

PrestonEastin Robot Transport Units (RTUs) provide precise linear movement for robotic applications. Whether you are welding, material handling, or painting, **PrestonEastin** has the right RTU for your application. Our robust designs distinguish us from our competitors providing for low maintenance and reliable positioning solutions that maximize up-time. Specializing in customized designs, **PrestonEastin** insures that your RTU is exactly what you need for your application.

PRODUCT SPECIFICATIONS

DRIVE

- Rack and pinion guided by linear ball bearings on a machined track
- Speeds up to 1 meter per second are considered standard utilizing a servo motor control system
- Higher speeds are available upon request

REPEATABILITY

- +/- 0.25 mm [\approx 0.010 inches]
 - If optional anti-backlash device is purchase the repeatability improves to +/- 0.13 mm [\approx 0.005 inches]

SUPPORT STRUCTURE

- Single axis robot transporter
- Structural steel, fabricated and machined base frame
- Linear ball bearing rail system on base
- Rubber hard stops on opposing ends of frame to prevent carriage over-travel
- Leveling pads at 750 to 1,500 millimeter [\approx 30 to \approx 60 inch] intervals based on final overall length
- Standard included cable carrier is an open design with separators every other link
- Cable entry near middle of track length (includes cutouts on both sides of track frame)
- Customer specified track lengths in 1 meter increments
- Track can be shipped fully assembled in sections up to 14 meters [\approx 46 feet] in length



CARRIAGE

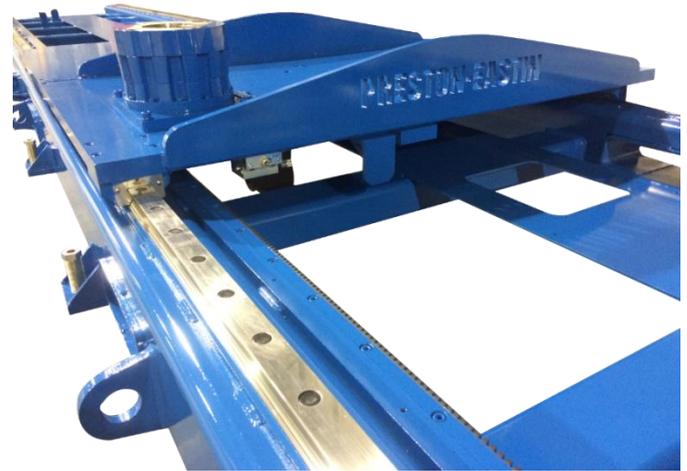
- Included is a single standard carriage that will carry a customer supplied robot and riser
- Carriage machined from steel plate
- Carriage is drilled to mount customer's robot
- Carriage houses drive mechanism for system
- Four linear ball bearings with end seals and scrapers

- Linear bearings plumbed to common termination point 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 customer provided servo motor
- Output of reducer is a rack and pinion drive system

AVAILABLE OPTIONS

AUTO LUBE SYSTEMS - OPTIONAL

- Upgrade to a battery powered or 24v automatic lubrication system for linear rail and bearings (replaces common termination point for manual lubrication)
- Upgrade to a 24v automatic lubrication system for rack and pinion (replaces standard battery powered auto lube)
- Upgrade to a combined 24v automatic lubrication system for linear rail, bearings, rack, and pinion (Replaces common termination point and standard rack/pinion auto lube)
- All 24v lubrication systems include remote operation and monitoring by customer supplied PLC



