sup>
AMO<sup>®</sup> Sovereign<sup>™</sup>, Signature<sup>™</sup>,
AMO Plus<sup>™</sup>, Prestige<sup>™</sup>
Staar Surgical<sup>®</sup> Wave<sup>™</sup>
Surgical Design<sup>®</sup> Ocusystem<sup>™</sup>
American Optisurgical<sup>®</sup> Horizon<sup>™</sup>
Nidek<sup>®</sup> CV-12000<sup>™</sup>, CV-6000<sup>™</sup>, CV-7000<sup>™</sup>

| 800 CPM | 20 PSI | 20 Ga | With Irrigation Sleeve |

12-5068
Alcon<sup>®</sup> Legacy<sup>™</sup>, STTO<sup>™</sup>, STTM<sup>™</sup>, Universal<sup>™</sup>
AMO<sup>®</sup> Sovereign<sup>™</sup>, Signature<sup>™</sup>,
AMO Plus<sup>™</sup>, Prestige<sup>™</sup>
Staar Surgical<sup>®</sup> Wave<sup>™</sup>
Surgical Design<sup>®</sup> Ocusystem<sup>™</sup>
American Optisurgical<sup>®</sup> Horizon<sup>™</sup>
Nidek<sup>®</sup> CV-12000<sup>™</sup>, CV-6000<sup>™</sup>, CV-7000<sup>™</sup>

| 800 CPM | 20 PSI | 20 Ga | Without Irrigation Sleeve |

12-5118
AMO<sup>®</sup> Gemini<sup>™</sup>
B&L<sup>®</sup> Stellaris<sup>™</sup>, Millennium<sup>™</sup>,
Premiere<sup>™</sup>, Protge<sup>™</sup>
Optikon<sup>®</sup> Pulsar 2<sup>™</sup>, Assistant<sup>™</sup>
Croma Pharma/Corneal: Open Phaco<sup>™</sup>
Carl Zeiss Meditec<sup>®</sup>OL Tech/Fritz Ruck: Pentasys<sup>™</sup>
Carl Zeiss<sup>®</sup> Visalis 100<sup>™</sup>
Medical Technical Products<sup>™</sup>
Mediphacos<sup>™</sup>
Nidek<sup>®</sup> CV-24000<sup>™</sup>

| 800 CPM | 25 PSI | 20 Ga | With Irrigation Sleeve |

12-5142
Alcon<sup>®</sup> Accurus<sup>™</sup>,
Infiniti™ – Anterior Vitrectomy Pack
DORC: Harmony Total TTC™
Packaged with 21Ga Irrigation Cannula
Nidek<sup>®</sup> CV-24000<sup>™</sup>

| 800 CPM | 30 PSI | 20 Ga | Without Irrigation Sleeve |

12-5101
AMO<sup>®</sup> Gemini<sup>™</sup>
B&L<sup>®</sup> Stellaris<sup>™</sup>, Millennium<sup>™</sup>,
Premiere<sup>™</sup>, Protge<sup>™</sup>
Optikon<sup>®</sup> Pulsar 2<sup>™</sup>, Assistant<sup>™</sup>
Croma Pharma/Corneal: Open Phaco<sup>™</sup>
Carl Zeiss Meditec<sup>®</sup>OL Tech/Fritz Ruck: Pentasys<sup>™</sup>
Carl Zeiss<sup>®</sup> Visalis 100<sup>™</sup>
Medical Technical Products<sup>™</sup>
Mediphacos<sup>™</sup>
Nidek<sup>®</sup> CV-24000<sup>™</sup>

| 800 CPM | 25 PSI | 20 Ga | Without Irrigation Sleeve |

12-5208
Alcon<sup>®</sup> Legacy<sup>™</sup>, STTO<sup>™</sup>, STTM<sup>™</sup>, Universal<sup>™</sup>
AMO<sup>®</sup> Sovereign<sup>™</sup>, Signature<sup>™</sup>, Prestige<sup>™</sup>,
AMO Plus<sup>™</sup>, Staar Surgical<sup>®</sup> Wave<sup>™</sup>
Nidek<sup>®</sup> CV-12000<sup>™</sup>, CV-6000<sup>™</sup>, CV-7000<sup>™</sup>

| 800 CPM | 30 PSI | 20 Ga | Without Irrigation Sleeve |

Sterile
One per package

*™ All trademarks are property of their respective owners

Product images, including color, may slightly differ from actual product appearance due to the 3D effect applied
Disposable / Posterior

