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2460

EYECRYL™ *Actw*
IOL RANGE

OPTIMALLY
TREATING
PRESBYOPIA



biotech

VISION CARE



ILED TECHNOLOGY

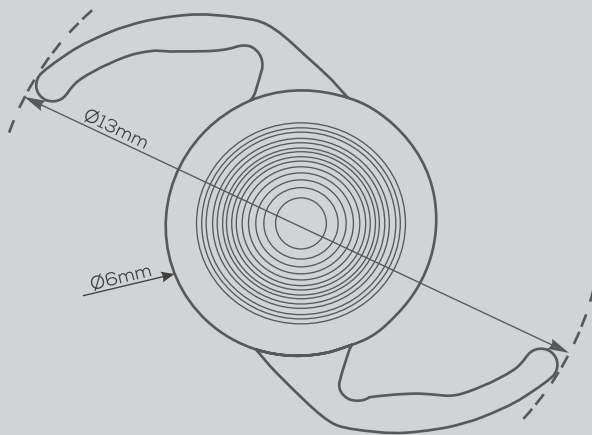
Improved near vision without compromising the distance vision

- Designed for Natural Adaptation
- Effective use of unused light energy and balanced energy distribution
- Improved near vision without disturbing the distance vision
- Less pupil dependency
- Optimized light distribution to maintain good contrast
- Controlled halos and glares

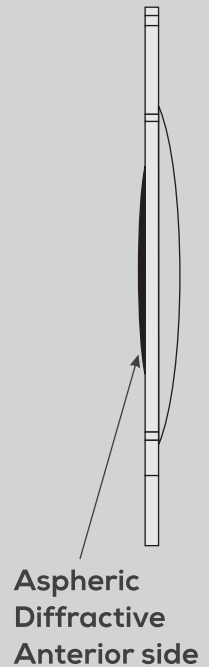
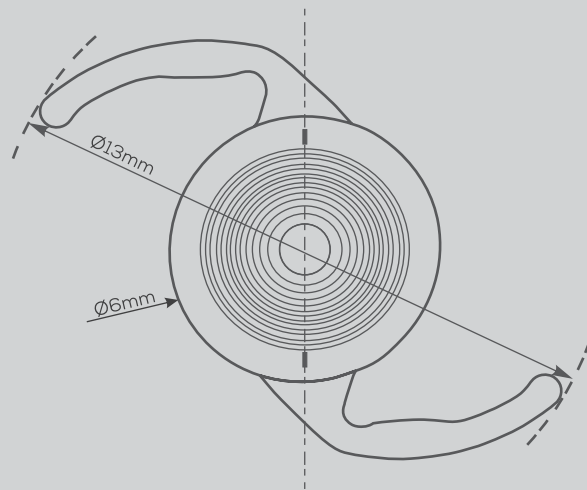
UNIQUE REFRACTIVE DIFFRACTIVE ASPHERIC DESIGN

- Optimized center zone (Refractive Zone) supports larger angle Alpha & minimizes haloes and glares
- Optimized Diffractive Zone reduces dependency on pupil Size
- Peripheral Refractive Zone supports the Distance Vision in dimmer lighting conditions

EYECRYL ACTV



EYECRYL ACTV TORIC



EYECRYL™ Actv



EYECRYL ACTV IOLs are
Diffractive-Refractive Multifocal IOLs
having a series of concentric rings
with diffractive steps

EYECRYL™ Actv TORIC



EYECRYL ACTV TORIC IOLs are
Diffractive-Refractive Multifocal IOLs
having a series of concentric rings with
diffractive steps and cylindrical correction
for treatment of corneal astigmatism

PROVEN PLATFORMS



EYECRYL ACTV TORIC is Aspheric Multifocal TORIC IOL which is manufactured by combining, the proven technologies of EYECRYL ACTV-Multifocal IOL and EYECRYL TORIC - TORIC IOL, using pre-hydrated advanced hydrophobic material.



The spacing between the steps gets progressively closer from the central to outer diffractive ring of lens. EYECRYL ACTV IOLs use this technology to provide excellent distance and near vision along with good intermediate vision.



EYECRYL TORIC lenses have cylinder power built into the lens to correct astigmatism and provides excellent rotational stability.

