

975 Cottonwood Ave., PO Box 20, Hartland, Wisconsin 53029-0020, USA | [www.dorner.com](http://www.dorner.com) | [info@dorner.com](mailto:info@dorner.com)

### COMMON DRIVE CONVEYOR SETUP

Up to (4) conveyors can be coupled together and driven from a single gearmotor.

- Conveyors move at same relative belt speed.
- Creates single lanes for handling parts.
- Wide parts or pallets can be carried by each conveyor to allow access from below.
- Conveyors can be of different widths and lengths.

### Uses Standard 3200 Series End Drive Conveyors

- Aluminum Extruded Frame with T-slot Construction
- Sealed Ball Bearings
- V-guided and Non-V-guided Belt Compatible
- Rack and Pinion Belt Tensioning
- Conveyor Widths: 3.75" to 48" wide
- Conveyor Lengths: End Drive = 3' to 40' long
- 3" diameter Drive Pulley turns approximately 9.7" of Belt per revolution
- Belt Speeds: up to 421 ft/min

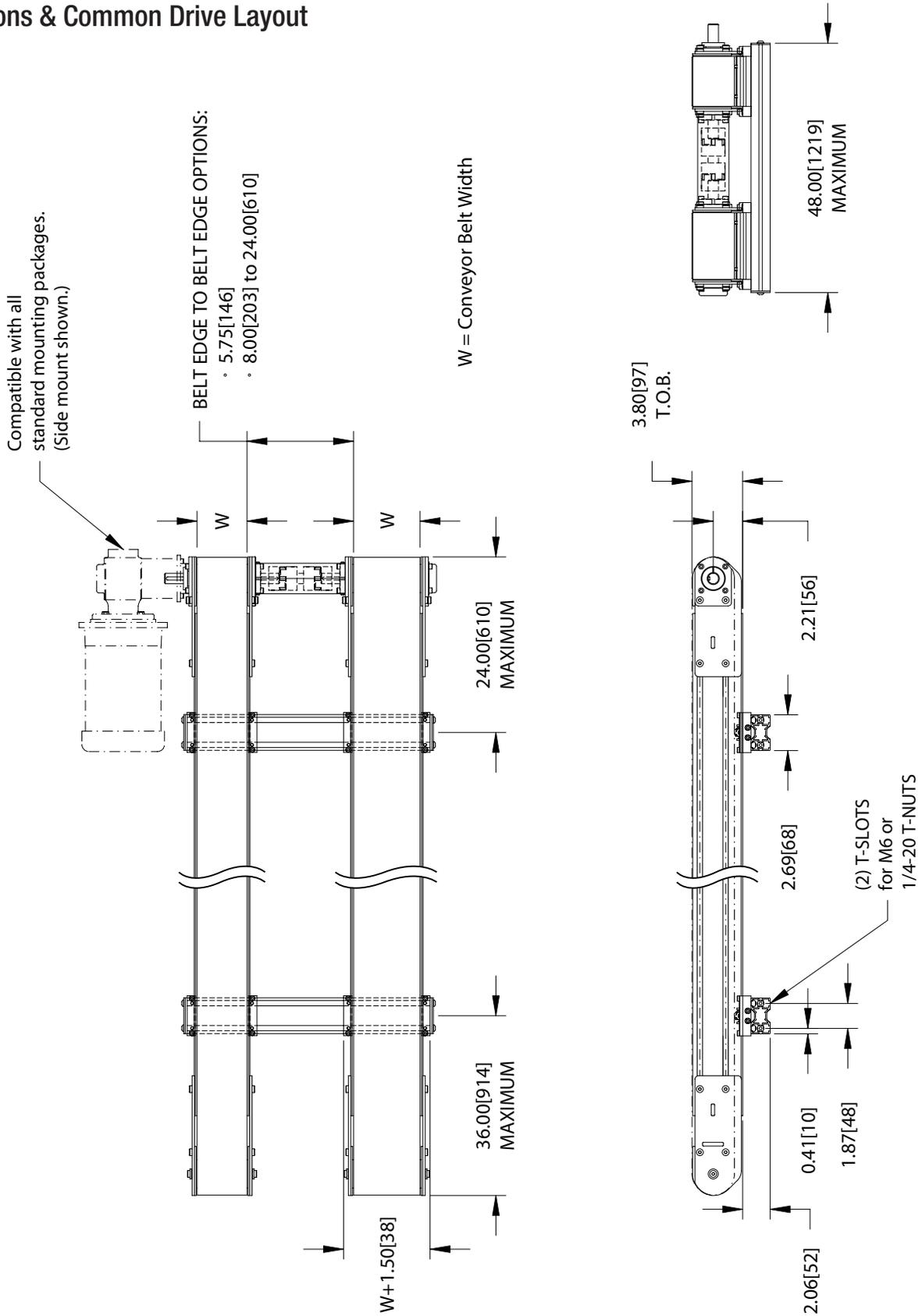
*See Product Engineering Manual or [www.dorner.com](http://www.dorner.com) for details.*