12-5020
Alcon® STTO™, Ocutome 800/8000™
Nidek® CV-12000™

800 CPM  20 PSI  20 Ga  Without Irrigation Sleeve

12-5124
Alcon® Accurus™
DORC® Associate™

2500 CPM  30 PSI  20 Ga  Without Irrigation Sleeve

12-5064
Alcon® Accurus™
DORC® Harmony Total TTC™

800 CPM  30 PSI  20 Ga  Without Irrigation Sleeve

12-5168
Carl Zeiss Meditec®OL Tech.®Pentasy™ – 1500 cpm
Fritz Ruck® Pentasy™ – 1500 cpm
Croma Pharma/Cornea:®Open Phaco™ – 1500 cpm
Optikon® Pulsar 2™, Assistant™ – 2000 cpm
AMO® Gemini™ – 2000 cpm
Nidek® CV-24000™ – 2500 cpm

1500–2500 CPM  25 PSI  20 Ga  Without Irrigation Sleeve

12-5099
AMO® Gemini™
B&L® Premiere™, Millennium™, Daisy™
Optikon® Pulsar 2™, Assistant™
Carl Zeiss Meditec®OL Tech.®Pentasy™
Fritz Ruck® Pentasy™
Croma Pharma/Cornea:®Open Phaco™
Alcon® Microtome™, MVS™, STTO Dx™
Nidek® CV-24000™, VT-5000™
MID Labs® MVS™, SupraVit™
Syntec® VitMan™

800 CPM  25 PSI  20 Ga  Without Irrigation Sleeve

12-5215
DORC® Harmony Total TTC™

1500 CPM  25 PSI  20 Ga  Without Irrigation Sleeve

Sterile
One per package

*™ All trademarks are property of their respective owners

Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied
Disposable / Posterior

12-5140
B&L® Millennium™, Premiere™ – 750 cpm
DORC® Harmony Total TTC™ – 1500 cpm
12-5022 – Pressure Line Adapter required
Cali Zeiss Meditec®OL Tech® Pentasy™ – 1500 cpm
Fritz Ruck® Pentasy™ – 1500 cpm
Croma Pharma®Corneal® Open Phaco™ – 1500 cpm
Optikon® Pulsar 2™, Assistant™ – 2000 cpm
AMO® Gemini™ – 2000 cpm
Nidek® CV-24000™ – 2500 cpm
Nidek® CV-12000™, VT-5000™ – 800 cpm

12-5171
B&L® Millennium™, Premiere™ 750 cpm
Cali Zeiss Meditec®OL Tech® Pentasy™ – 1500 cpm
Fritz Ruck® Pentasy™ – 1500 cpm
Croma Pharma®Corneal® Open Phaco™ – 1500 cpm
Optikon® Pulsar 2™, Assistant™ – 2000 cpm
Nidek® CV-12000™, CV-6000™, CV-7000™ – 800 cpm
Nidek® CV-24000™ – 2500 cpm

<table>
<thead>
<tr>
<th>750–2500 CPM</th>
<th>25 PSI</th>
<th>23 Ga</th>
<th>Without Irrigation Sleeve</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-5022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure Line Adapter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connects 12-5140 with DORC® Harmony Total TTC™</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5 per pack</td>
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12-5157
Alcon® Accurus™
DORC® Associate™

<table>
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<tr>
<th>2500 CPM</th>
<th>30 PSI</th>
<th>23 Ga</th>
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12-5172
Alcon® Accurus™
DORC® Associate™

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<th>Without Irrigation Sleeve</th>
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12-5216
DORC® Harmony Total TTC™

<table>
<thead>
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<th>1500 CPM</th>
<th>30 PSI</th>
<th>23 Ga</th>
<th>Without Irrigation Sleeve</th>
</tr>
</thead>
</table>

Sterile
One per package

* ™ All trademarks are property of their respective owners

Irrigation Sleeves

Disposable Irrigation Sleeve
5 per package
12-5035

Reusable Irrigation Sleeve
1 per package
12-5034

Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied
**BackFlush Handles**

**Titanium Backflush Handle**
- Passive Aspiration
- Reusable
- 12-6010

**Titanium Backflush Handle**
- Active Aspiration
- Reusable
- 12-6000

**Backflush Handle**
- Passive Aspiration
- Sterile
- 5 per box
- 12-5197

**Backflush Handle**
- Active Aspiration
- Sterile
- 5 per box
- 12-5196

**Replacement Reservoir for Backflush Handle**
- Passive
- Sterile
- 10 per box
- 12-5147

**Replacement Reservoir for Backflush Handle**
- Active
- Sterile
- 10 per box
- 12-5159

*Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied*
Cannulas For Backflush Instruments

Charles Flute Cannulas
Designed to aspirate blood and debris from the posterior segment. Smooth, finished tip provides atraumatic entry and reduces risk of trauma to surrounding tissue. Disposable, 5 per box