PROVEN FEATURES OF EYECRYL IOL RANGE

Glistening Free Hydrophobic Material

Aspheric Design with Negative SA to compensate Positive SA of the Cornea and to enhance visual acuity & contrast sensitivity in all lighting conditions

Optimized 'C' haptic design for better stability

Excellent tackiness with capsular bag

Advanced 360° square edge

Negligible level of biological contamination having Bacterial Endotoxin even less than 0.2 EU/IOL

Minimal incision size reduces SIA

SPECIAL FEATURES

EYECRYL™ *Activ*

Near addition of + 3.0 D

Improved spectacle independency

**Excellent distance and near vision
along with good intermediate vision**

**Improved visual outcomes in
all lighting conditions**

EYECRYL™ *Activ* TORIC

in addition to qualities of EYECRYL™ *Activ*

**Near addition of + 3.0 D with wide
range of cylindrical correction**

Excellent rotational stability

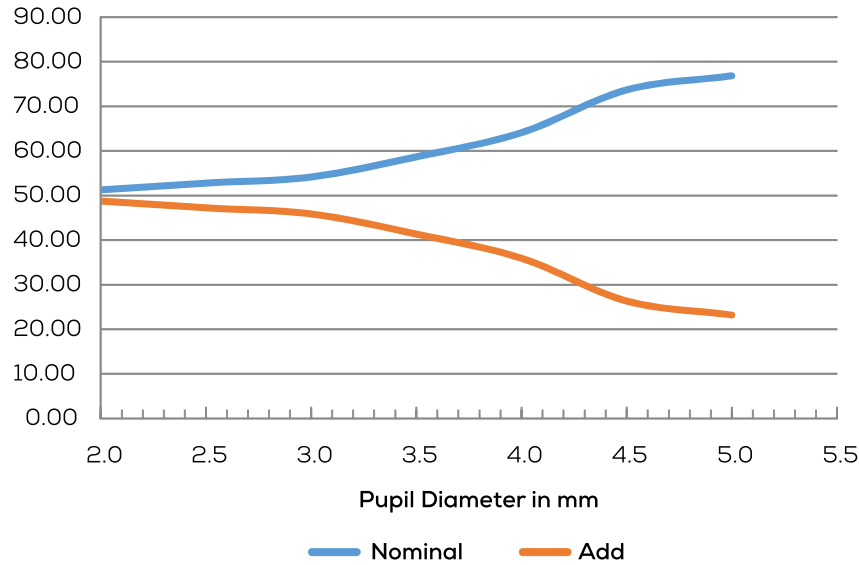
**Astigmatism correction with
predictable outcomes**

OPTIMIZED LIGHT DISTRIBUTION

Effective use of unused light energy and balanced energy distribution

- High Transmitted Light energy will provide good quality of vision and will improve contrast sensitivity
- Priority for the Near vision without compromising the Distance vision.
- Effective use of unused light energy

EYECRYL ACTV Light energy Distribution @546 nm



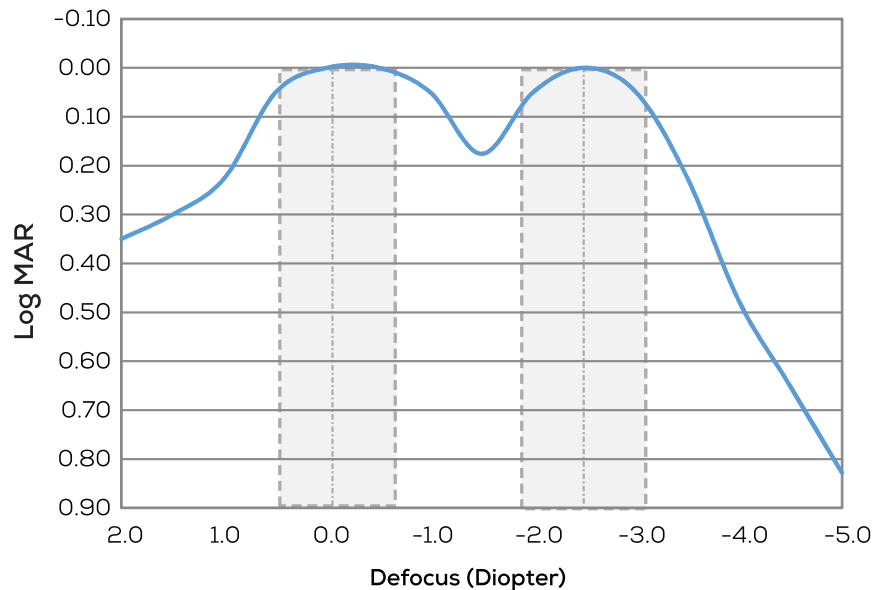
- As per literature study around 80% energy will be utilized in Bifocal IOLs.

