

# Robot Transport Units



**PrestonEastin** Robot Transport Units (RTU) provides precise linear movement for robotic applications. Whether you are welding, material handling, painting, or positioning a part, *PrestonEastin* can design and build the right RTU for your application and to exact specification. Our robust, rigid, low profile designs distinguish us from our competitors providing for low maintenance and reliable positioning solutions that maximize up-time. Specializing in standard and customized designs, **PrestonEastin** ensures that your RTU fits exactly what you need for your application.

### **Product Specifications**

#### DRIVE

- Rack and pinion guided by linear ball bearings on a precision machined track
- Standard speeds of 1m/sec
- Additional speed option(s) available

#### REPEATABILITY

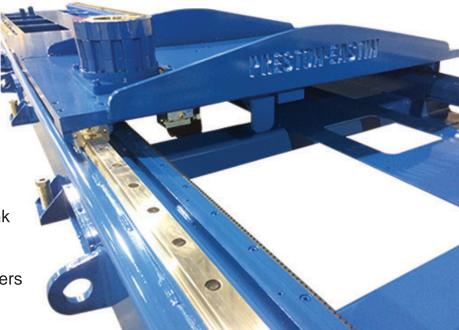
- +/- 0.25 mm [≈0.010 inches]
- Additional repeatability option(s) available



## **Product Specifications**

#### SUPPORT STRUCTURE

- Single axis robot transporter
- Lowest profile in the industry
- Available in any requested length
- Structural steel; fabricated and machined base frame with low profile
- Linear ball bearing rail system
- Over-travel rubber hard stops
- Leveling pads at 500 to 1,500 millimeter [≈20 to ≈60 inch]
- Included cable carrier is open design, separators every other link
- Cable entry near middle of track
- Track can be shipped in fully assembled sections up to 14 meters [≈46 feet] in length

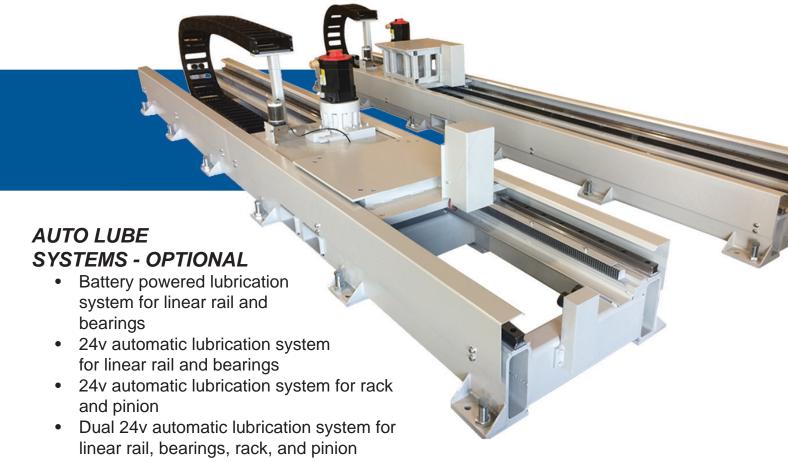


#### **CARRIAGE**

- Included is a single standard carriage, housing drive mechanism for system
- Carriage is drilled to mount specific robot footprint
- Minimum of four linear ball bearings with end seals and scrapers
- Linear ball bearings plumbed to common termination manifold for ease of lubrication
- Battery powered automatic lubrication system included for rack and pinion
- Carriage has home or zero pin capability
- Drive consists of a low backlash reducer for direct coupling of servo motor
- Output of reducer is a rack and pinion drive system



## **Available Options**



 All 24v lubrication systems include remote operation and monitoring by customer supplied PLC

#### ANTI-BACKLASH DEVICE - OPTIONAL

- Repeatability improvement up to +/- 0.13 mm [≈0.005 inches]
- Spring loaded pivot plate ensures uninterrupted gear meshing
- Designed to minimize backlash

#### TRACK COVERS - OPTIONAL

- Standard Duty linear rail covers (not to be used as a step)
- Heavy Duty linear rail covers (can be used as a step)
- Rack covers (recommended to protect the rack in applications with falling debris/ welding FOD)



