

RECOMMENDED CONSTANTS SUGGESTED AS STARTING POINT FOR IOL POWER CALCULATION

Please note, constants should be individualized subsequently per surgeon to enable highest precision and best predictability!

MODEL	RECOMMENDED CONSTANTS FOR LASER INTERFEROMETRY AND IMMERSION ULTRASOUND BIOMETRY							ESTIMATED MANUFACTURER A-CONSTANT ⁵
	HAIGIS	HOFFER Q (PACD)	HOLLADAY (SURGEON FACTOR)	HOLLADAY 2 ²	SRK/T	SRK II ³	BARRETT LF/DF ⁴	OPTICAL (ACUSTICAL)
ASPIRA-aA/-aAY ¹	a ₀ = -0.8658 a ₁ = 0.2131 a ₂ = 0.2141 Note: a _i s negative here	5.374	sf=1.626	5.199	118.715	119.0	1.73/ --	118.4 (118.1)
ASPIRA-aXA/-aXAY ¹	a ₀ = -0.5209 a ₁ = 0.2693 a ₂ = 0.2152 Note: a _i s negative here	5.924	sf=2.166	5.14	119.568	119.8	2.18/ --	118.3 (118.0)
MC X11 ASP	a ₀ = 1.59 a ₁ = 0.4 a ₂ = 0.1	5.85	sf=2.08	5.14	119.4	119.8	2.09/ --	118.3 (118.0)
ASPIRA-aQA ¹	a ₀ = -0.4913 a ₁ = 0.072 a ₂ = 0.2267 Note: a _i s negative here	5.605	sf=1.805	5.374	118.952	119.3	1.86/ --	118.7 (118.4)
AS	a ₀ = 0.885 a ₁ = 0.312 a ₂ = 0.125	5.36	sf=1.60	5.199	118.7	119.1	1.73/ --	118.4 (118.1)
ASPIRA [®] 3P-aVA	a ₀ = 1.29 a ₁ = 0.4 a ₂ = 0.1	5.34	sf=1.73	5.315	119.1	119.1	1.94/ --	118.6 (118.3)
TORICA-aA/-aAY	a ₀ = 1.18 a ₁ = 0.4 a ₂ = 0.1	5.35	sf=1.51	5.199	118.3	118.4	1.52/ --	118.4 (118.1)
DIFF-aA/-aAY	a ₀ = 1.28 a ₁ = 0.4 a ₂ = 0.1	5.50	sf=1.73	5.199	118.9	119.2	1.83/ --	118.4 (118.1)
TORICADIFF-aA/-aAY	a ₀ = 0.885 a ₁ = 0.312 a ₂ = 0.125	5.36	sf=1.60	5.199	118.7	119.1	1.73/ --	118.4 (118.1)

References:

¹ Source: IOLCon.org <https://iolcon.org> (Version: 03.03.2020)

All other listed constants are data from HumanOptics AG. All constants optimizations based primary on Caucasian patients.

² The ACD-constant of the Holladay 2 formula refers to the manufacturer's constant and is not subject for optimization.

³ The A-constant of the SRK II formula is not subject to any further adjustments.

⁴ The Barrett lens constant (LF) refers to the SRK/T A-constant of the IOL and is solely based on theoretical calculation by http://calc.apacrs.org/barrett_universal2105/.

Therefore, precision might be limited, so that crosschecking the result with a second formula as well as early individual personalization of the LF is highly recommended.

Please note, the Barrett design factor (DF) is not necessary for the calculation and please leave the DF field in the Lens Manager blank. The blank field is not equal to zero!

⁵ Estimated A-constant of the manufacturer (packaging) is not recommended for IOL power calculation.

This information is supplied without liability. It is always recommended to use personalized IOL constants by the surgeons on the base of the surgeon's own clinical experience, the surgical techniques, the used measuring devices and postoperative results to achieve best prediction results. The values specified above are only start values and guidance for the calculation of IOL power.

For Chinese market other constants are recommended for the model DIFF-aA/-aAY. Please refer to relating separate list of constants accordingly. Please contact for further assistance application@humanoptics.com.