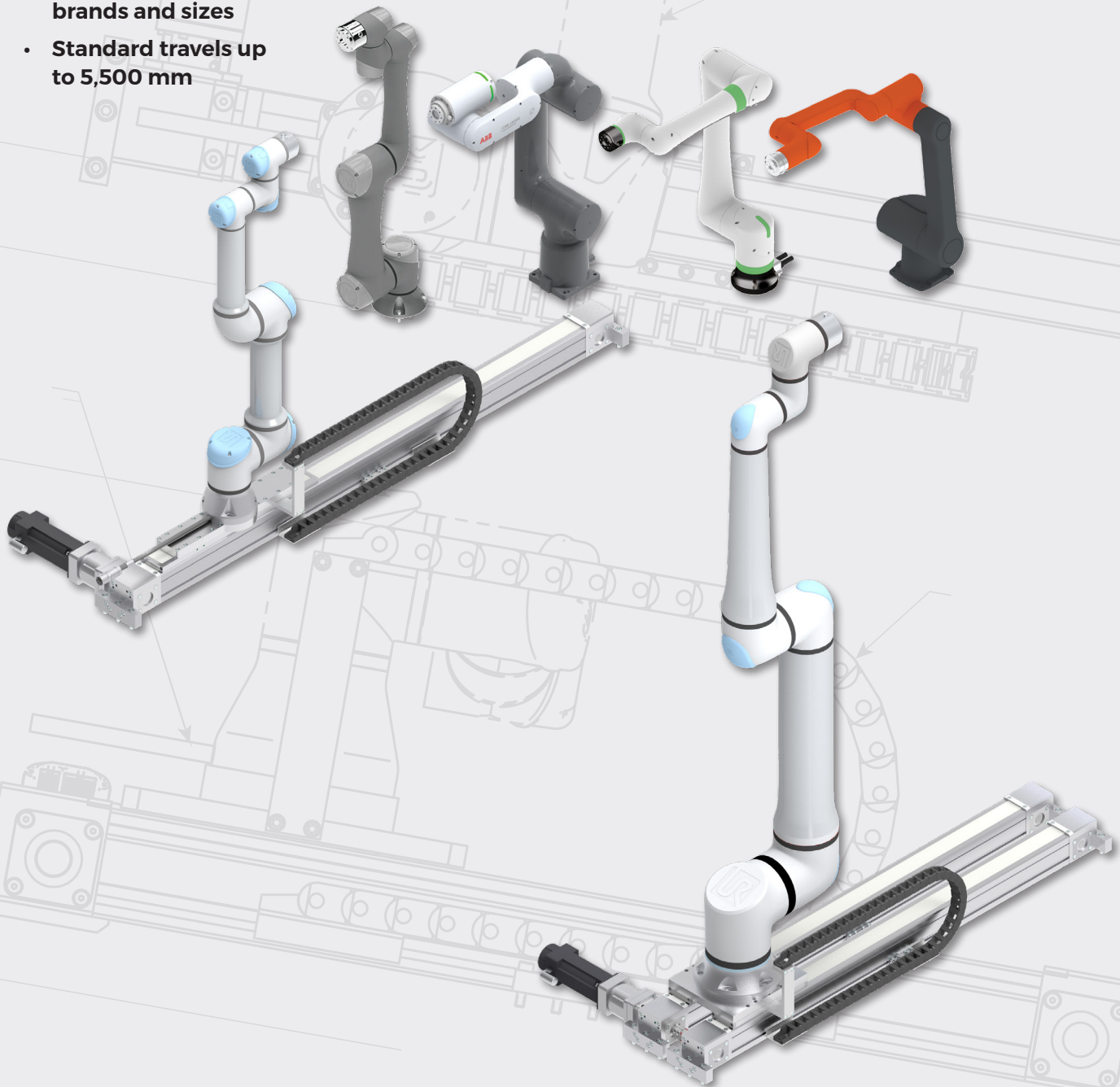


7TH AXIS SOLUTIONS

Robot Transfer Units for Cobots

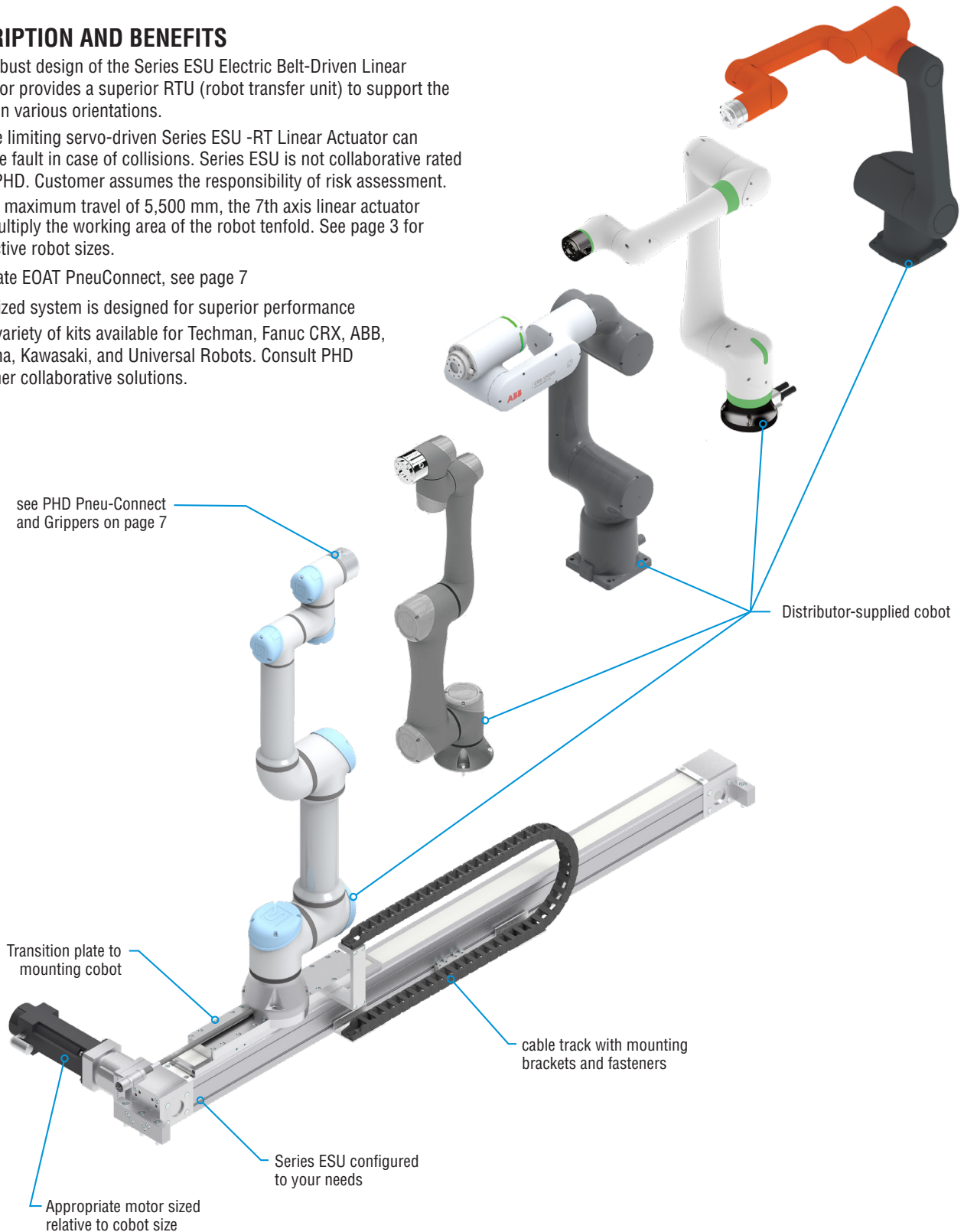
- Increases work area of robot productivity
- Solutions for wide range of cobot brands and sizes
- Standard travels up to 5,500 mm