#### OTHER AVAILABLE OPTIONS

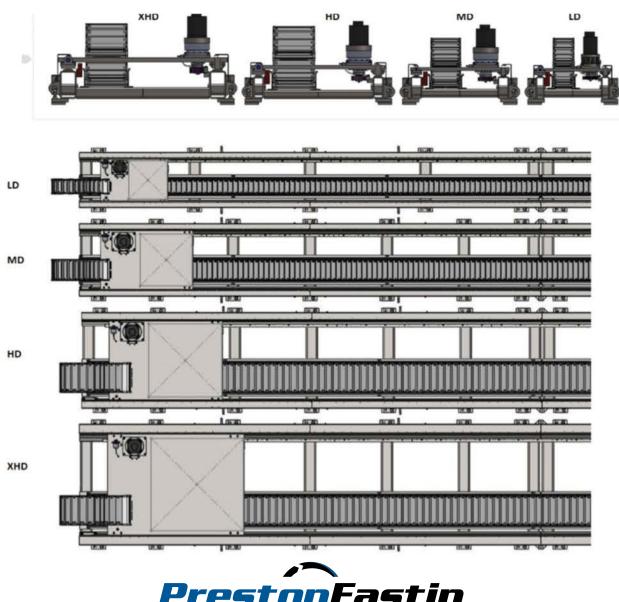
- Upgrade to fully enclosed cable carrier
- Carriage shock absorbers (full speed impact)
- High speed drive system
- Walk over plates
- Additional carriages
- Extended length carriages
- Cable entry at end of track
- Side mounted cable carrier
- Limit switches (for end of travel and/or carriage to carriage)
- Zone bars w/switches
- Remove servo drive system (manual slide)
- Replace servo drive with standard AC motor drive system and hand pendant
- Explosion Proof and Caustic environment designs available



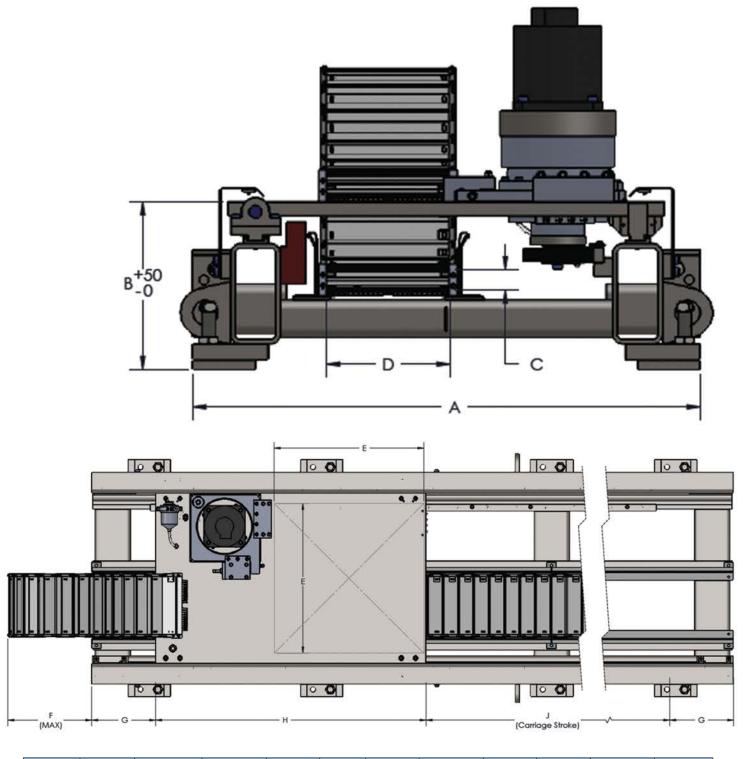


### Miscellaneous

- Customer runoff at **PrestonEastin** or on site at customer's facility is available upon request
- Includes a standard one year warranty, extended warranties of two or three years available
- **PrestonEastin** preventative maintenance packages available upon request
- Servo motors are mounted by **PrestonEastin** prior to shipment (supplied by customer) unless otherwise requested and defined in the quote
- RTU installation support available upon request
- All equipment built to **PrestonEastin** standards and painted standard gray unless otherwise specified
- Equipment is based on **PrestonEastin** standard terms and conditions which may be found on our website: http://www.prestoneastin.com/warranty.php







Model	Rail Size	Rated Capacity	Α	В	С	D	E	F	G	Н	J
LDRTU	30mm			330mm	42mm	168mm	500mm	500mm	275mm	875mm	SPECIFY
MDRTU	35mm	1,200 kg	1,030mm	340mm	42mm	250mm	650mm	500mm	275mm	1,175mm	SPECIFY
HDRTU	45mm	2,400 kg	1,360mm	360mm	56mm	350mm	950mm	500mm	355mm	1,475mm	SPECIFY
XHDRTU	55mm	3,600 kg	1,680mm	430mm	56mm	350mm	1,200mm	500mm	365mm	1,775mm	SPECIFY



