LENSVECTOR®

M2M Series: Dynamic Beam Shaping Lenses
Product Datasheet

Description

LensVector's Dynamic Beam Shaping lenses deliver virtually infinite beam control allowing designers to create scenes and manage environments on-demand without mechanical systems, without ladders, without replacement optics, and without replacement lamps. LensVector lenses work perfectly with conventional or wireless control systems. From very narrow spots to wide flood, or something in between, LensVector's Dynamic Beam Shaping lenses give you more control than ever before.

M2M series lenses enable Dynamic Beam Shaping from as narrow as 5° and as wide as 55°.

LensVector supports integration efforts with driver reference designs, sample drivers, PCBs and software reference designs. Contact LensVector for third party suppliers of drivers, collimating optics, LEDs and software solutions that enable customer designs.

M2M Series

Part Number	Clear Aperture	Dynamic Beam Shaping Min / Max	Center Beam Intensity Efficiency	Total Beam Flux Transmission Efficiency
LV-M2M-35003-P	35.1 mm	5° to 55°	~ 88% to 80%	~ 90% - 85%
LV-M2M-48003-P	48.1 mm			
LV-M2M-65003-P	65.1 mm			

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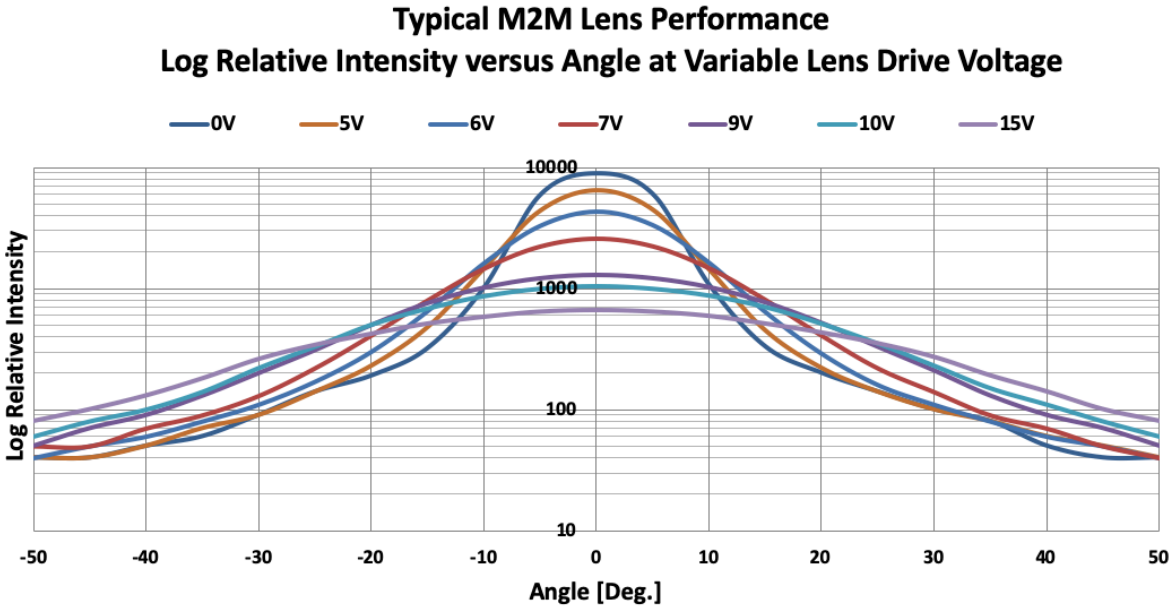
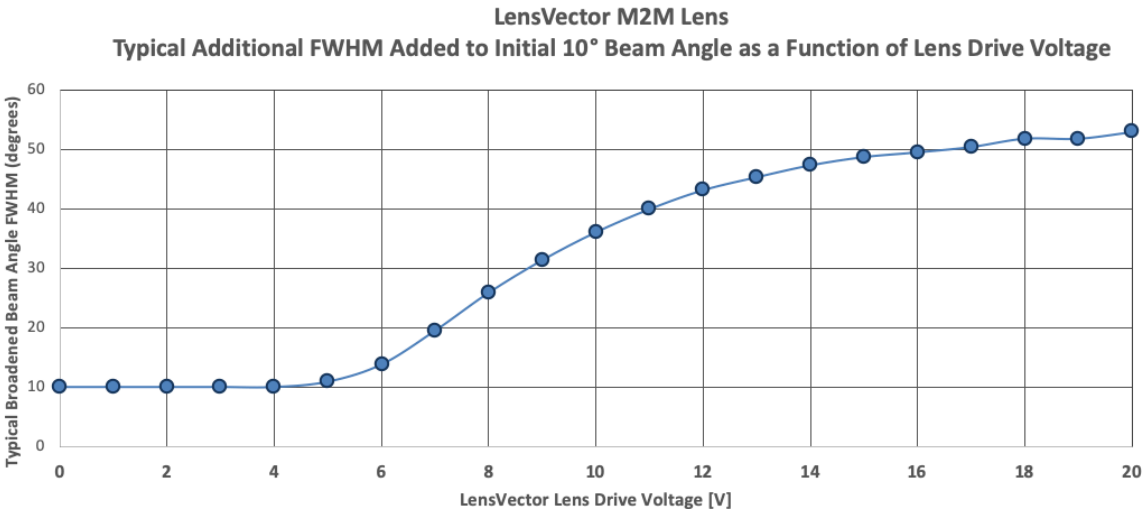
http://lensvector.com

Performance Graphs

The following performance graphs apply to all M2M series lenses.