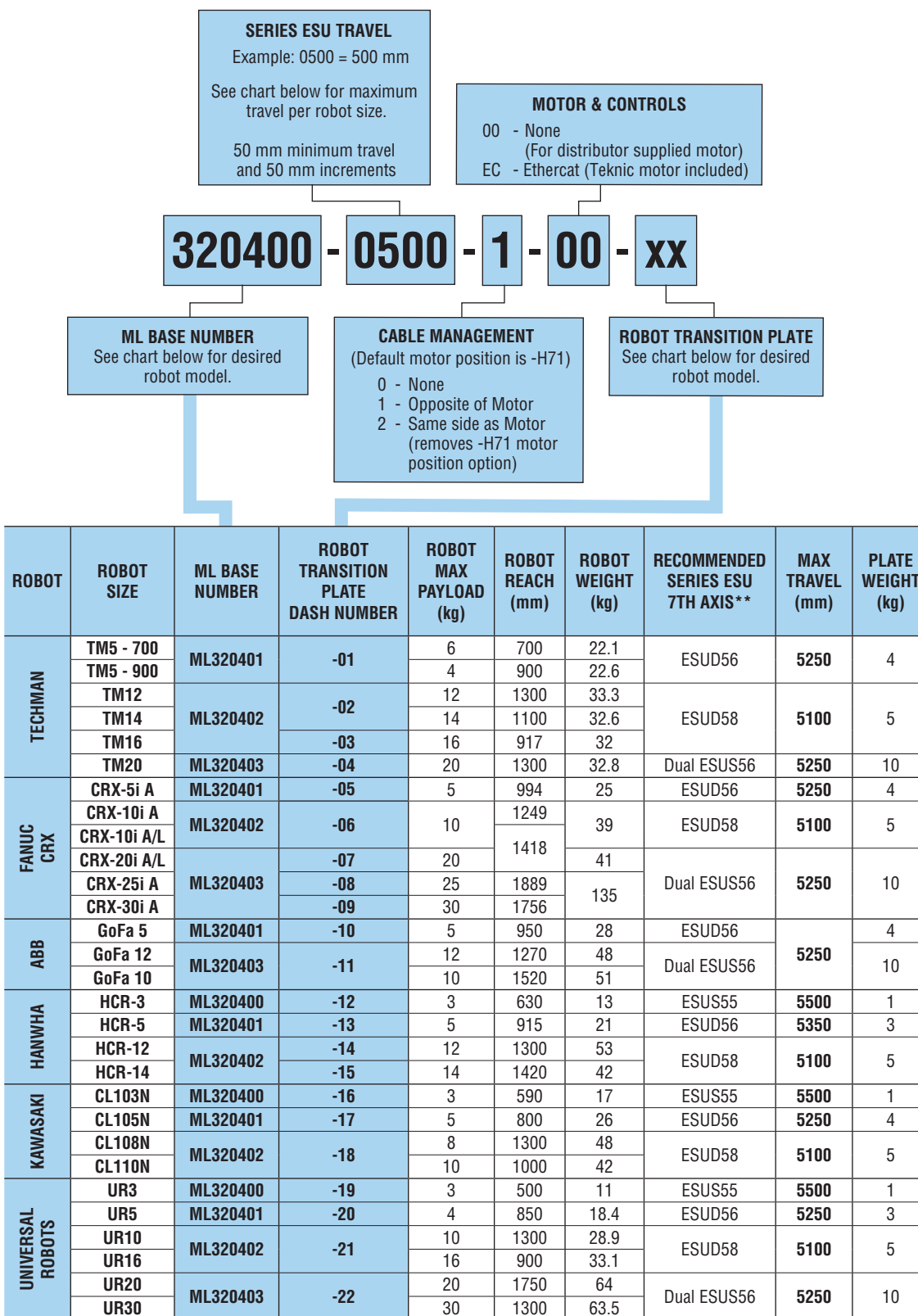
Robot Transfer Units for Cobots

DESCRIPTION AND BENEFITS

- The robust design of the Series ESU Electric Belt-Driven Linear Actuator provides a superior RTU (robot transfer unit) to support the robot in various orientations.
- Torque limiting servo-driven Series ESU -RT Linear Actuator can provide fault in case of collisions. Series ESU is not collaborative rated from PHD. Customer assumes the responsibility of risk assessment.
- With a maximum travel of 5,500 mm, the 7th axis linear actuator can multiply the working area of the robot tenfold. See page 3 for respective robot sizes.
- Integrate EOAT PneuConnect, see page 7
- Optimized system is designed for superior performance
- Wide variety of kits available for Techman, Fanuc CRX, ABB, Hanwha, Kawasaki, and Universal Robots. Consult PHD for other collaborative solutions.



