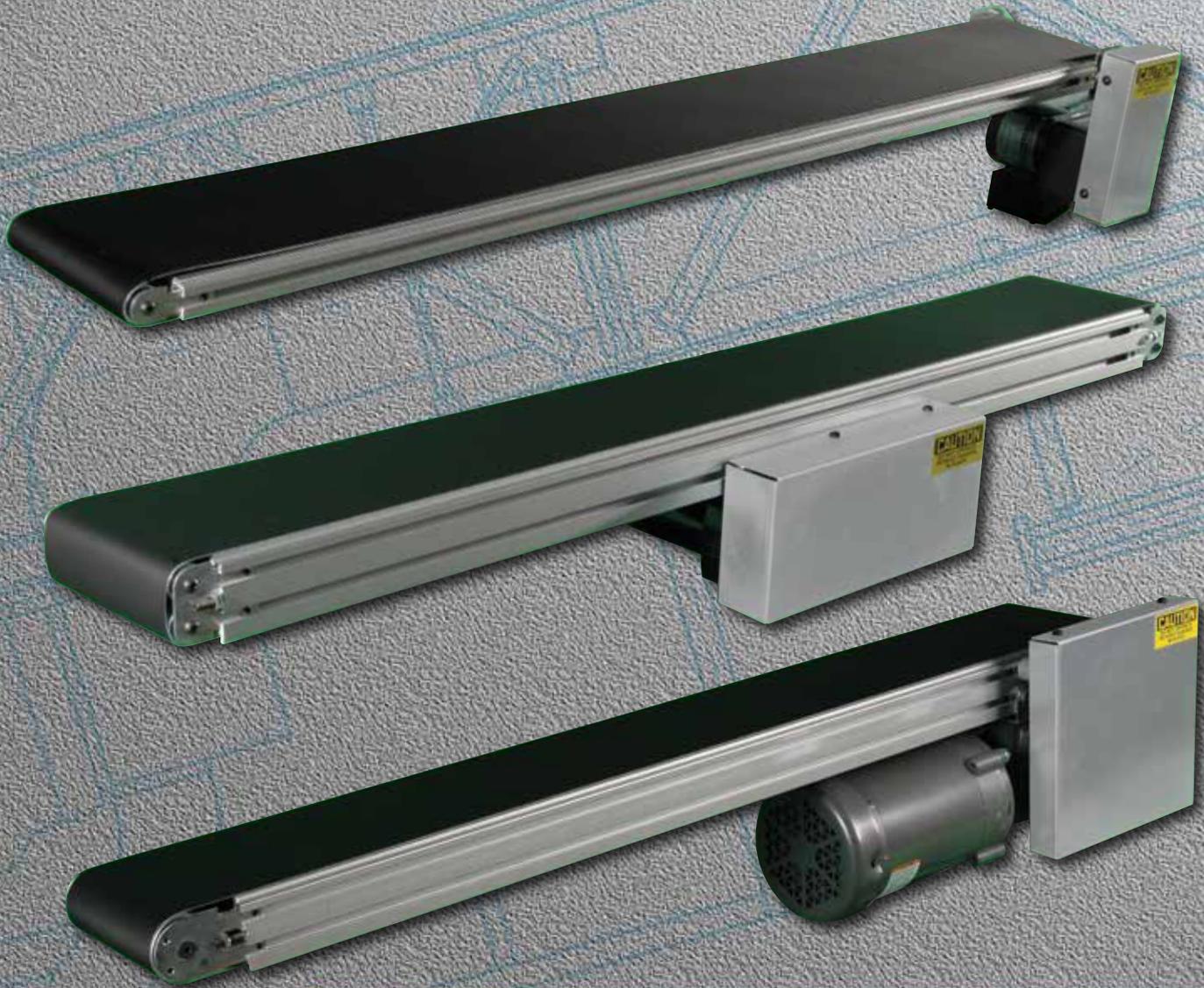


# Diebel

## ALUMINUM FRAME CONVEYORS



The ORIGINAL extruded-aluminum-frame conveyor

American Made and American Engineered





# The Diebel Series

The Diebel Series of Conveyors are designed to offer an economical method of transporting small, lightweight products. The overall profile is compact and the small diameter end rollers provide easy parts transfer from one conveyer to another. Options such as adjustable guide rails, sensor brackets, tight transfer end pulleys and transfer plates are available. The Diebel Series of aluminum frame conveyors is a low cost, ready to use solution for your automated systems needs.



## Table of Contents

| Area                                | Page | Area  | Page |
|-------------------------------------|------|---|------|
| <b>General Specifications</b>       | 1    | <b>Model D-3300 Drive Locations</b>                 | 9-10 |
| <b>Diebel Tight Transfer</b>        | 2    | <b>Frames</b>                                       | 11   |
| <b>Model D-1300 Specifications</b>  | 3    | <b>Supports</b>                                     | 11   |
| <b>Model D-2300 Specifications</b>  | 3-4  | <b>Options</b>                                      | 11   |
| <b>Model D-3300 Specifications</b>  | 4    | <b>Specialty Conveyors</b>                          | 12   |
| <b>Model D-1300 Drive Locations</b> | 5-6  | <b>Standard Belt Options</b>                        | 13   |
| <b>Model D-2300 Drive Locations</b> | 7-8  | <b>Speeds, Motors, Controllers &amp; Photo Eyes</b> | 14   |

