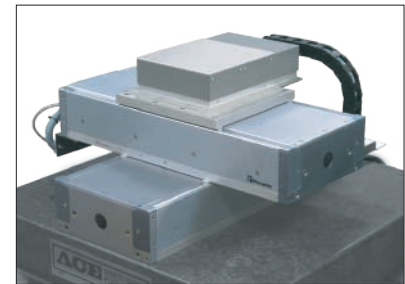


drivetrain while minimizing the overall height. The PZA is also slim enough to give easy access to all sides of the load, and since the center of the carriage is centered over the bearings, deflections from a cantilevered load are minimized.

Additional Standard Features

The PZA Series elevator table come standard with integral limit switches, mechanical hard stops, and a home index. The stage tabletop is protected with a clear anodize finish and metric mounting patterns are standard.



"Complete XYZ Motion"
A PZA25 stacked on 2 PLG210s

For more information and a complete datasheet, go to www.primatics.com

Feature Summary:

- Precision vertical travel up to 25mm
- Loads up to 10 kg
- Sub-micron resolution
- Compact design; the PZA25 has a low profile and is slim enough to give easy access to all sides of the load.
- Precision rolled ballscrew drivetrain.
- Integrated brushless servo motor
- Ballscrew location minimizes roll and pitch errors during travel.
- Rotary or linear encoder feedback.
- Class 10 cleanroom option

Overview

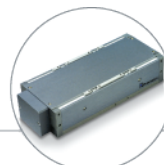
Primatics PZA25 Series elevator tables offer an ideal solution for applications that require small incremental vertical movements. The design and components ensure sub-micron resolution in a compact profile and make the PZA ideal for semiconductor inspection, fiber optics assembly and machine vision applications requiring smooth motion, exceptional stiffness, and high resolution.

Superior Vertical Motion

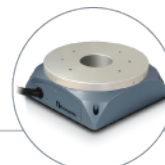
The PZA offers a higher performance, space-saving alternative to traditional Z-axis stages: The inclined plane approach offers superior performance through use of our reliable ballscrew

Performance Specification	PZA25
Travel (mm)	25
Mechanical Drive System	2mm Lead Ballscrew w/ Brushless, Frameless Motor
Resolution (µm) [2000 line rotary, 0.1 µm linear]	0.1
Accuracy (µm) [2000 line rotary, 0.1 µm linear] ^{1, 2}	+/- 5, +/- 4
Error Mapped Accuracy w/ E2 Linear Encoder (µm)	+/- 1.5
Repeatability (µm) [2000 line rotary, 0.1 µm linear] ²	+/- 1, +/- 0.75
Max Speed (mm/s)	20
Maximum Load (kg)	10
Pitch, Roll & Yaw (arc-seconds) ²	30
Finish	Tabletop & Base Clear Anodize
Weight (kg)	5.8

¹ Using measured slope correction data ² Specifications based on load COG within 25 mm or centerline of stage All specifications subject to change w/o notice.



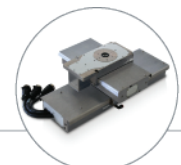
Linear Positioning



Rotary Positioning



Motion Controls



OEM Solutions

CONNECTOR PIN OUTS

Servo Axis connector

Mating Connector: FCI (Burdny) Male, circular connector, 28 contacts, size 20 shell pin-out

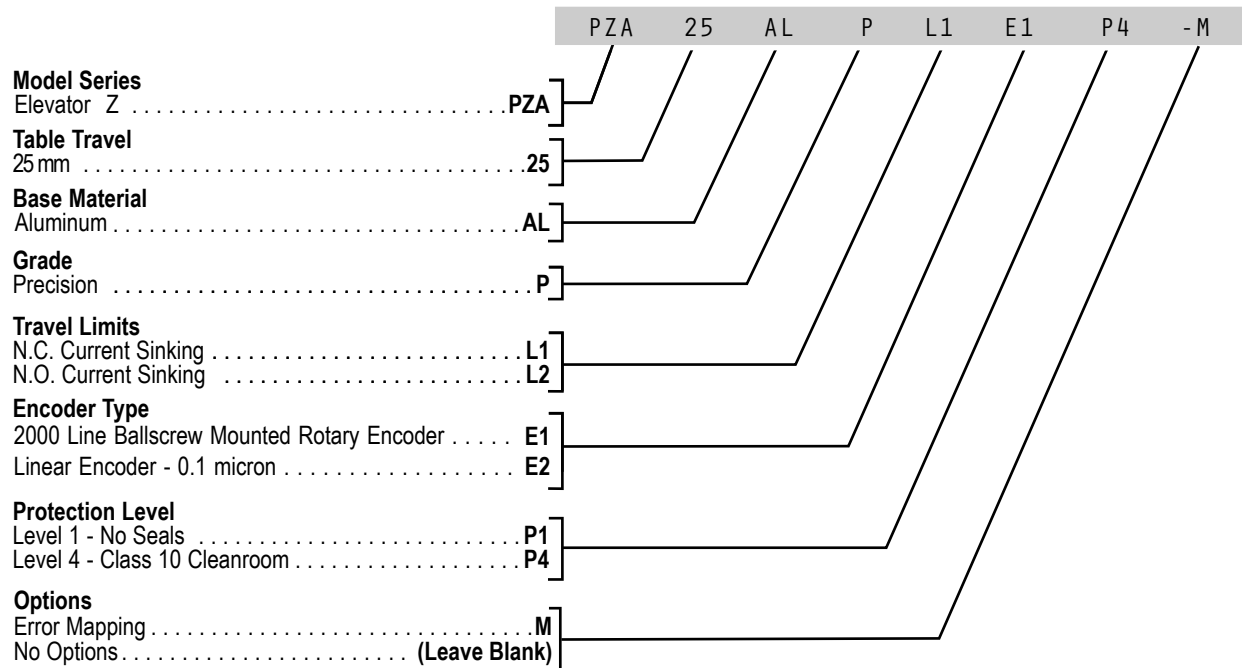
Pin	Function
A	Motor A
B	Motor B
C	Motor C
D	Motor Shield
E	Encoder 5V - power for encoder
F	Encoder A+ output
G	Encoder A- output
H	Encoder B+ output
J	Encoder B- output
K	Encoder Shield
L	12VDC - for limit, home, and temp sensor
M	DCCOM
N	NC
P	NC
R	NC
S	Chassis

Pin	Function
T	Hall V+
U	Hall V-
V	Encoder Common
W	Encoder Index +
X	Encoder Index -
Y	Forward Limit Switch - switch to DCCOM in normal operation
Z	Reverse Limit Switch - switch to DCCOM in normal operation
a	NC
b	Hall A
c	Hall B
d	Temperature monitor - connect to DCCOM for temperature OK
e	Hall C

MODEL NUMBER CONFIGURATION

OPTIONS :

SAMPLE MODEL NUMBER :



Last Updated 03/20/2007