ANTI-BACKLASH DEVICE - OPTIONAL

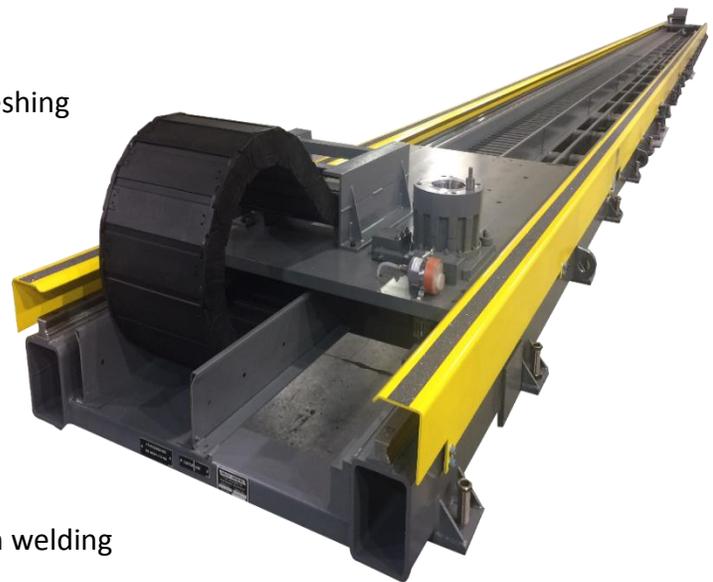
- Spring loaded pivot plate ensures uninterrupted gear meshing
- Unit is designed to minimize backlash
- Repeatability improves to +/- 0.13 mm [≈ 0.005 inches]

TRACK COVERS - OPTIONAL

- Rack covers (recommended to protect the rack in applications that may have falling debris)
- Light Duty linear rail covers (not to be used as a step)
- Heavy Duty linear rail covers (can be used as a step)

OTHER AVAILABLE OPTIONS

- Upgrade to fully enclosed cable carrier (recommended in welding applications)
- Chained homing pin w/holder (recommended to keep homing pin from being lost)
- Carriage shock absorbers rated for full speed impact
- High speed drive system (for speeds above 1 meter per second)
- Walk over plates
- Additional carriages (for using multiple robots on a single track)
- Extended length/trailing carriage (for mounting extra equipment)