<table>
<thead>
<tr>
<th>Code</th>
<th>Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-5151</td>
<td>20 Ga</td>
</tr>
<tr>
<td>12-5164</td>
<td>23 Ga</td>
</tr>
<tr>
<td>12-5156</td>
<td>25 Ga</td>
</tr>
<tr>
<td>12-5492</td>
<td>27 Ga</td>
</tr>
</tbody>
</table>

Brush Tip Cannulas
For atraumatic brushing of retina. Disposable, 5 per box

<table>
<thead>
<tr>
<th>Code</th>
<th>Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-5017</td>
<td>20 Ga</td>
</tr>
<tr>
<td>12-5162</td>
<td>23 Ga</td>
</tr>
<tr>
<td>12-5160</td>
<td>25 Ga</td>
</tr>
</tbody>
</table>

Soft Tip Cannulas
Flexible tip allows atraumatic entry through retinal or macular tears or holes and enables aspiration of subretinal fluid. Disposable, 5 per box

<table>
<thead>
<tr>
<th>Code</th>
<th>Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-5063</td>
<td>20 Ga</td>
</tr>
<tr>
<td>12-5161</td>
<td>23 Ga</td>
</tr>
<tr>
<td>12-5152</td>
<td>25 Ga</td>
</tr>
<tr>
<td>12-5491</td>
<td>27 Ga</td>
</tr>
</tbody>
</table>

Diamond Dusted Soft Tip Cannulas
Designed for better cohesion and gentle sweeping of the membrane. Disposable, 5 per box

<table>
<thead>
<tr>
<th>Code</th>
<th>Gauge</th>
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</thead>
<tbody>
<tr>
<td>12-5193</td>
<td>20 Ga</td>
</tr>
<tr>
<td>12-5192</td>
<td>23 Ga</td>
</tr>
</tbody>
</table>

*Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied*
**Infusion Cannulas**
Ultra thin wall cannula 0.90 mm (20Ga) with 45° beveled tip allows more fluid flow than a regular wall cannula. Flexible tubing is 25 cm long and attaches to an infusion source with luer lock fitting. Unique design facilitates injection of silicone oil and other viscous fluids.

**Infusion Cannula**
Disposable, 5 per box

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Length</th>
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</thead>
<tbody>
<tr>
<td>12-5066</td>
<td>20Ga (0.90 mm), 2.5 mm</td>
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<tr>
<td>12-5010</td>
<td>20Ga (0.90 mm), 4.0 mm</td>
<td></td>
</tr>
<tr>
<td>12-5011</td>
<td>20Ga (0.90 mm), 6.0 mm</td>
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</tbody>
</table>

Reusable

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-024</td>
<td>20Ga (0.90 mm), 2.5 mm</td>
<td></td>
</tr>
<tr>
<td>12-025</td>
<td>20Ga (0.90 mm), 4.0 mm</td>
<td></td>
</tr>
<tr>
<td>12-026</td>
<td>20Ga (0.90 mm), 6.0 mm</td>
<td></td>
</tr>
</tbody>
</table>

**Silicone Oil Infusion Cannula**
Disposable, 5 per box

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-5012</td>
<td>20Ga, 4.0 mm tip</td>
</tr>
<tr>
<td>12-5013</td>
<td>20Ga, 6.0 mm tip</td>
</tr>
</tbody>
</table>

**Self-Retaining Sutureless Cannulas**
Sutureless fixation. Retaining ridge holds cannula in place.

**Self-Retaining Infusion Cannula**
Disposable, 5 per box

4.0 mm tip Stainless Steel Metal Hub

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
</tr>
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<tbody>
<tr>
<td>12-5116</td>
<td>20Ga (0.90 mm)</td>
</tr>
<tr>
<td>12-5144</td>
<td>23Ga (0.60 mm)</td>
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</tbody>
</table>

6.0 mm tip Stainless Steel Metal Hub

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-5219</td>
<td>20Ga (.90 mm)</td>
</tr>
<tr>
<td>12-5221</td>
<td>23Ga (.60 mm)</td>
</tr>
</tbody>
</table>

**Self-Retaining Silicone Oil Infusion Cannula**
Disposable, 5 per box

4.0 mm tip Stainless Steel Metal Hub

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
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<tbody>
<tr>
<td>12-5117</td>
<td>20Ga</td>
</tr>
<tr>
<td>12-5165</td>
<td>23Ga</td>
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</table>

6.0 mm tip Stainless Steel Metal Hub

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
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</thead>
<tbody>
<tr>
<td>12-5220</td>
<td>20Ga</td>
</tr>
<tr>
<td>12-5222</td>
<td>23Ga</td>
</tr>
</tbody>
</table>

*Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied*
Dual Bore Cannulas
For simultaneous infusion and aspiration of liquids.

