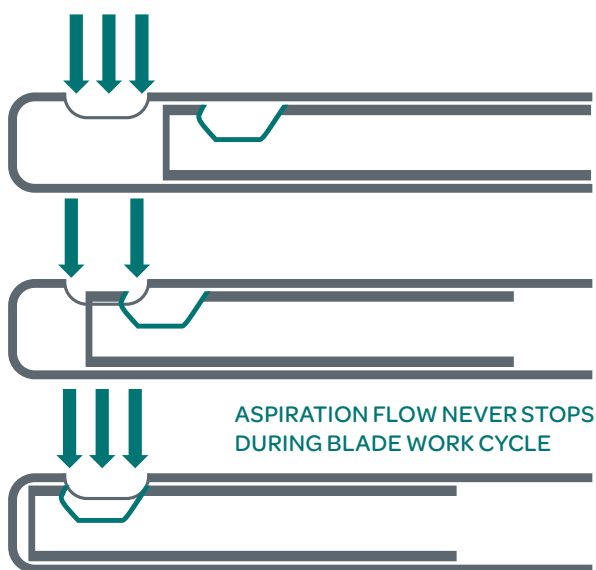


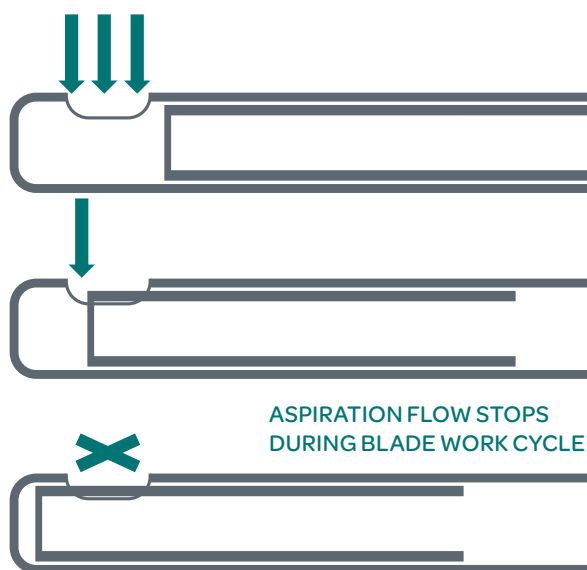
TWEDGE™

20,000 CUTS/MIN DUAL BLADE VITREOUS CUTTER

TWEDGE™

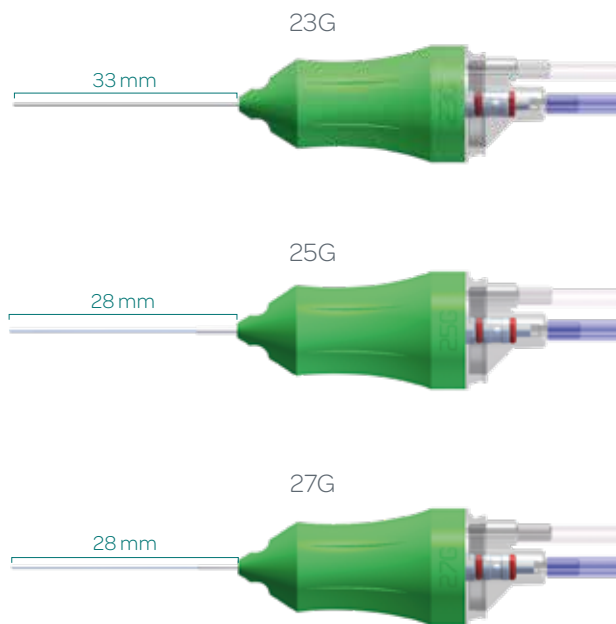
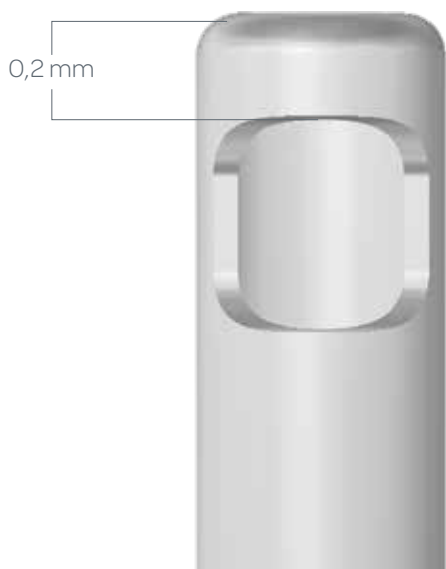


