

WAFER PREALIGNERS

LPA SERIES

- ▶ **Innovative, high-performance**, Class 1 compatible
- ▶ Unique **all-in-one design** eliminates external controller and interconnecting cables while maintaining **drop-in compatibility**
- ▶ Scanning electronics, motion controller, and power supply included within an industry standard footprint
- ▶ Driven by **ultra-low inertia brushless motors** for smooth, instant response
- ▶ Advanced scanning electronics capable of detecting **transparent, semi-transparent and opaque objects** without mechanical repositioning between different sizes
- ▶ Seamless interface with wafer handling robots supporting all wafer sizes from **45mm to 480mm**, and respective sizes of square substrates
- ▶ Logosol control software featuring a comprehensive set of commands enabling compatibility and interface with a **variety of semiconductor platforms**
- ▶ **Rapid alignment cycle times** facilitate achievement of maximum system throughput
- ▶ Available as **standalone** devices and as **embedded** devices working in conjunction with wafer handling robots
- ▶ Retention options include **vacuum, non-vacuum, and edge handling**

Basic Configurations

Standalone, 12"-18" Wafers



Embedded, 3"-12" Wafers



Standalone, 2"-6" Wafers

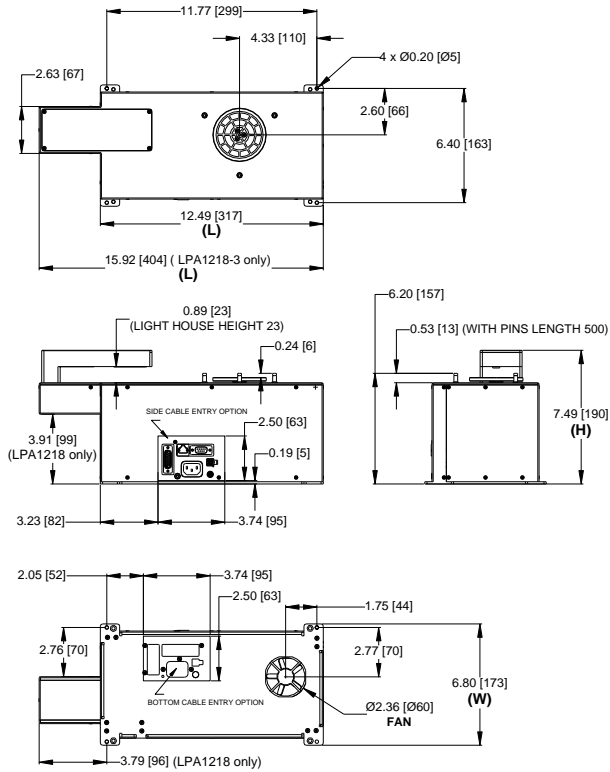


Edge Handling, 8" Wafers

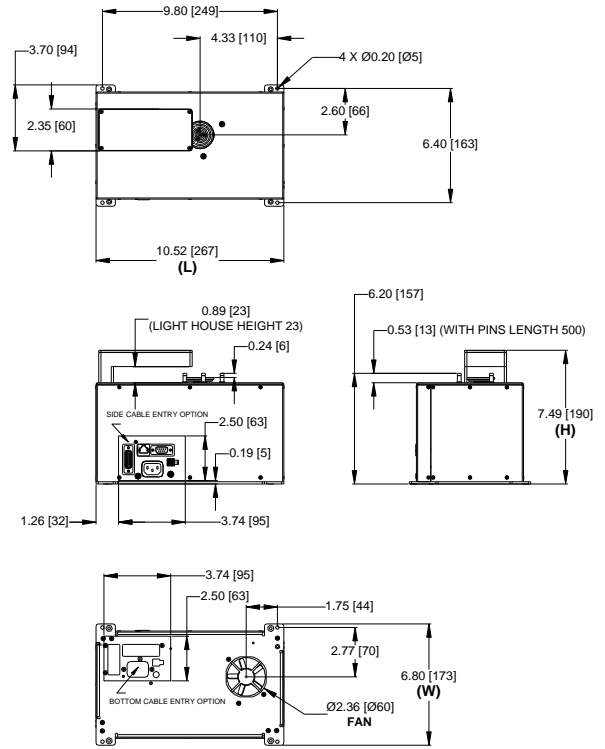


LPA SERIES PREALIGNERS GENERAL DIMENSIONS

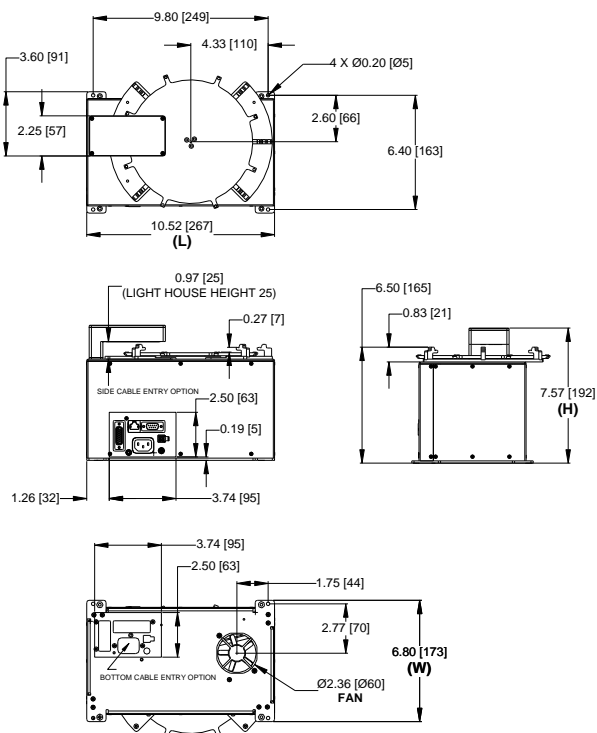
LPA STANDALONE MODELS: 312-3, 812-3, 1218-3 (shown)



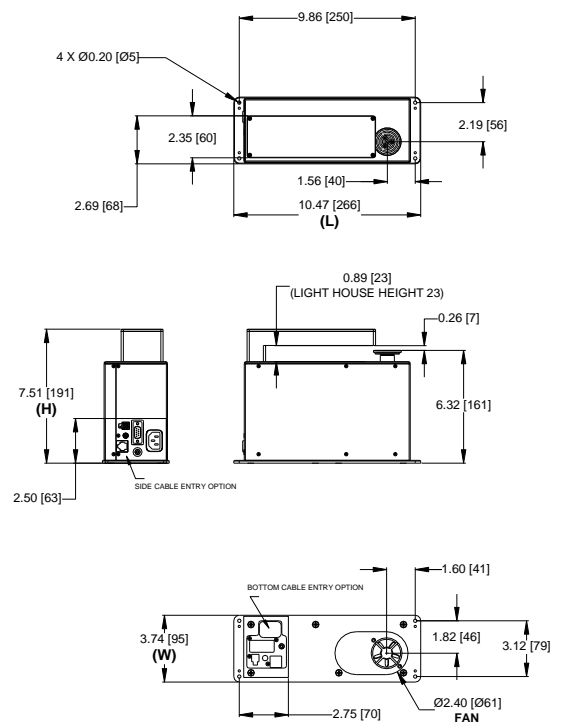
LPA STANDALONE MODELS: 26-3, 38-3 (shown), 58-3



LPA EDGE HANDLING MODELS: 4EH, 5EH, 6EH, 8EH (shown)