Dual Bore PFC Cannula
Simultaneous infusion of heavy liquids and aspiration of intraocular fluids
Dual bore enables to control constant intraocular pressure during injection
Disposable, 5 per box
12-5191  20Ga (0.90 mm)
12-5203  23Ga (0.60 mm)

Dual Bore BSS Injection Needle
Enables to control subretinal injection of BSS
Dual bore cannula combined with aspiration capability
Disposable, 1 per box
12-5194  20Ga / 41Ga (0.10 mm) tip

Illuminated Infusion Cannula
For simultaneous infusion of liquids and illumination.

Chandelier Cannula with illumination
Ocutome® connector
12-5037  20Ga

Illuminated Infusion Cannula
12-5038  18Ga, Ocutome® connector
12-5096  18Ga, Alcon® connector
12-5128  18Ga, B&L® connector
## Fiber Optic Probes

<table>
<thead>
<tr>
<th>Surgical System</th>
<th>Type of Illumination</th>
<th>Fiber Optic Probes</th>
<th>Wide Angle Fiber Optic Probe</th>
<th>Shielded Fiber Optic Probe (Wide Angle Illumination with central focal point)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcon®</td>
<td></td>
<td>12-5072 20 Ga</td>
<td>12-5073 20 Ga</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Accurus™</td>
<td>12-5177 23 Ga</td>
<td>12-5178 23 Ga</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12-5135 25 Ga</td>
<td></td>
<td></td>
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<tr>
<td>B&amp;L®</td>
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<td>12-5076 20 Ga</td>
<td>12-5077 20 Ga</td>
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<td>12-5179 23 Ga</td>
<td>12-5180 23 Ga</td>
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<td>12-5138 25 Ga</td>
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<td>Ocutome®</td>
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<td>12-5014 20 Ga</td>
<td>12-5019 20 Ga</td>
<td>12-5079 20 Ga</td>
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<tr>
<td></td>
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<td>12-5169 23 Ga</td>
<td>12-5210 23 Ga</td>
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<tr>
<td></td>
<td></td>
<td>12-5126 25 Ga</td>
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</tbody>
</table>

5 per box

### Fiber Optic Adapter

- For Ocutome™ 5 mm connector to Alcon® Accurus™
  - 1 per box
  - 12-5023

- For Ocutome™ 5 mm connector to Grieshaber®, Trek®
  - 1 per box
  - 12-5025

- For Ocutome™ 5 mm connector to B&L® systems
  - 1 per box
  - 12-5024

*Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied*
Ultra Purified Silicone Oil

For Vitreoretinal Surgery

- Maximum interfacial tension and minimum interactions between tissues, cells and endo-tamponades media
- Optimal combination of specific gravity, refractive index and surface tension
- Different viscosity indexes enable easy injection (1000 cSt) and stable temporary tamponade (5000 cSt)

<table>
<thead>
<tr>
<th></th>
<th>SmartSil 1000</th>
<th>1000 cSt</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SmartSil 5000</td>
<td>5000 cSt</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physicochemical properties:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interfacial tension at 37°C</td>
<td>43,2 mN/m¹</td>
</tr>
<tr>
<td>Density</td>
<td>0,97 g/cm³</td>
</tr>
<tr>
<td>Viscosity</td>
<td>1000 cSt / 5000 cSt</td>
</tr>
<tr>
<td>Refractive index</td>
<td>1,404</td>
</tr>
<tr>
<td>Volatility</td>
<td>0,06%</td>
</tr>
<tr>
<td>Polydispersity</td>
<td>2,33</td>
</tr>
<tr>
<td>Elements potentially toxic</td>
<td>&lt; 3 ppm</td>
</tr>
<tr>
<td>Low molecular weights</td>
<td>D4–D9: &lt; 24 ppm</td>
</tr>
<tr>
<td></td>
<td>D10–D20: 4 ≤ ppm</td>
</tr>
</tbody>
</table>

Not available in the US

Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied
Silicone Oil Infusion Systems

Reusable Tubing System for the Infusion of Silicone Oil

Caprolon Adapter adjustable to:
Ioltech® Pentasys™
Optikon® Antares™
Alcon® STTO™
Storz® Premiere™
DORC® Harmony Budget™
12-RTUB-1

DORC® Associate™
Alcon® Constellation™, Accumus™
12-RTUB-2

Caprolon Adapter adjustable to:
Oerlii® Orbit™, Faros™, Os3™
12-RTUB-4

Viscous Fluid Injection Cannula
10 mm polyimide tip
Allowing injection of viscous fluids such as silicone oil through 23Ga trocar cannula
Disposable, 5 per box
12-5248 23Ga

Product images, including color, may slightly differ from actual product appearance due to the 3d effect applied