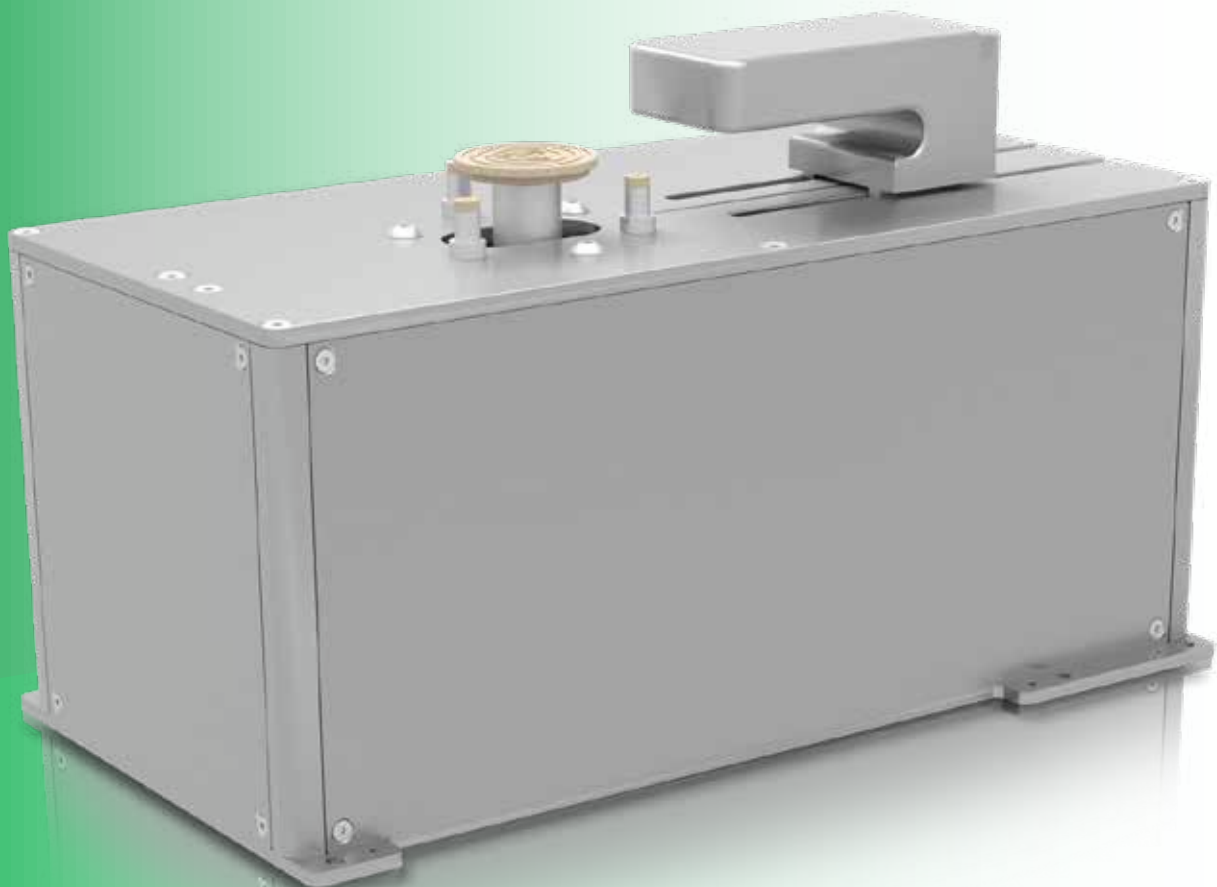


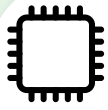
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LEADING THE WAY OF INNOVATION



# SMART PREALIGNER





**Industry leading** alignment precision using a high-resolution encoder



**Self-calibration** and self-diagnostic capabilities



**RGB + IR light sources** – allowing easier and faster edge detection for semi-transparent and glass carriers



**Moving lighthouse** allows alignment of square and round substrates with non-standard sizes



**Industry 4.0 ready** - web interface with M2M communication capability for smart manufacturing and



**Nitrogen purge** option for maximum cleanliness



**Chuck and pins** available in variety of materials (Peek, Tekapeek ELS nano, Semitron ESD420, Viton, Kalrez, Ceramic, etc.)