DEFOCUS CURVE

Improved near vision without compromising the distance vision

- Supportive design for Near vision
- 45 cm (3.0 D) Near Focal point
- 35 cm to 55 cm continuous vision in near field
- Refractive correction for Distance Vision

Defocus Curve EYECRYL ACTV



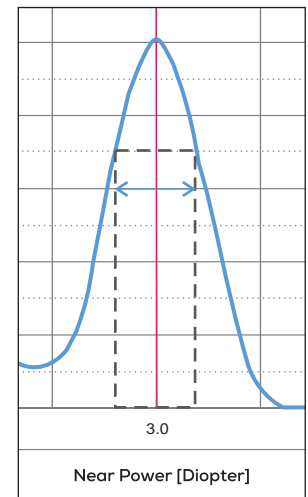
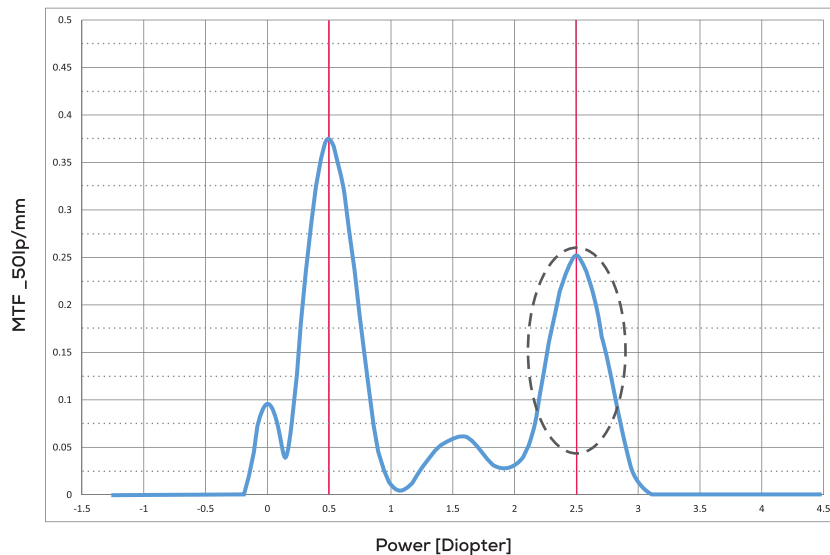
MODULATION TRANSFER FUNCTION

Improved near vision without disturbing the distance vision

- Sufficient energy distribution at each focal point
- Better MTF
- Better resolution
- Good contrast

Improved near vision without compromising the distance vision

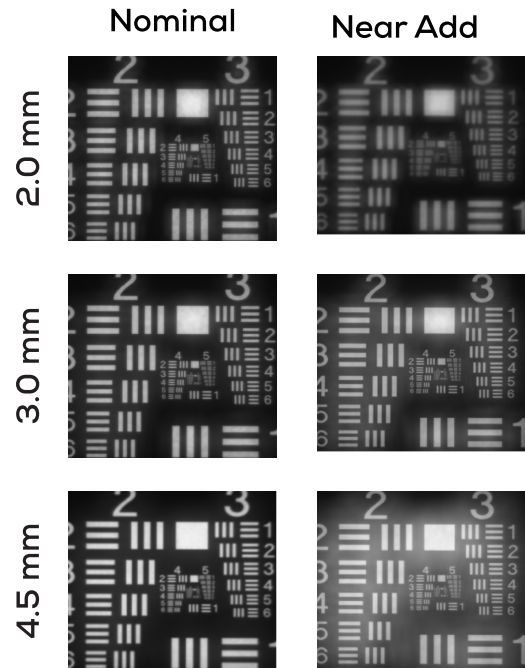
- Extended depth of focus at near vision will provide Extended range of quality vision for Daily activities
- Covers 35–55 cm distance Near vision without loss of contrast sensitivity