SINGLE-BLADE VITREOUS CUTTER



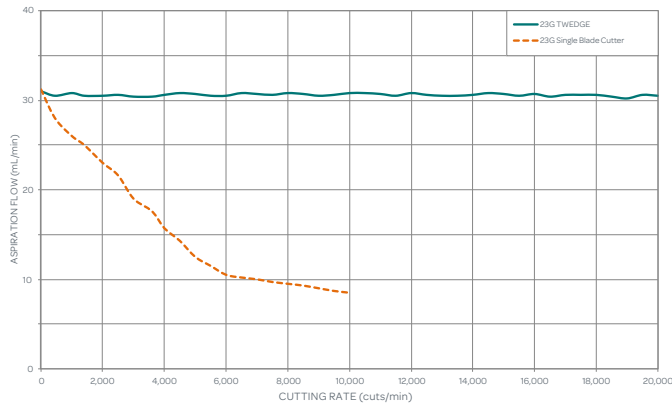
EVEN CLOSER TO THE RETINA

The shortest tip to port distance,
the best retinal shaving action



ON THE CUTTING TWEDGE OF TECHNOLOGY

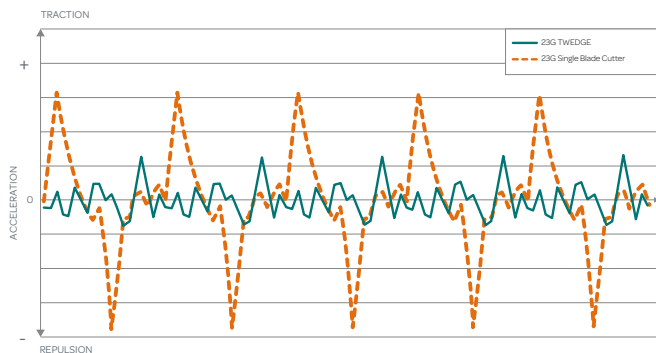
MAXIMUM AND CONSTANT FLOW AT ANY CUTTING RATE



The chart shows the differences in aspiration flow (balanced salt solution, Vacuum 650 mmHg, Venturi pump, R-Evolution™ CR) that are achieved using the Twedge™ vitreous cutter (solid line) compared to a single blade vitreous cutter (dashed line), as the cutting rate changes.

In particular, the solid line shows how the flow remains constant up to 20,000 cuts/min with the Twedge™ vitreous cutter; in comparison, the flow decreases as cutting rate increases using the single blade vitreous cutter.

NO FLUCTUATIONS EVEN CLOSE TO THE RETINA



The chart shows the accelerations (porcine vitreous, 3,000 cuts/min, 300 mmHg vacuum, Venturi pump, R-Evolution™ CR) induced by the Twedge™ vitreous cutter (solid line) and a single blade vitreous cutter (dashed line), as a function of time. At every blade work cycle the reduction of stress value, using the Twedge™, generates a pulse-free action and the utmost safety close to the retina.

The advantages that can be achieved in surgical practice through the use of this instrument have been identified and proven by scientific studies carried out by Tommaso Rossi* in collaboration with Giorgio Querzoli**.

Reference:

- "Fluid dynamics of vitrectomy probes" Rossi T., Querzoli G., Angelini G., Malvasi C., Iossa M., Placentino L., Ripandelli G.; Retina. 2014 Mar; 34(3): 558-67. doi:10.1097/IAE.0b013e3182a0e628
- "Introducing new vitreous cutter blade shapes: a fluid dynamics study" Rossi T., Querzoli G., Angelini G., Malvasi C., Iossa M., Placentino L., Ripandelli G.; Retina. 2014 Sep; 34(9): 1896-904.
- "A new vitreous cutter blade engineered for constant flow vitrectomy" Rossi T., Querzoli G., Malvasi C., Iossa M., Angelini G., Ripandelli G.; Retina. 2014 Jul; 34(7): 1487-91.

Courtesy of:
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