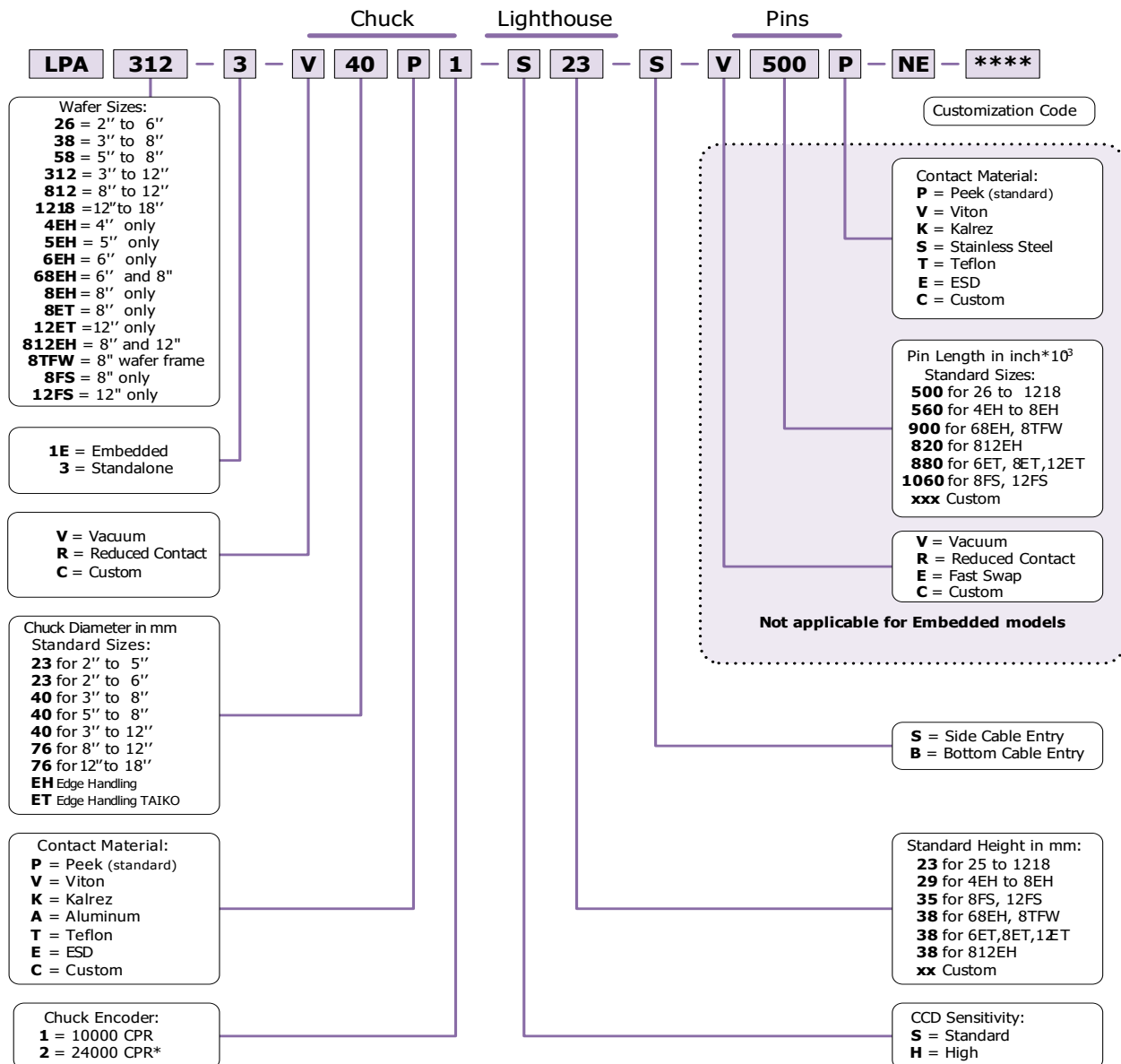
LPA EMBEDDED MODELS: 25-1, 38-1, 58-1, 312-1 (shown), 812-1



LPA SERIES PREALIGNERS SPECIFICATIONS

Specifications		Prealigner Model												
		Standalone						Embedded						Edge Handling
		26-3	38-3	58-3	312-3	812-3	1218-3	25-1E	38-1E	58-1E	312-1E	812-1E	1218-1E	Type
Wafer Diameter	2"	✓						✓						
	3"	✓	✓		✓			✓	✓		✓			
	100mm	✓	✓		✓			✓	✓		✓			4EH, 45EH
	125mm	✓	✓	✓	✓			✓	✓	✓	✓			5EH, 45EH, 56EH
	150mm	✓	✓	✓	✓				✓	✓	✓			6EH, 56EH
	200mm		✓	✓	✓	✓				✓	✓	✓		8EH, 8ET
	300mm				✓	✓	✓				✓	✓	✓	12ET
	450mm						✓						✓	
Square Substrates		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N/A
Angular Accuracy (3 Sigma)	10000 CPR Encoder	0.04°					N/A	0.06°					N/A	0.04°
	24000 CPR Encoder	0.02°						0.04°						0.02°
Centering Accuracy (3 Sigma)		25um						50um						25um
Max Initial Offset		10mm	12mm					9mm	10mm					1.7mm to 2.0mm
Body Dimensions	W	173mm						95mm						173mm
	L	267mm		317mm		404mm		266mm			328mm		267mm or 317mm	
	H	190mm						191mm						190mm to 206mm
Weight		5.0kg to 5.7kg						3.4kg to 3.8kg						5.3kg to 6.0kg
Servo Axes		Three						One						Three
Handling		Vacuum Chuck and Pins						Vacuum Chuck						Edge Handling
Facilities Required		100-240VAC, 50/60Hz, 48VA or 24VDC/2A, Vacuum 12" Hg for vacuum retention												
Host Interface		RS232, Ethernet												
Flat/Notch Compatibility		SEMI Standards Compliant												
Wafer Opacity		Transparent, Semi-Transparent, Opaque												
Cleanliness		Class 1												
MTBF		More than 70000 hours												

LPA SERIES PREALIGNERS ORDERING GUIDE



* LPA1218 available with 24000 CPR encoder only