OPTICAL BENCH MEASUREMENTS

Optimized light distribution to maintain good contrast

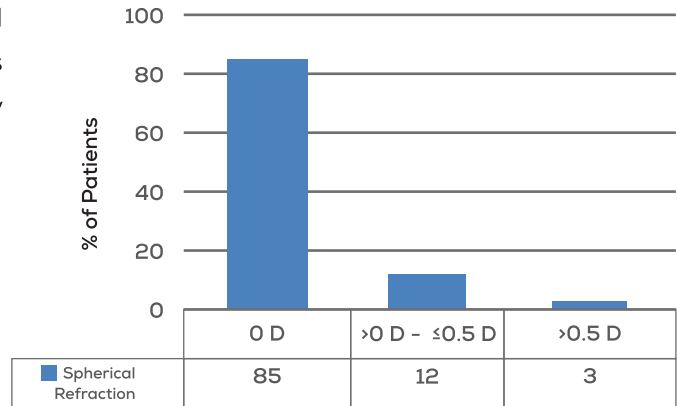
- Optimized light distribution provides better resolution and good contrast



CLINICAL RESULTS¹(n=59)

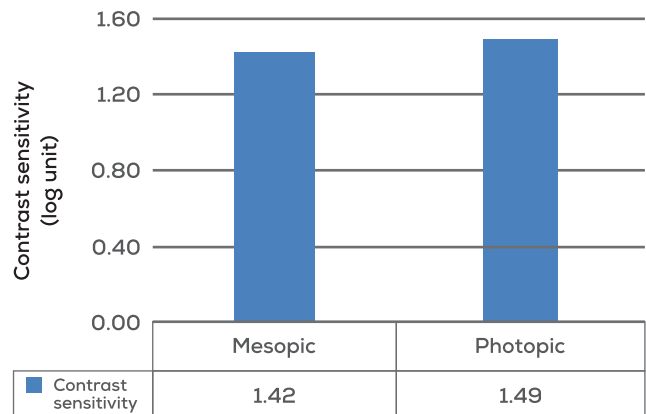
SPHERICAL CORRECTION

Post 6 months manifest refraction result shows that 97% of patients are within 0.5 D for spherical correction which proves stable effective lens position in the capsular bag as well as accuracy of the dioptric power.



CONTRAST SENSITIVITY

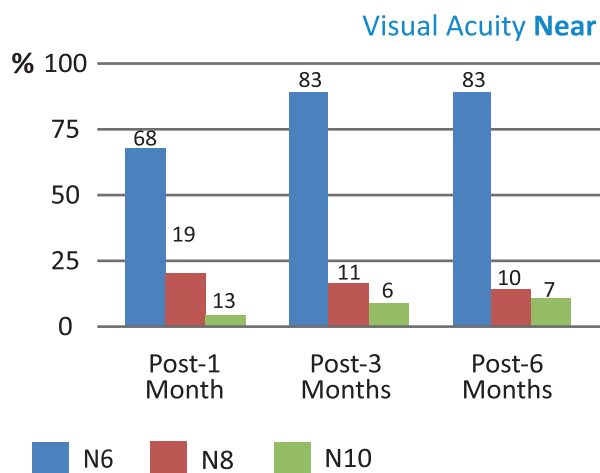
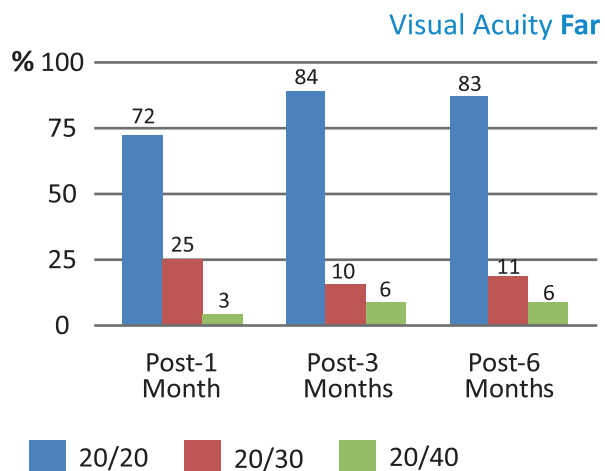
Binocular contrast sensitivity with distance correction was measured under Photopic and Mesopic conditions and there was no statistically significant difference observed between both the conditions.



