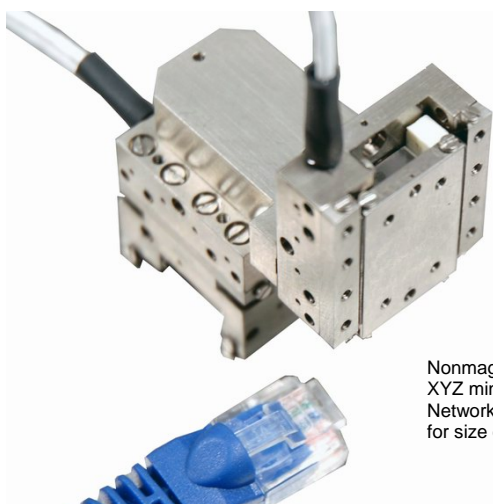


# N-900C004 Mini XYZ Stage, Nonmagnetic, PiezoWalk® Motors

## Vacuum Compatible, Self-locking, High Resolution, for SEM



Nonmagnetic PiezoWalk® XYZ miniature stage. Network connector for size comparison

- Non-Magnetic & Vacuum Compatible Working Principle
- For Operation in Strong Magnetic Fields, such as MRI
- Patented PiezoWalk® Motor
- Travel Range to 10 mm
- Open-Loop with Sub-Micrometer Step Size: Designed to Align Samples
- 5 N Force
- Self-Locking at Rest, No Heat Generation
- Custom Designs Available

### PiezoWalk® Working Principle

PiezoWalk® technology overcomes the limitations of conventional piezo drives and combines virtually unlimited travel ranges with high stiffness in a very small package. NEXACT® linear motors provide piezo-class resolution and millisecond responsiveness. The special drive design reduces the operating voltage to 45 V and below.

### Non Magnetic Design

The N-900C004 is a customized PiezoWalk® linear motor-driven miniature XYZ stage for SEM or any other application where magnetic drive systems are not permissible. All components and materials employed in the stage and motor are non-magnetic and non-magnetizable.

### Ordering Information

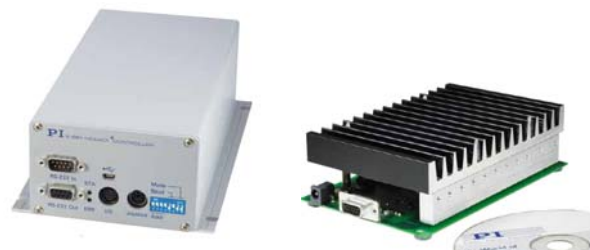
**N-900C004**  
Miniature XYZ Positioning Stage, Piezo-Motor-Driven, Non-Magnetic