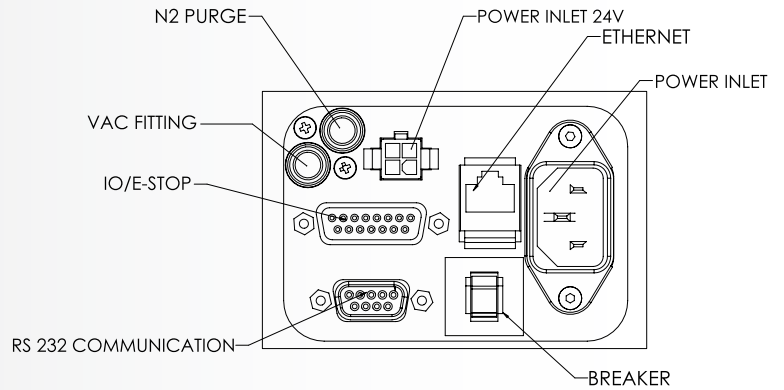
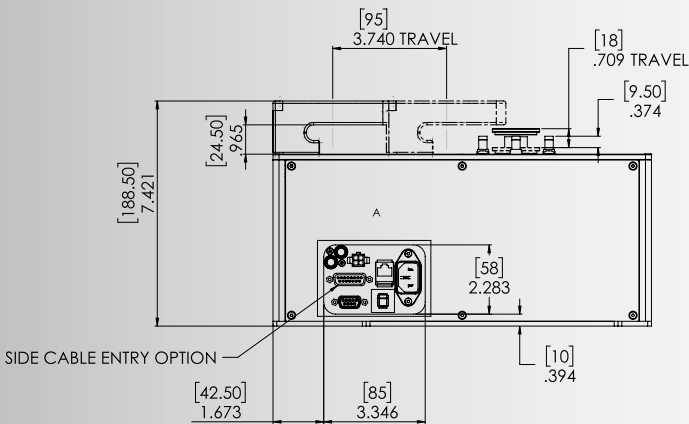
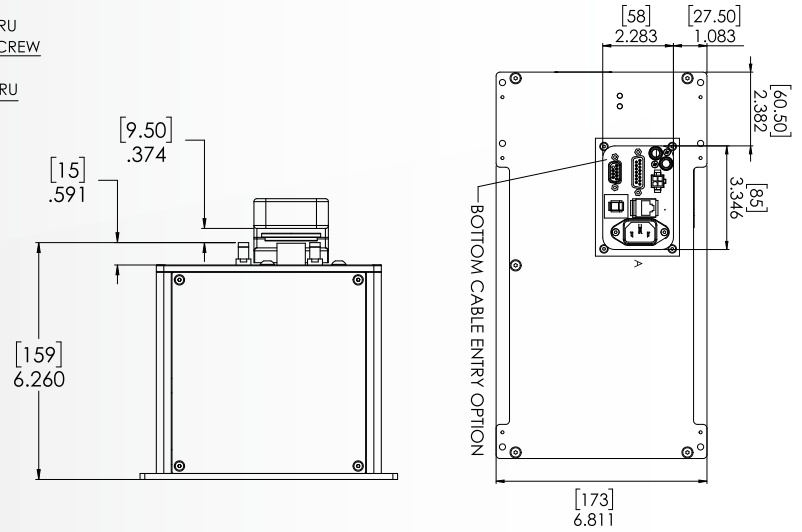
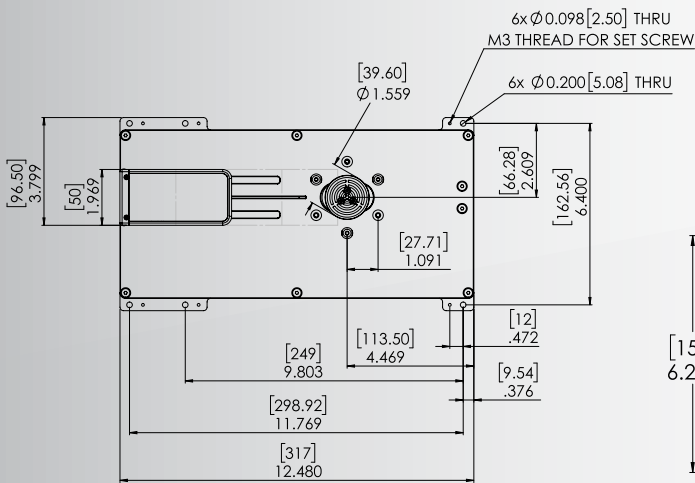


**Drop-in replacement** for common brands in the industry



**Light intensity, sensor sensitivity** and vacuum control





All dimensions are in inch[mm].

# SPECIFICATIONS

- **Wafer Diameter** → From 3" to 12"
- **Support non-standard size wafers** (e.g. 108 mm, 208 mm etc.)
- **Square substrates support**
- **Flat and Notch compatibility**
- **Wafer Opacity** → Transparent, Semi-Transparent, Opaque
- **Angular Accuracy** → 0.015°
- **Centering Accuracy** → 20 um / 0.0007"
- **Initial Offset Limit** → 10 mm / 0.39"
- **Body Dimensions**
  - **Width** → 173 mm / 6.811"
  - **Length** → 317 mm / 12.480"
  - **Height** → 188.50 mm / 7.421"
- **Weight** → 5.00 kg

- **Chuck and pins materials** → Peek, Tekapeek ELS nano, Semitron ESD420, Viton, Kalrez, Ceramic, etc.
- **Servo Axes** → Four
- **Handling** → Vacuum
- **Facilities Required** → 100-240 VAC, 50-60Hz or 24 VDC/3A
- **Minimum Vacuum** → 70 kPa
- **Minimum Airflow** → 100 cc/sec. (at 70kPa)
- **Host Communication** → RS232 or Ethernet
- **Light Source** → Adaptive
- **Cleanliness** → Class 1
- **Nitrogen Purge** → Optional
- **MTBF** → >60 000 hours / >10 000 000 cycles
- **Certification** → TUV-SUD, SEMI S2 and CE



## About Milara

Milara, Inc. has a long history of developing automation designs serving the needs of the semiconductor, automotive, and medical industries. It is recognized as a leading provider of wafer automation solutions for global top tier customers in USA, Europe, and Asia. The company's portfolio includes but it is not limited to the design and manufacturing of high technology wafer handling tools such as Equipment Front End Modules (EFEM), Wafer Handlers, Sorters, Robots, Prealigners and many more. In addition, Milara Inc. offers high precision CNC machining services, complex manufacturing automation solutions, and contract design services. Milara's long-standing experience in robotics and mechatronics can satisfy any customer requirement for production automation.

What stands as a competitive advantage for Milara is the vertically integrated production system which ensures tightly controlled production processes and uncompromised final product quality.

Our team of skilled professionals is dedicated to delivering products and services which exceed clients' expectations. Milara's core values of determination, commitment, production quality, customer satisfaction, continuous improvement, and teamwork are the main engine of the company's operations.



SMART PREALIGNER



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