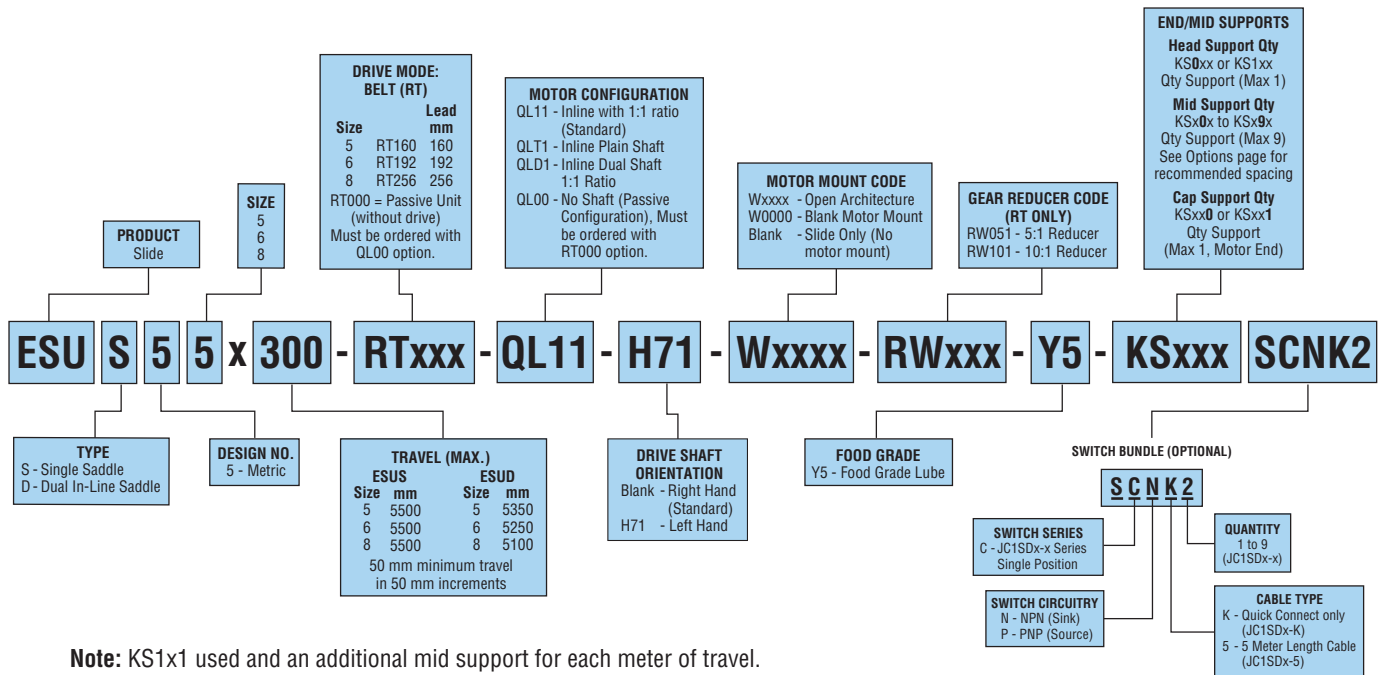
ORDERING DATA: 7th Axis Solutions



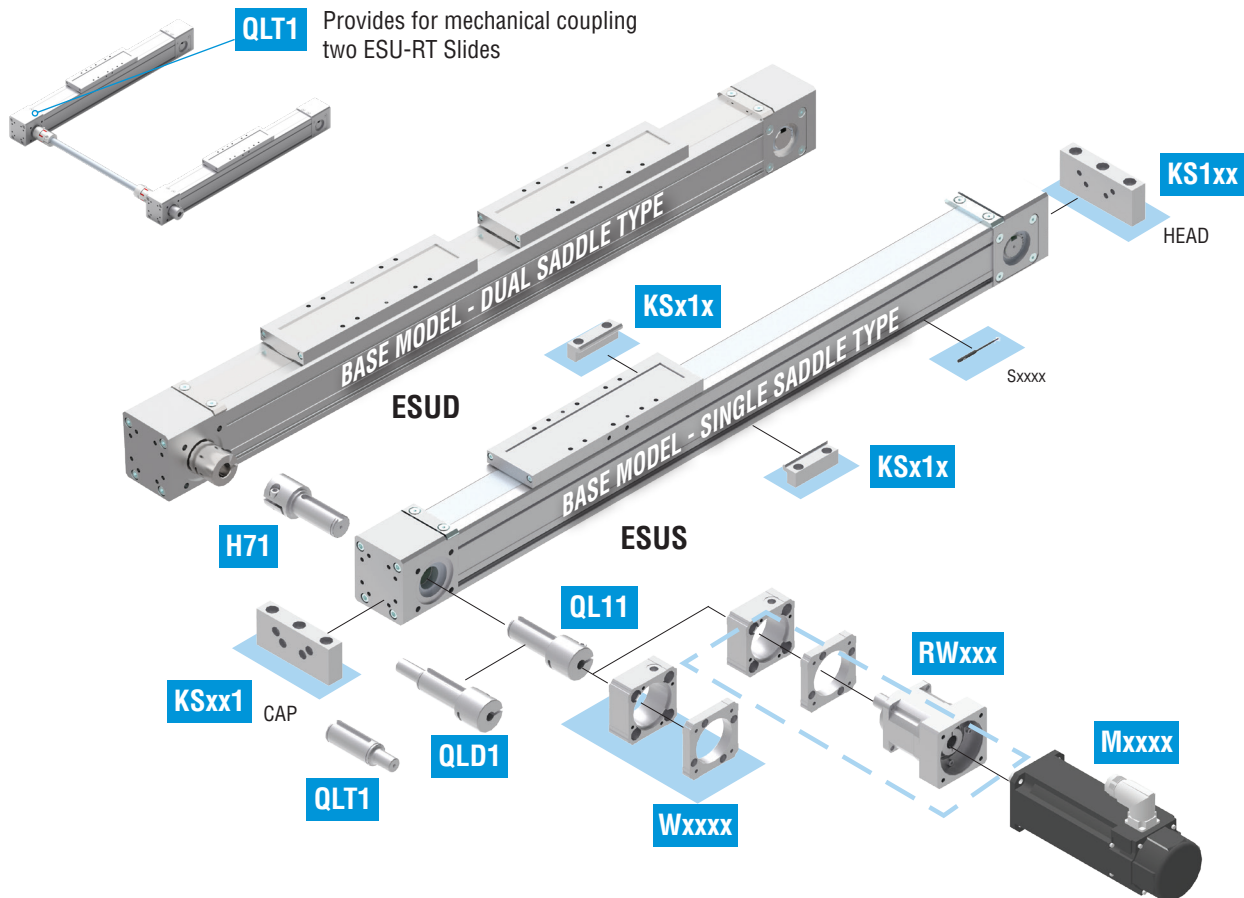
NOTES:

- 1) Cap available for UR Cobot combinations when combined with Kollmorgen.
- 2) **Recommended linear actuator selected for maximum payload and reach of robot. Sizing is based on robot center of gravity to be less than 1/3 of robot reach during dynamic moves. Contact PHD Applications Engineering for other combinations.
- 3) RTU (robot transfer unit) sized for maximum velocity of 300 mm/sec.

