

# Optimized Constants for AF-1 / Nanex™ Preloaded IOLs

(based on clinical results published on IOLCon and optical biometry mostly from the Zeiss IOLMaster)

Model name	Specifications	Nominal A	Barrett LF	$a_0$	Haigis $a_1$	$a_2$	Hoffer Q pACD	Holladay-1 sf	SRK/T A	C	Castrop H	R	Cooke K6 A	Eom A	Olsen ACD	
<b>AF-1</b>																
<b>PY-60AD</b>	3-Piece, asph.	118.4	1.67	-0.093	-0.023	0.208	5.30	1.54	118.6	-	-	-	-	-	-	*
<b>PC-60AD</b>	3-Piece, asph.	118.4	1.67	-0.093	-0.023	0.208	5.30	1.54	118.6	-	-	-	-	-	-	*
<b>PY-60R</b>	3-Piece, spherical	118.4	1.62	1.060	0.400	0.100	5.24	1.48	118.5	-	-	-	-	-	-	*
<b>PC-60R</b>	3-Piece, spherical	118.4	1.62	1.060	0.400	0.100	5.24	1.48	118.5	-	-	-	-	-	-	*
<b>251</b>	1-Piece, asph.	118.4	1.62	-0.542	0.161	0.204	5.30	1.52	118.5	-	-	-	-	-	-	*
<b>250</b>	1-Piece, asph.	118.4	1.62	-0.542	0.161	0.204	5.30	1.52	118.5	-	-	-	-	-	-	*
<b>255</b>	1-Piece, asph.	118.4	1.62	-0.542	0.161	0.204	5.30	1.52	118.5	-	-	-	-	-	-	*
<b>254</b>	1-Piece, asph.	118.4	1.62	-0.542	0.161	0.204	5.30	1.52	118.5	-	-	-	-	-	-	*
<b>151</b>	1-Piece, spherical	118.4	1.62	-0.542	0.161	0.204	5.30	1.52	118.5	-	-	-	-	-	-	*
<b>150</b>	1-Piece, spherical	118.4	1.62	-0.542	0.161	0.204	5.30	1.52	118.5	-	-	-	-	-	-	*



As the data set for model 250/251 is larger on Ocusoft/ULIB than that submitted to IOLCon, the recommendation is to use the Manufacturer/ULIB constants rather than the optimized IOLCon values.

## Nanex™

<b>NY1-SP</b>	1-Piece, asph.	119.2	1.94	-0.2676	0.2382	0.1993	5.715	1.904	119.112	0.3370	0.0716	0.1757	119.244	-	4.935	**
<b>NC1-SP</b>	1-Piece, asph.	119.2	1.94	-0.2676	0.2382	0.1993	5.715	1.904	119.112	0.3370	0.0716	0.1757	119.244	-	4.935	**

\* <http://ocusoft.de/ulib/c1.htm> (as of Oct 31, 2016)

\*\* <https://iolcon.org> (as of September 29, 2025)

 UV-filter  UV- and blue light filter

Constants for Holladay-2, Hill-RBF or KANE formulas are not published on Ocusoft or IOLCon. Optimized constants for these formulas can be calculated in some biometer devices based on the above-mentioned SRK/T values. The Olsen formula can be used for IOL power calculation in the Oculus Pentacam AXL and Haag-Streit Lenstar / Eyestar devices, as all required IOL parameters are included in the corresponding software.

These optimized constants for the calculation of intraocular lens power are based on actual surgical data and are provided by Ocusoft or IOLCon as a starting point for individual constant optimizations. The information available on these websites are based on data originating from other users and not by HOYA Surgical Optics ("HSO"). HSO therefore does not warrant the correctness, completeness and correctness of the contents on the said websites.

# Optimized Constants for Vivinex™ Preloaded IOLs

(based on clinical results published on IOLCon and optical biometry mostly from the Zeiss IOLMaster)

Model name	Specifications	Nominal A	Barrett LF	$a_0$	Haigis $a_1$	$a_2$	Hoffer Q pACD	Holladay-1 sf	SRK/T A	C	Castrop H	R	Cooke K6 A	Eom A	Olsen ACD
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## Vivinex™

<b>XY1 XY1-SP</b>	1-Piece, asph.	118.9	1.98	-0.4362	0.2496	0.2035	5.682	1.918	119.192	0.323	0.1605	0.1193	119.182	119.172	4.84	**
<b>XC1 XC1-SP</b>	1-Piece, asph.	118.9	1.98	-0.4362	0.2496	0.2035	5.682	1.918	119.192	0.323	0.1605	0.1193	119.182	119.172	4.84	**

## Vivinex Impress™ (Toric)

<b>XY1-EM(T)</b>	1-Piece, asph., toric/non-toric	118.8	1.98	-0.4362	0.2496	0.2035	5.682	1.918	119.192	0.323	0.1605	0.1193	119.182	119.172	4.84
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As IOLCon data set is less than 250 cases for Vivinex Impress™, the recommendation is to use the optimized constants for the Vivinex™ monofocal IOL also for Vivinex Impress™ and Vivinex Impress™ Toric.

## Vivinex™ Toric

<b>XY1A XY1A-SP</b>	1-Piece, toric, asph.	118.9	1.98	-0.4362	0.2496	0.2035	5.682	1.918	119.192	0.323	0.1605	0.1193	119.182	119.172	4.84
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As IOLCon data set is less than 250 cases for Vivinex™ Toric, the recommendation is to use the optimized constants for the Vivinex™ monofocal IOL also for Vivinex™ Toric.

## Vivinex™ Gemetric™ (Toric) / Vivinex™ Gemetric™ Plus (Toric)

<b>XY1-G(T) XY1-GP(T)</b>	1-Piece, trifocal, asph., toric/non-toric	119.0	1.88	-0.1558	0.295	0.1775	5.529	1.776	118.991	-	-	-	118.883	118.927	-	**
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\*\* <https://iolcon.org> (as of September 29, 2025)

UV-filter

UV- and blue light filter

Constants for Holladay-2, Hill-RBF or KANE formulas are not published on OcuSoft or IOLCon. Optimized constants for these formulas can be calculated in some biometer devices based on the above-mentioned SRK/T values. The Olsen formula can be used for IOL power calculation in the Oculus Pentacam AXL and Haag-Streit Lenstar / Eyestar devices, as all required IOL parameters are included in the corresponding software.

These optimized constants for the calculation of intraocular lens power are based on actual surgical data and are provided by OcuSoft or IOLCon as a starting point for individual constant optimizations. The information available on these websites are based on data originating from other users and not by HOYA Surgical Optics ("HSO"). HSO therefore does not warrant the correctness, completeness and correctness of the contents on the said websites.