CLINICAL RESULTS¹(n=59)

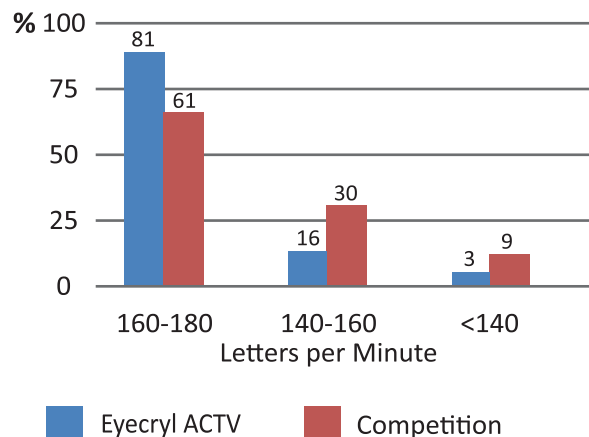
VISUAL ACUITY

EYECRYL ACTV demonstrates excellent unaided visual acuity for far as well as near distances.



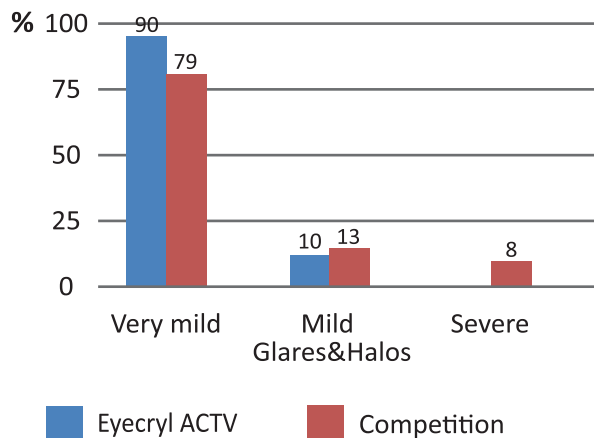
READING SPEED

After having implanted EYECRYL ACTV, 81% of the patients can read with speed of over 160 etters per minute.



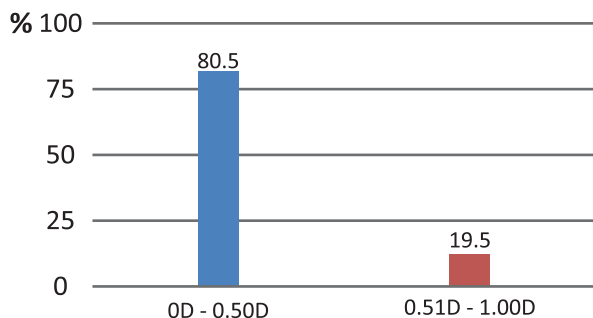
GLARES & HALOS

Round Edge (Unique Design) reduces internal reflection and minimizes edge glare.



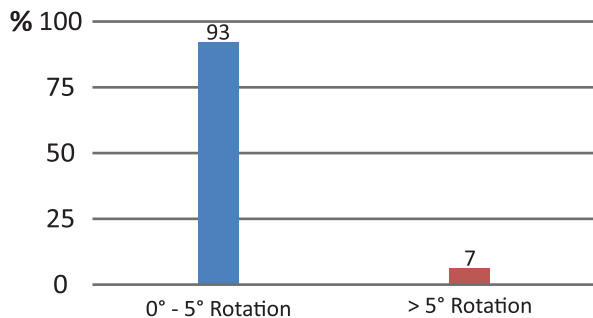
CYLINDRICAL CORRECTION

EYECRYLACTV TORIC IOLs demonstrate excellent capability for cylindrical correction. Study result shows that refractive cylinder was within 0.50D in 80.5% cases and within 1.00D in 100.0% cases.



ROTATIONAL STABILITY

Excellent rotational stability due to advanced hydrophobic material and larger overall length of the lens. Rotational stability for 93% cases, has been observed within 0° - 5°.



SIMULATED IMAGES OF VISION THROUGH EYES IMPLANTED WITH EYECRYL *Actv* AND EYECRYL *Actv* TORIC

EYECRYL ACTV / EYECRYL ACTV TORIC provides excellent distance and near vision with good intermediate vision, thus reduces patient's dependency on glasses for daily activities. EYECRYL ACTV TORIC also corrects pre-existing astigmatism to eradicate requirement of cylindrical glasses for such patients after cataract surgery.