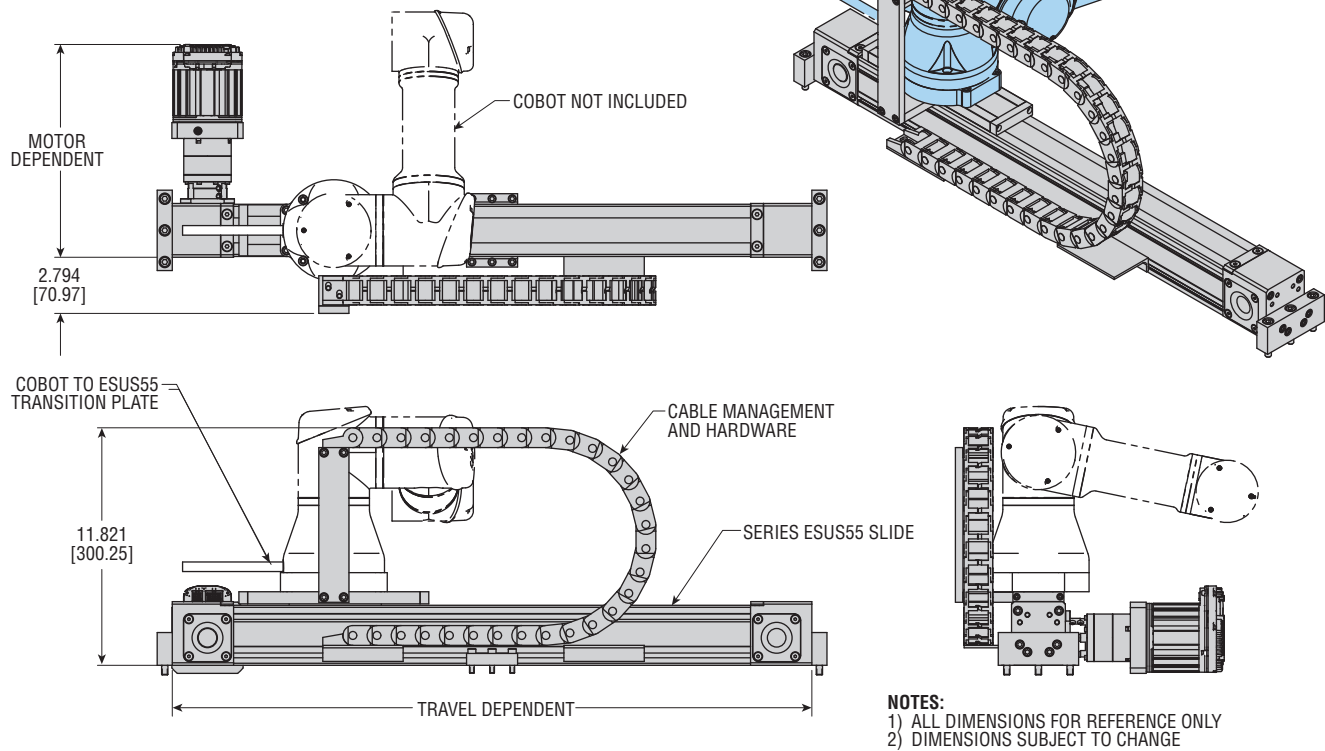
SERIES ESU -RT CONFIGURATION REFERENCE



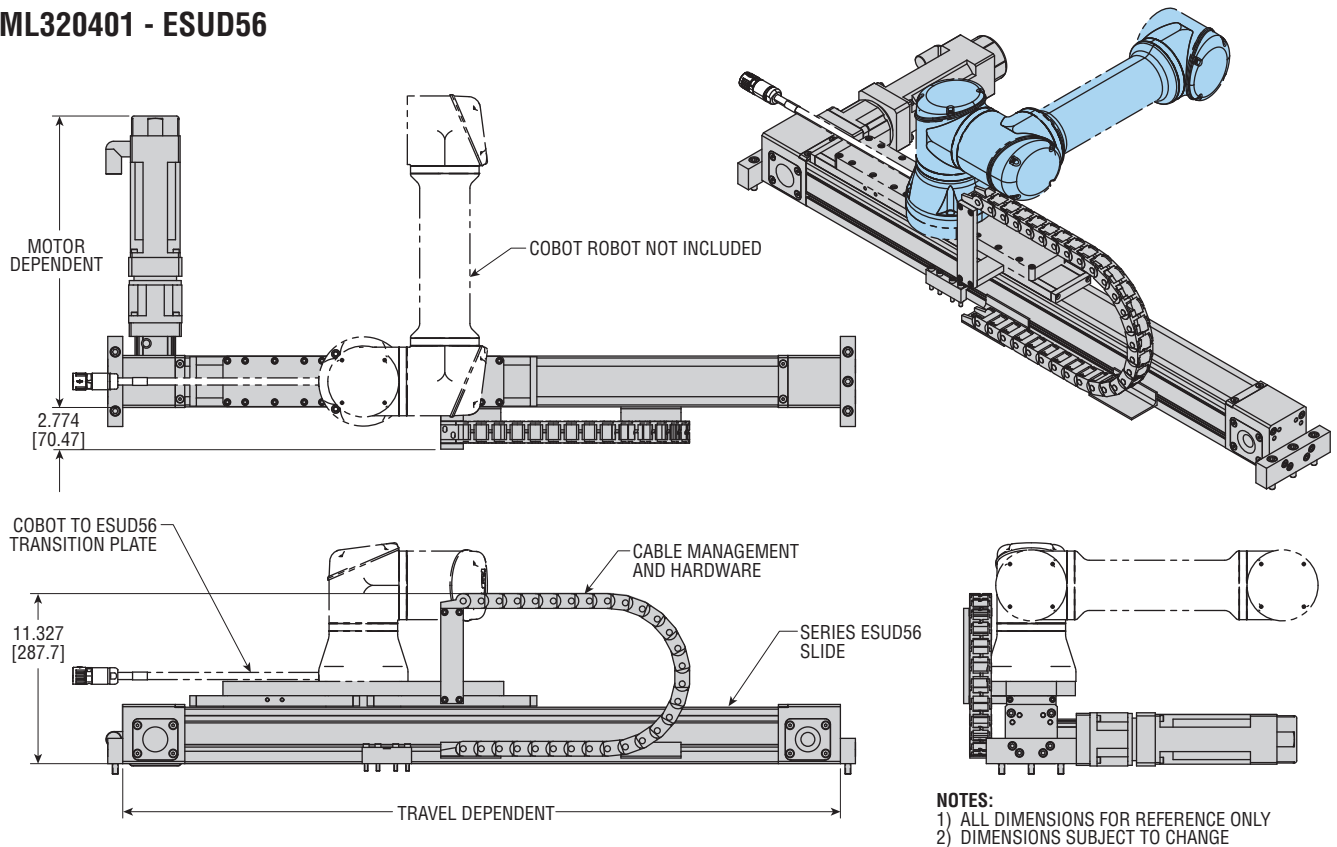
MOUNTING OPTIONS



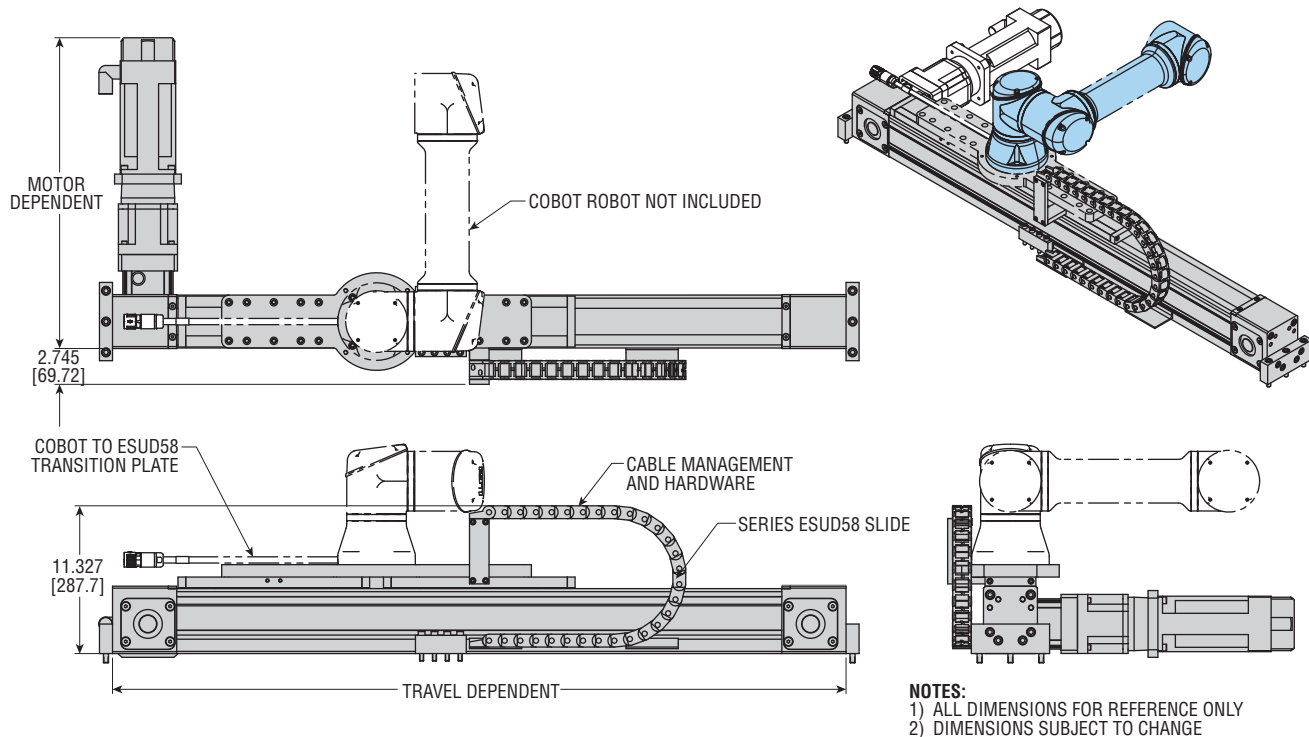
ML320400 - ESUS55



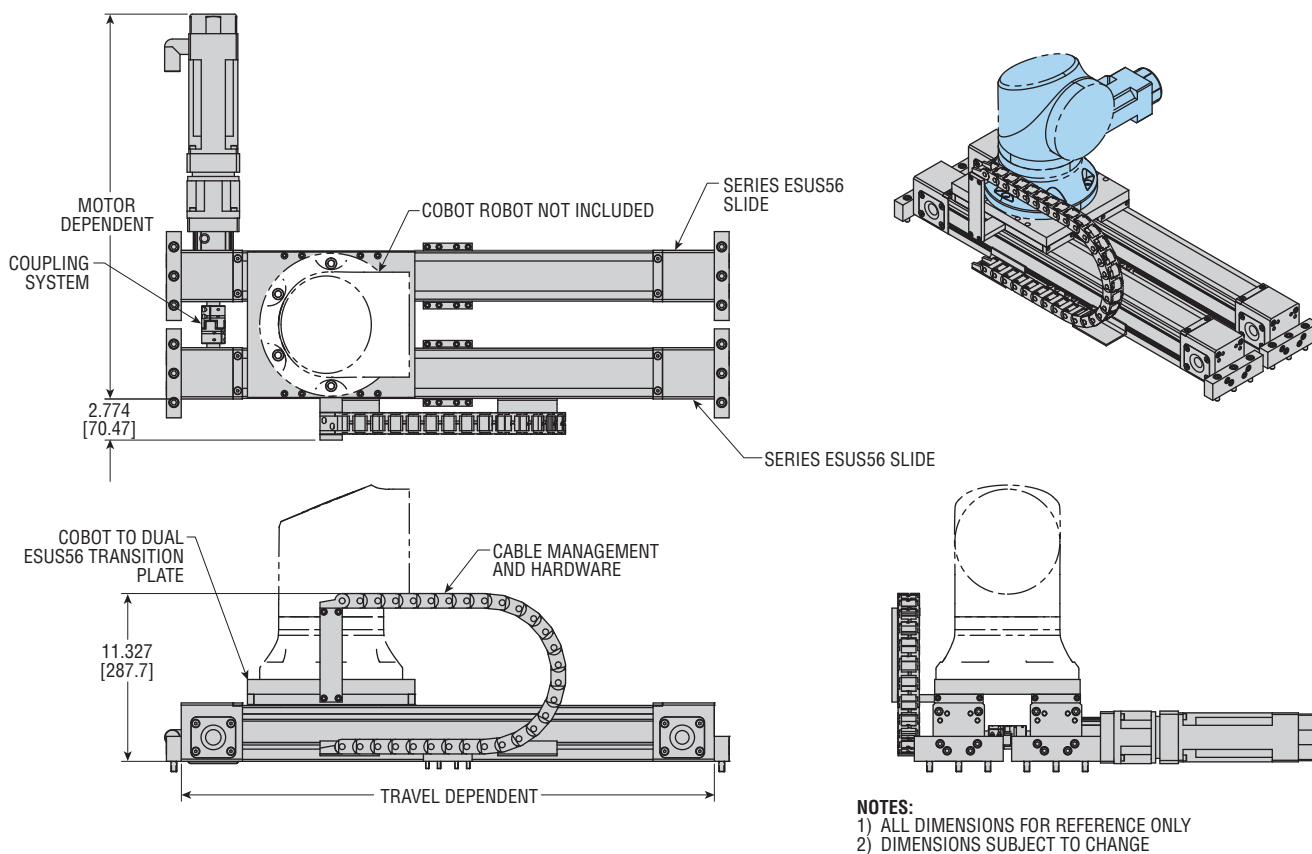
ML320401 - ESUD56



ML320402 - ESUD58



ML320403 - Dual ESUS56

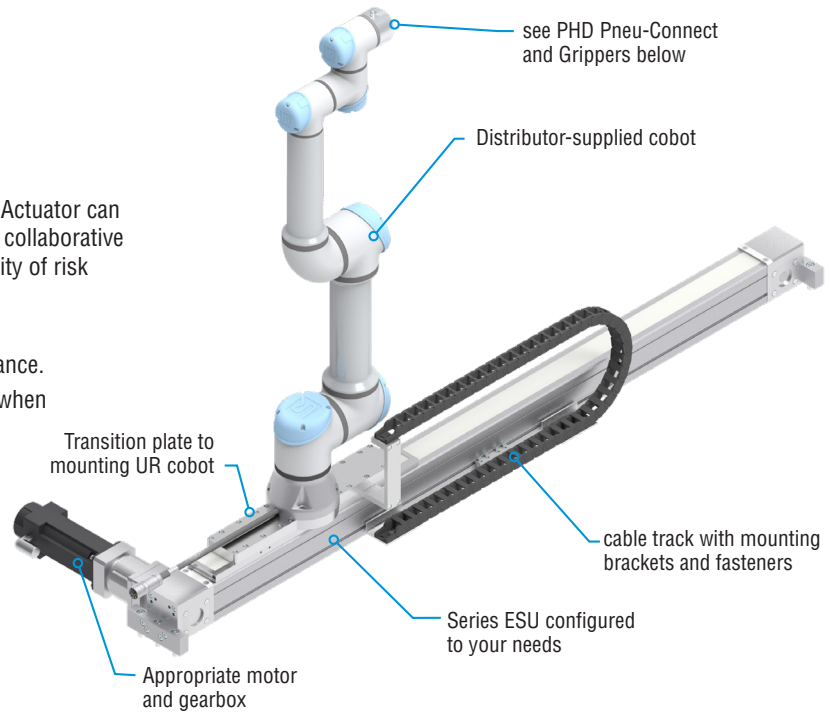


Systems for UR Cobots

DESCRIPTION

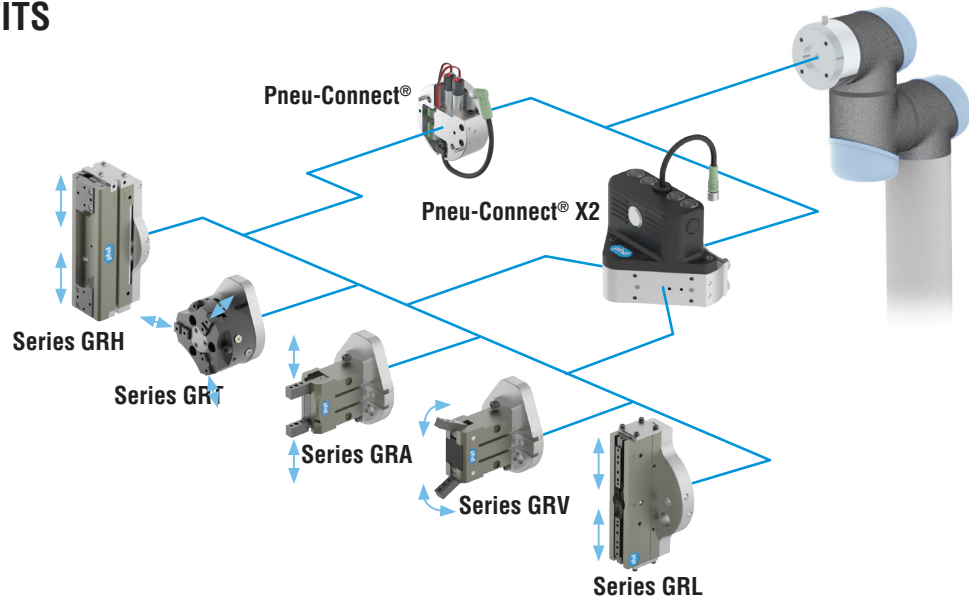
- Torque limiting servo-driven Series ESU -RT Linear Actuator can provide fault in case of collisions. Series ESU is not collaborative rated from PHD. Customer assumes the responsibility of risk assessment.
- Integrate EOAT PneuConnect, see below.
- Optimized system is designed for superior performance.
- Easy to set up and program using URCap software when combined with Kollmorgen.

URCap is included with system



PNEU-CONNECT® BENEFITS

- Provides seamless, cost-effective, pneumatic end-effector integration for collaborative robots.