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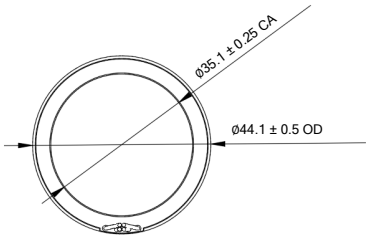
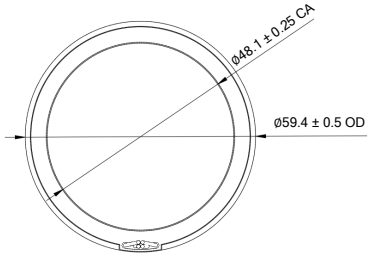
Dimensions

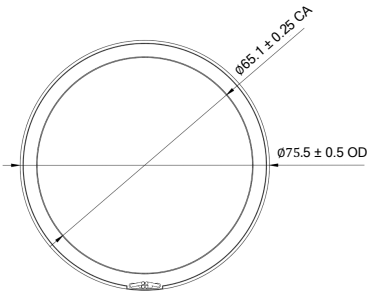
LV-M2M-35003-P

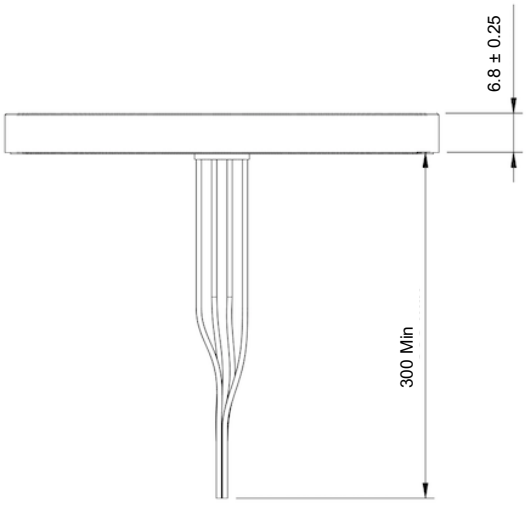


LV-M2M-48003-P

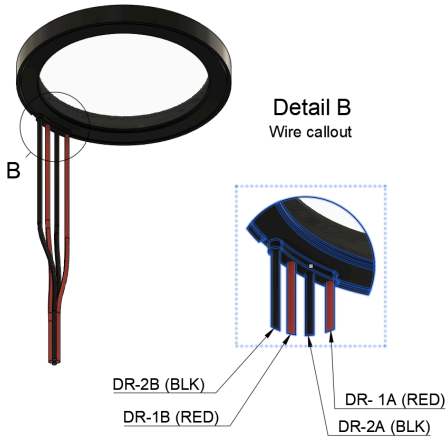


LV-M2M-65003-P





Pinout



The LensVector lens is sensitive only to the AC components of the differential voltages (DR_1A – DR_1B) and (DR_2A – DR_2B).

Therefore, DR_1A can be swapped with DR_1B and DR_2A can be swapped with DR_2B, without affecting the behavior of the lens.

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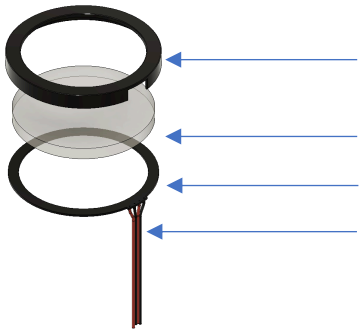
Normal Operating Conditions

Indoor Use Only	-20° to 80° C, less than 100% RH

Note: For verification, an operating reference temperature T_{ref} measurement via a contact thermocouple at the outside center-point of the lens should not exceed 70°C.

Exploded View and Material Callout



Part	Description	Material
1	Cover, Injection Molded	Liquid Crystal Polymer, Xydar G930 or equivalent.
2	Lens	Soda Lime Glass.
3	PCB	Black, FR4, RoHS compliant.
4	Wire	#28 AWG, Stranded Copper Conductor, type AWM or TEW.

Compliance

RECOGNIZED COMPONENT
Intertek
5011975
Conforms to UL Std. 1598
Cert. to CSA Std. C22.2 No. 250.0

RoHS COMPLIANT

CE

Application of Council Directives:
Low Voltage Directive (LVD) 2006/95/EC
Electromagnetic Compatibility Directive (EMC) 2004/108/EC
Conformity is declared to Annex II (EMC)2004/108/EC

About LensVector

LensVector is transforming the shape of light from fixed reflectors and lenses with digital liquid crystal technology that allows light to be infinitely shaped on demand from IoT platforms, mobile devices, and modern control systems. LensVector's innovative Dynamic Beam Shaping technology has been recognized with a 2018 Sapphire Award and as a Top Ten Innovation at the 2018 Light + Building Conference and Exhibition.

LensVector lenses are covered by U.S. and international patents. These patents are listed and updated at http://lensvector.com/company/#patents

Availability

See http://lensvector.com for distribution partners.

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