### Common Drive Specifications

- Drive up to (4) Conveyors from a Single Drive Gearmotor
- Fixed Conveyor Locations
- Load Capacity: Contact Factory for Details
- Compatible with all Standard End Drive Gearmotor Mounting Packages
- Includes Aluminum Extruded Conveyor Tie Bar Assembly with Belt Return Roller
- Includes Common Drive Couplings and Guarding
- Multiple Conveyor Spacing Options
  - 5.75" Belt Edge to Belt Edge
  - 8" to 24" Belt Edge to Belt Edge



## Dimensions & Common Drive Layout



### Profiles:

- All 3200 Series profiles are applicable.
- *See Product Engineering Manual or [www.dorner.com](http://www.dorner.com) for details.*

### Belting:

- All 3200 Series belting is applicable.
- Finger Splice is preferred, plastic and metal clipper splices are available.
- *See Product Engineering Manual or [www.dorner.com](http://www.dorner.com) for details.*

### Mounting Packages & Gearmotors:

- All 3200 Series mounting packages and gearmotors are applicable.
- *See Product Engineering Manual or [www.dorner.com](http://www.dorner.com) for details.*

### Support Stands:

- All 3200 Series support stands are applicable.
- *See Product Engineering Manual or [www.dorner.com](http://www.dorner.com) for details.*

## EXPRESS INQUIRY FORM: GENERAL INFORMATION

*Along with completing the Express Inquiry form below, please complete the specific 3200 Series Common Drive Conveyor application questions on the next page to the best of your ability.*

Contact Technical Sales at 1-800-259-1510 (Press 3) or TechnicalSales@dorner.com for Application Assistance.

### CONTACT INFORMATION

Company: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-Mail: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

### PRODUCT

Description/Material: \_\_\_\_\_

Dimensions: \_\_\_\_\_

Weight: \_\_\_\_\_ Total Weight to be Placed on Conveyor: \_\_\_\_\_

Temperature: \_\_\_\_\_ Leading Edge Dimension: \_\_\_\_\_

### ENVIRONMENT

Chemicals or Fluids Present: \_\_\_\_\_

Unusual Ambient Temperature Conditions: \_\_\_\_\_

Other Concerns: \_\_\_\_\_

### GEARMOTOR & MOUNT PACKAGE

Mount Position:  Top  Bottom  Side  Parallel Shaft  90°

Belt Speed: \_\_\_\_\_  Fixed  Variable See example on next page for calculating belt speed.

Belt Direction & Motor Position: \_\_\_\_\_

### ELECTRICAL

Voltage: \_\_\_\_\_ Phase: \_\_\_\_\_

Hz: \_\_\_\_\_ For Variable Speed:  DC  AC

Controls required: \_\_\_\_\_

**Complete individual conveyor specifications on page 6.**

## EXPRESS INQUIRY FORM: GENERAL INFORMATION

Page may need to be copied to communicate multiple conveyors

### DESCRIBE THE COMMON DRIVE CONVEYOR APPLICATION

Describe the product being conveyed: \_\_\_\_\_  
 \_\_\_\_\_

What do you want the conveyors to do? \_\_\_\_\_  
 \_\_\_\_\_

How is the part being introduced onto conveyor? \_\_\_\_\_  
 \_\_\_\_\_

What is the product feed rate? (parts per minute) \_\_\_\_\_

Is part orientation critical?  Yes  No Explain: \_\_\_\_\_

Where does the part go upon discharging from the conveyor? \_\_\_\_\_  
 \_\_\_\_\_

### PRODUCT SAMPLES

Samples of actual products can be critical to the successful design and application of a common drive conveyor.