- Couples directly to the robot arm tool port enabling pneumatic gripping capability.
- Incorporated MAC® valves
- URCap software is included for intuitive, easy setup of Pneu-Connect system.
- Pneu-Connect X2 design features the Freedrive button that interfaces with the UR for easy position programming.
- Consult PHD for use on other cobots.



CLICK & GRIP: Adjustable Gripper Tooling



- Fast configuration and reconfiguration
- Flexibility with interchangeable component - segments can be added and removed allowing for endless combinations
- Lightweight polyamide plastic, ideal for cobot applications and proof of concept
- Design provides limited compliance – helpful during setups and around workers

Digital Design Tools



CAD APP

- Select from popular CAD formats (AutoCAD®, Inventor® Unigraphics®, Solidworks®, and more)



Sizing APP

Answer questions about your application to find a product that meets your exact requirements.



- Graphical configurator supports real-time compatibility
- Download CAD models directly from your browser or have them emailed

- Save a project to revisit and revise later
- Automatic calculations and unit conversion: imperial or metric
- Available for web and mobile use

Our powerful online engineering tools simplify the design process to save you time.

Customized Solutions

We have the engineering expertise and factory capability to design and build custom solutions for almost any industry and application. Currently, our database includes over 35,000 unique designs born out of a commitment to provide our customers exactly what they need. If an application requires a modified component, our experienced design team is ready to help. We welcome special requests for fully custom products, regardless of quantity or frequency of order.



FAST & EASY PRODUCT CUSTOMIZATION

35,000+ DESIGNS IN OUR DATABASE

150,000+ AVAILABLE QUOTES

NO MINIMUM ORDER QUANTITIES

Partnering to Serve the Customer



We're a proud member of the MAC Distributor Network (MDN): a global network of manufacturers and distributors partnering to provide superior product, service, and support to customers.

Our distribution partners within this global network are factory-trained, application-oriented, and carry a wide range of supporting products. MDN offers the opportunity to blend their unique expertise with that of the PHD team to provide exceptional automation solutions and ongoing support to our customers around the world.

Global Reach

A globally linked network of partners in over 45 countries facilitates fast and seamless support to multinational customers.

Expert Support

Factory-trained application and industry specialists ensure cost-effective and field-proven automation solutions.

Customer Commitment

MDN members are committed to providing customers what they need when they need it.