Vision through Eye with
Cataract & Astigmatism



Vision through Eye implanted with
EYECRYL *Actv* IOL



Vision through Eye implanted with
EYECRYL *Actv* TORIC IOL

SPECIFICATIONS

EYECRYL™ *Actu*

EYECRYL™ *Actu* TORIC

MATERIAL	Hydrophobic Acrylic Containing Natural Chromophore			Hydrophobic Acrylic Containing Natural Chromophore		
OPTIC TYPE	Single Piece, Diffractive-Refractive, 360° Square Edge with Aspheric Optic			Single Piece, Diffractive-Refractive, 360° Square Edge with Toric Aspheric Optic		
NEAR ADDITION	+3.0 D			+3.0 D		
OPTIC SIZE	6.00 mm			6.00 mm		
OVERALL SIZE	13.00 mm			13.00 mm		
ANGULATION	0°			0°		
ACD	5.28			5.28		
REFRACTIVE INDEX	1.483			1.483		
RECOMMENDED ULTRASOUND A-CONSTANT	SRK-T 118.3			SRK-T 117.89		
RECOMMENDED OPTICAL A-CONSTANTS	SRK - T 118.7	SRK - II 118.9	Holl 1 Const SF : 1.63	SRK - T 118.29	SRK - II 118.51	Holl 1 Const SF : 1.28
	HOFFER Q ACD : 5.42		HAIGIS α0:1.240, α1:0.40, α2:0.10	HOFFER Q ACD : 5.07		HAIGIS α0:0.838, α1:0.40, α2:0.10
	Olsen ACD 4.47			Olsen ACD 4.18		
DIOPTR RANGE	+7.5 D to +30.0 D (with 0.5 D steps)			+10.0 D to +30.0 D (with 0.5 D steps)		
IMPLANTATION SITE	Capsular Bag			Capsular Bag		
STERILIZATION	Irradiation			Irradiation		
SHELF LIFE	4 years from date of manufacture			4 years from date of manufacture		



USER FRIENDLY
AND ACCURATE
EYECRYL™ *ACTV* TORIC
CALCULATOR

Biotech Eyecryl ACTV TORIC Calculator is user friendly, considers "Posterior Curvature of Cornea" and provides options to choose suitable IOL model with predictable post-operative outcomes.

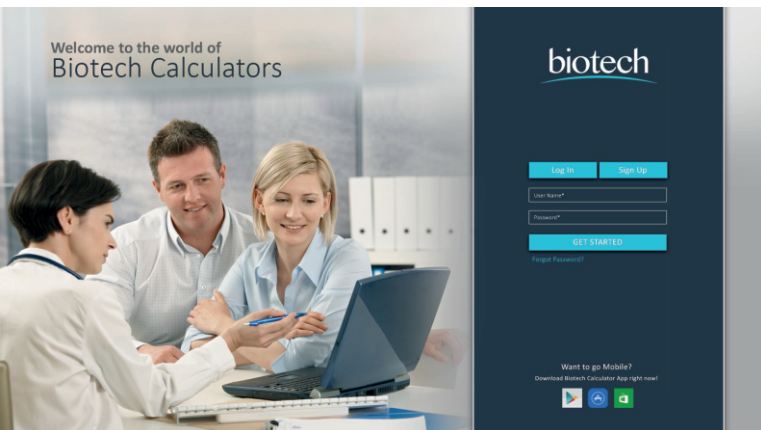
REFERENCE

1. Dr. Suhas Haldipurkar, Dr. Vijay Shetty; "Clinical Study Report-Prospective , Comparative clinical study of Eyecryl™ ACTV versus AcrySof®IQ ReSTOR® multifocal intraocular lens"-2019

MODELS AVAILABLE - EYECRYL[™] *Actv* TORIC

Model	Near Addition	Cylinder Power		Recommended Range of corneal astigmatic correction*
		At IOL plane	At Corneal plane	
HFYD-10	+3.0 D	1.50 D	1.03 D	0.87 D to 1.25 D
HFYD-20	+3.0 D	2.25 D	1.54 D	1.26 D to 1.75 D
HFYD-30	+3.0 D	3.00 D	2.05 D	1.76 D to 2.25 D
HFYD-35	+3.0 D	3.75 D	2.57 D	2.26 D to 2.75 D
HFYD-40	+3.0 D	4.50 D	3.08 D	2.76 D to 3.25 D
HFYD-50	+3.0 D	5.25 D	3.60 D	3.26 D to 3.75 D
HFYD-60	+3.0 D	6.00 D	4.11 D	3.76 D & Above

To choose suitable EYECRYL ACTV TORIC model, please logon to



Download Mobile App for Biotech Calculators





Scan For Surgery Video



EYECRYL ACTV TROIC



EYECRYL ACTV

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