Will sample products be provided to Dorner?  Yes  No

**FAX COMPLETED FORMS TO 800.369.2440 or 262.367.5827**

## BELT SPEED CALCULATOR

How to calculate minimum conveyor belt speed:

$$\frac{(\text{Part rate in parts per minute}) \times (\text{part size in inches})}{12}$$

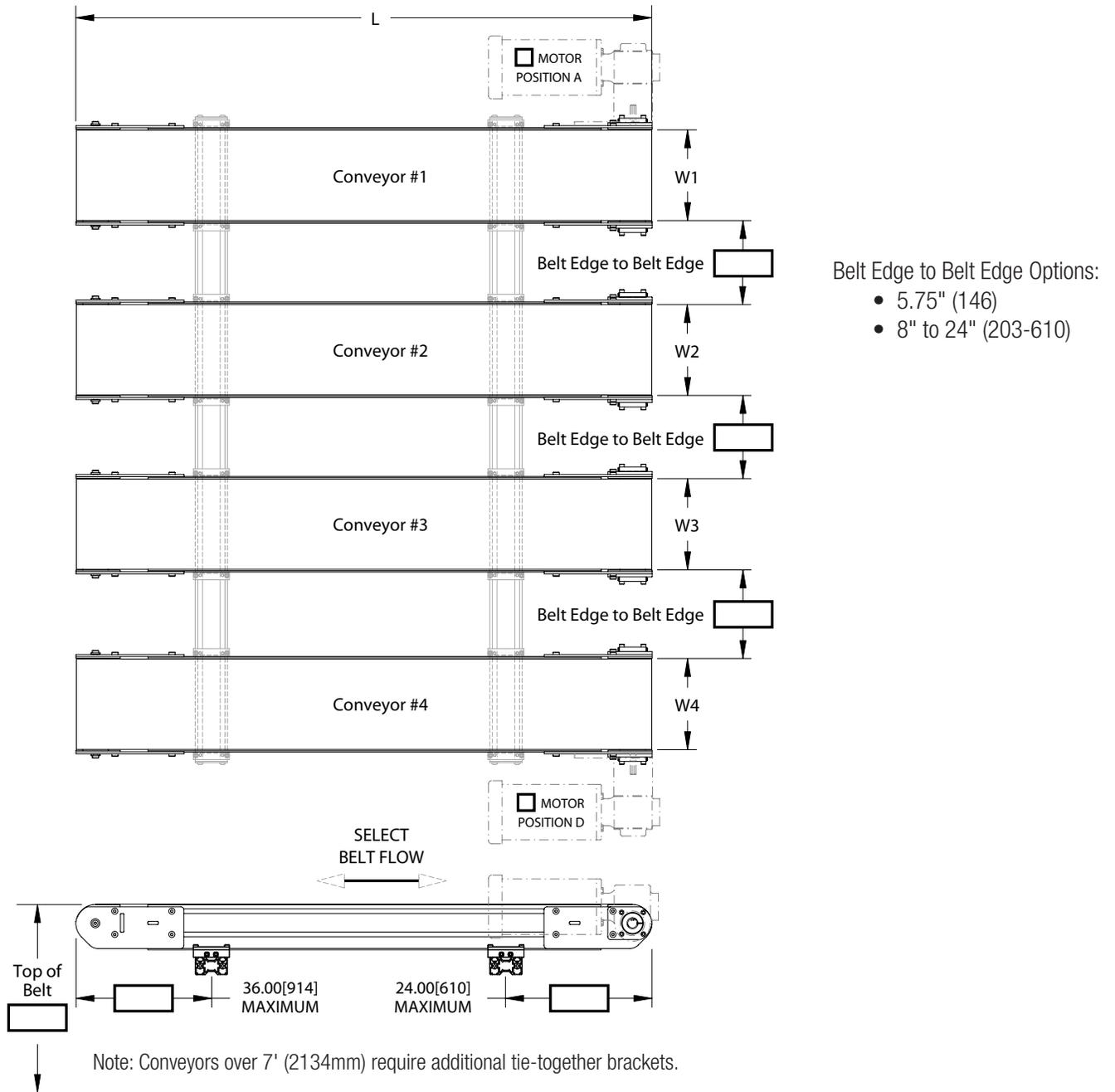
Example  $\frac{(30 \text{ parts per minute}) \times (6" \text{ dia. part})}{12} = \frac{180}{12} = 15 \text{ ft/min. Minimum Belt Speed}$

How to calculate conveyor belt speed incorporating a product spacing:

$$\frac{(\text{Part rate in parts per minute}) \times (\text{desired part spacing in inches} + \text{part size in inches})}{12}$$

Example  $\frac{(30 \text{ parts per minute}) \times (6" \text{ dia part} + 12" \text{ spacing between parts})}{12} = \frac{(30) \times (18)}{12} = \frac{540}{12} = 45 \text{ ft/min. Belt Speed}$

Please highlight the conveyor, dimensions, belt flow and motor positions required.



Complete the Conveyor Information				
Conveyor	Width (W)	Length (L)	Belt Type*	Profile*
#1				
#2				
#3				
#4				

\*See Product Engineering Manual or [www.dorner.com](http://www.dorner.com) for details.