Disposable Neuroendoscopes

This high-quality, reusable instrumentation was specifically designed for use with Channel™ Neuroendoscopes. Instruments are available in several lengths to ensure compatibility with each endoscope.

Auxiliary Equipment

Video Adapters

Optical Coupler
REF no. 5196-001

Expansion Ring
REF no. S196-001

EyePiece
REF no. S186-001

C to V Mount Adapter
REF no. S209-001

Universal Light Cable and Adapters

Universal Light Cable, 1 mm
REF no. S196-007

ACMI
REF no. S196-001

Olympus
REF no. S196-002

Storz
REF no. S196-003

Wolf/DCI
REF no. S196-004

CamLite™ Replacement Bulb
REF no. S191-002

For use with CamLite™ Models S191-100 and S191-200 (not shown)

For more information, contact your Medtronic NT sales representative or refer to www.medtronic.com.

Medtronic Neurologic Technologies
125 Cremona Drive
Goleta, CA  93117-5500
USA
(800) 468-9710 USA/Canada
(901) 344-0645 International
(800) 468-9713 FAX
(901) 396-2698 FAX International

Caution: Federal (USA) law restricts this device to sale by or on the order of a physician. Refer to product package insert for instructions, warnings, precautions and complications.
Channel™ Neuroendoscopes

- High-resolution endoscopes with 30,000 pixel fibers provide consistent, high-quality imagery.
- Lightweight design removes the bulk and weight of the camera away from the hand.
- The fiberoptic design permits the endoscope to be held in a retractor arm with minimal risk of damage to the optics.
- Separate inflow and outflow channels facilitate balancing irrigation with intracranial pressure.
- Lightweight design removes the bulk and weight of the camera away from the hand.

Specifications and Ordering Information

<table>
<thead>
<tr>
<th>REF No.</th>
<th>Working Length</th>
<th>Total Length</th>
<th>Outer Diameter</th>
<th>Working Diameter</th>
<th>Resolution</th>
<th>Pixel Fibers</th>
<th>Needed for Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>2233-005</td>
<td>13.0 cm</td>
<td>17.2 cm</td>
<td>4.2 mm</td>
<td>2.13 mm</td>
<td>High</td>
<td>30,000</td>
<td>3805-014</td>
</tr>
<tr>
<td>2233-002</td>
<td>21.6 cm</td>
<td>25.8 cm</td>
<td>4.2 mm</td>
<td>2.13 mm</td>
<td>High</td>
<td>30,000</td>
<td>3805-014</td>
</tr>
<tr>
<td>2232-003</td>
<td>13.0 cm</td>
<td>17.2 cm</td>
<td>4.5 mm</td>
<td>3.12 mm</td>
<td>Standard</td>
<td>10,000</td>
<td>3805-015</td>
</tr>
<tr>
<td>2232-001</td>
<td>21.6 cm</td>
<td>25.8 cm</td>
<td>4.5 mm</td>
<td>3.12 mm</td>
<td>Standard</td>
<td>10,000</td>
<td>3805-015</td>
</tr>
<tr>
<td>2232-004</td>
<td>13.0 cm</td>
<td>17.2 cm</td>
<td>3.5 mm</td>
<td>2.13 mm</td>
<td>Standard</td>
<td>10,000</td>
<td>3805-012</td>
</tr>
<tr>
<td>2232-002</td>
<td>21.6 cm</td>
<td>25.8 cm</td>
<td>3.5 mm</td>
<td>2.13 mm</td>
<td>Standard</td>
<td>10,000</td>
<td>3805-012</td>
</tr>
</tbody>
</table>

NeuroPEN™ Neuroendoscopes

- Select handle enables unencumbered placement of ventricular catheters away from the choroid plexus and other anatomical structures.
- Irrigation channel maintains clear field of view.
- Its contains an endoscope and a catheter.
- Length markers on catheters clearly identify insertion depth.
- Retrieval right-angle clip provides a non-kinking bend in the catheter at the Burr-hole site.
- Unique tip design configuration glides smoothly through tissue, unlike conventional "fish mouth" tips, which can tear tissue.

Specifications and Ordering Information

<table>
<thead>
<tr>
<th>REF No.</th>
<th>Working Length</th>
<th>Diameter</th>
<th>Catheter Length</th>
<th>Catheter Diameter</th>
<th>Endoscope Length</th>
<th>Endoscope Diameter</th>
<th>Tip Fibers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2120-125</td>
<td>15.5 cm</td>
<td>1.14 mm</td>
<td>100 cm</td>
<td>1.14 mm</td>
<td>Innervision</td>
<td>Standard</td>
<td>10,000</td>
</tr>
<tr>
<td>2120-925</td>
<td>15.5 cm</td>
<td>1.14 mm</td>
<td>100 cm</td>
<td>1.14 mm</td>
<td>Innervision with BioGlide</td>
<td>Standard</td>
<td>10,000</td>
</tr>
<tr>
<td>2120-025</td>
<td>15.5 cm</td>
<td>1.14 mm</td>
<td>100 cm</td>
<td>1.14 mm</td>
<td>N/A</td>
<td>Standard</td>
<td>10,000</td>
</tr>
<tr>
<td>2120-035</td>
<td>19.0 cm</td>
<td>1.14 mm</td>
<td>N/A</td>
<td>1.14 mm</td>
<td>N/A</td>
<td>Standard</td>
<td>10,000</td>
</tr>
</tbody>
</table>

MurphyScope™ Neuroendoscopes

- Different endoscope configurations available to accommodate different surgical preferences.
- The endoscope tip includes a non-traumatic rounded end to minimize trauma to surrounding tissue.
- The malleable tip can be reshaped per the surgeon's preference.
- An irrigation channel is included to maintain a clear field of view.

Specifications and Ordering Information

<table>
<thead>
<tr>
<th>REF No.</th>
<th>Angle</th>
<th>Length</th>
<th>Diameter</th>
<th>Tip Fibers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2123-141</td>
<td>45°</td>
<td>140 mm</td>
<td>1.4 mm</td>
<td>Barium Impregnated</td>
</tr>
<tr>
<td>2123-142</td>
<td>45°</td>
<td>140 mm</td>
<td>1.4 mm</td>
<td>Barium Impregnated</td>
</tr>
<tr>
<td>2123-143</td>
<td>45°</td>
<td>140 mm</td>
<td>1.4 mm</td>
<td>Barium Impregnated</td>
</tr>
<tr>
<td>2123-144</td>
<td>45°</td>
<td>140 mm</td>
<td>1.4 mm</td>
<td>Barium Impregnated</td>
</tr>
<tr>
<td>2123-145</td>
<td>45°</td>
<td>140 mm</td>
<td>1.4 mm</td>
<td>Barium Impregnated</td>
</tr>
<tr>
<td>2123-146</td>
<td>45°</td>
<td>140 mm</td>
<td>1.4 mm</td>
<td>Barium Impregnated</td>
</tr>
</tbody>
</table>