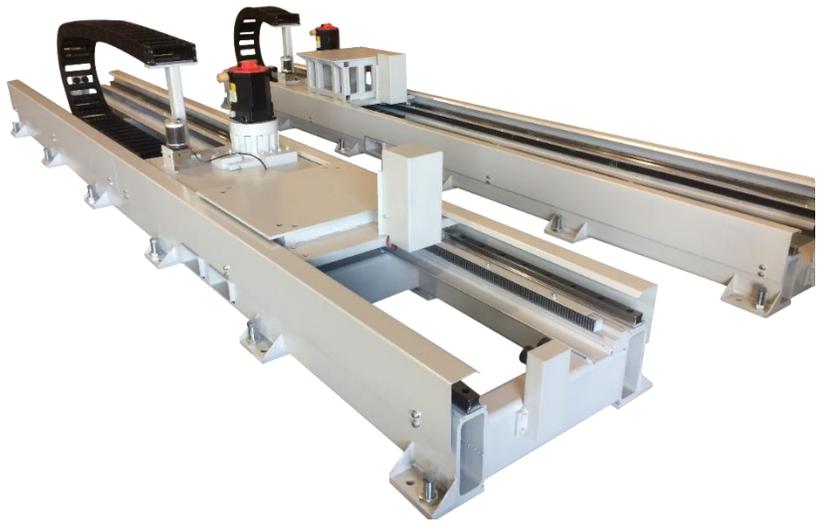


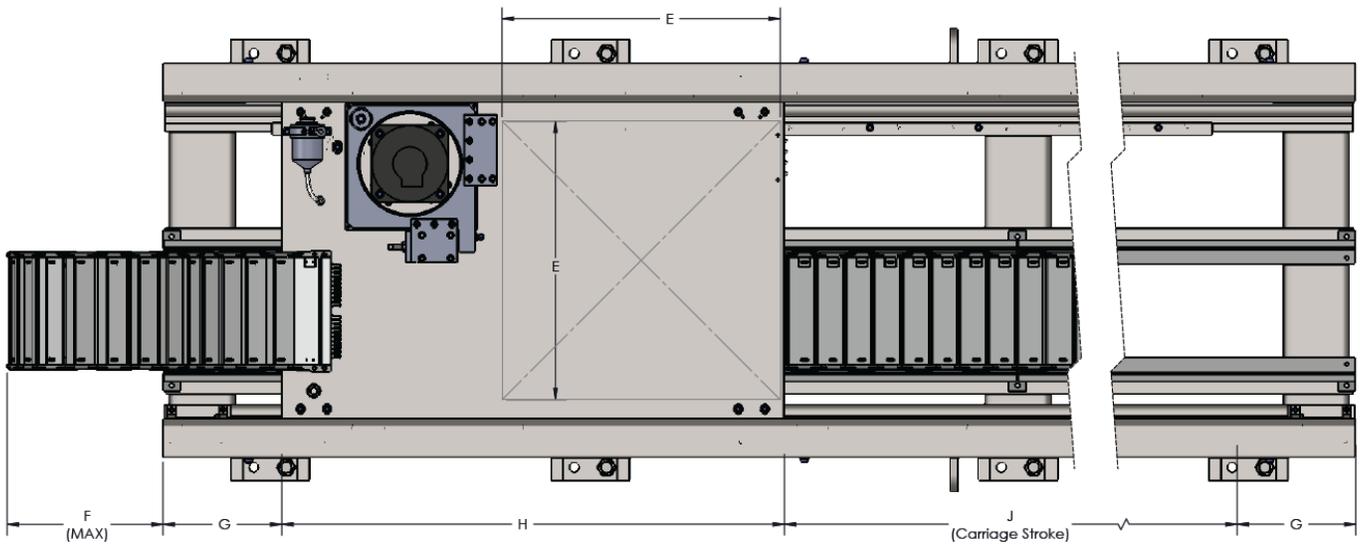
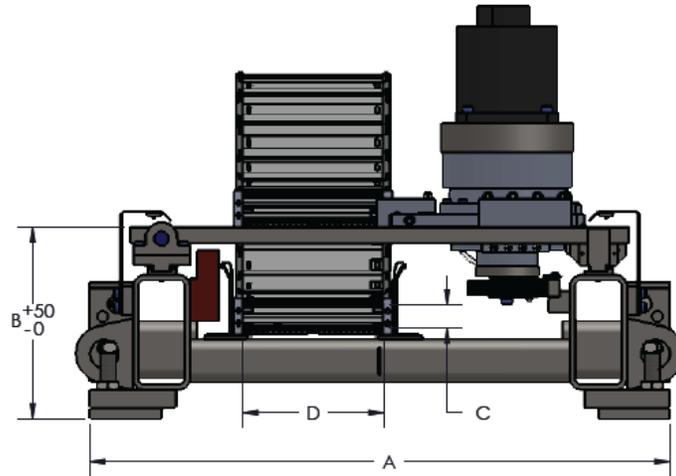
OTHER AVAILABLE OPTIONS (CONT'D)

- Cable entry at end of track (removes cable cutouts in frame and includes covers from end of cable carrier to end of track)
- Side mounted cable carrier trough (required for more than two carriages per track – optional otherwise)
- Limit switches (for end of travel and/or carriage to carriage)
- Zone bars with switches for setting multiple zones along length of track
- Remove servo drive system for manual carriage adjustment (for limited movement applications such as moving a tailstock)
- Replace servo drive with standard AC motor drive system and hand pendant (for low precision/limited movement applications such as moving a tailstock)

MISCELLANEOUS

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





Model	Rail Size	Rated Capacity	A	B	C	D	E	F	G	H	J
LDRTU	30mm	700 kg	830mm	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
XHRTU	55mm	3,600 kg	1,680mm	430mm	56mm	350mm	1,200mm	500mm	365mm	1,775mm	SPECIFY