**E-861**  
PiezoWalk® Motor Controller/Driver, Desktop

**E-862**  
PiezoWalk® Motor Controller/Driver, OEM

### Application Examples

- SEM
- Medical Technology
- MRI
- High Energy Physics

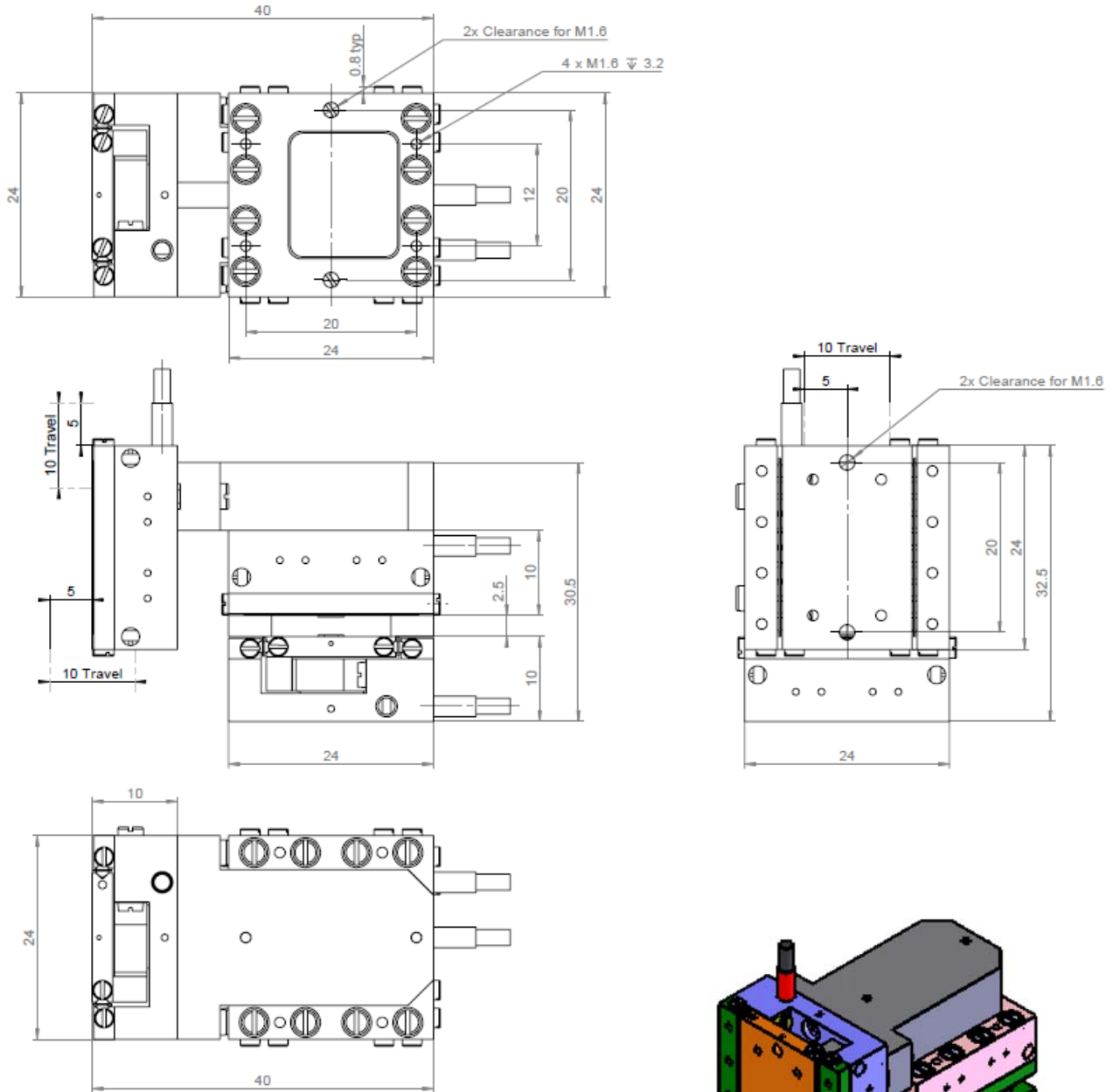


Controllers for PiezoWalk® motors. E-861 desktop version left and E-862 OEM version (right)

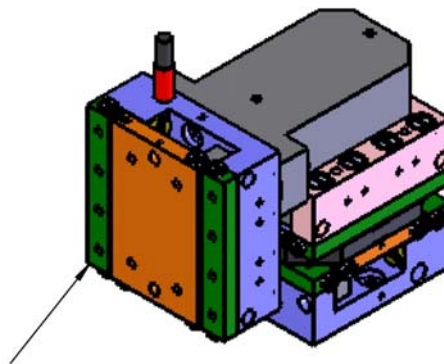
### Preliminary Data

Models	N-900C001	Units	Tolerance
Active axes	XYZ		
Drive type	NEXACT® piezo motor		
Travel Range	10	mm	
*Open-Loop Step size (in step mode)	10 nm to 5 µm		
Travel range in analog operation	7 (E-861) 5 (E-862)	µm	max.
Push/pull force	5 (E-861) 4 (E-862)	N	typ.
Recommended operating temperature	10 to 40 °C	°C	
Mass	150	g	±5%
Connector	HD Sub-D, 15 pin		

\*Depends on drive electronics.



N-900C004, dimensions in mm



Individual stage available as P/N N-900C003