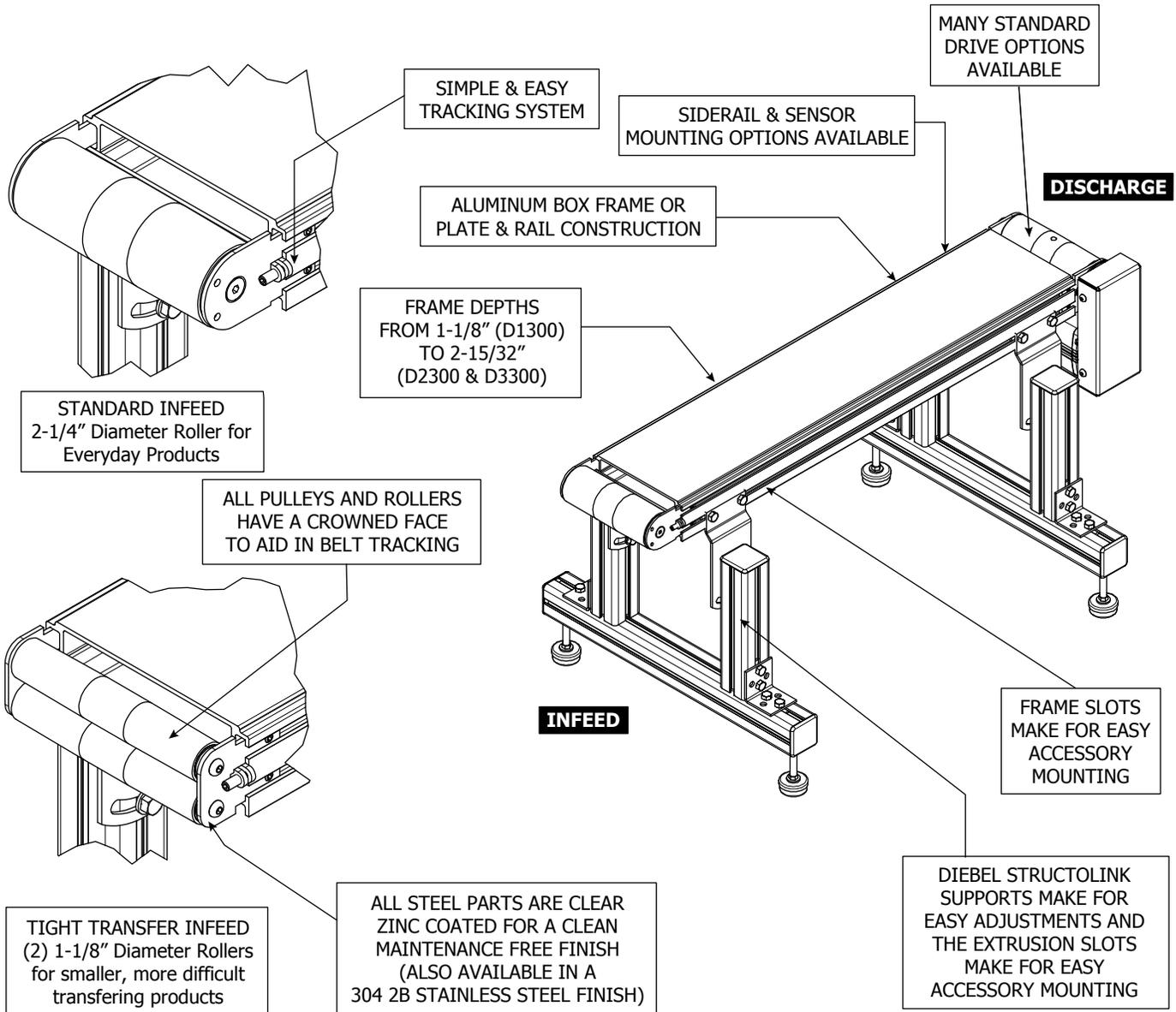


## Specifications

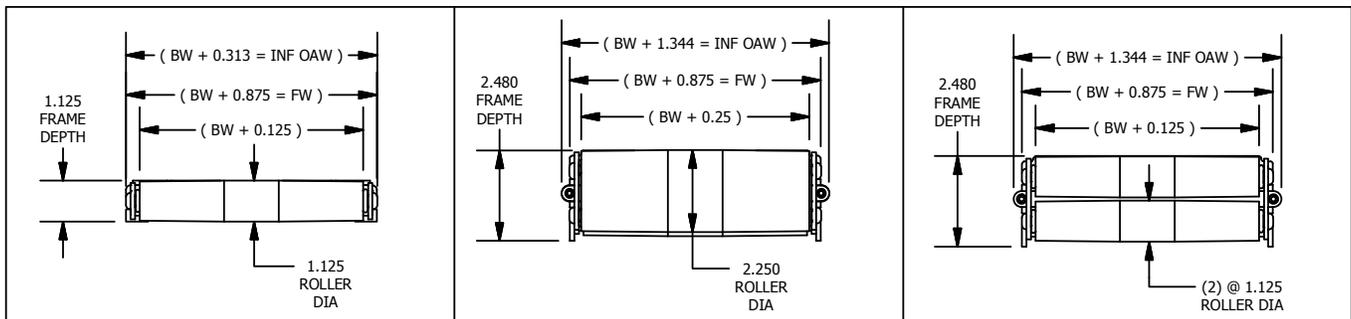
| Model Position                            | Light Duty – D-1300<br>Ultra-Low Profile                 | Medium Duty – D-2300<br>Low Profile |           |                            | Heavy Duty – D-3300<br>Low Profile |                    |                            |
|---|--|-------------------------------------|-----------|----------------------------|------------------------------------|--------------------|----------------------------|
| Diebel Model #                            | D-1300   | D-2300                              | D-2300    | D-2300<br>(Tight Transfer) | D-3300                             | D-3300             | D-3300<br>(Tight Transfer) |
| <b>Drive Location</b>                     | End & Center   | End                                 | Center    | Center                     | End                                | Center             | Center                     |
| <b>Lengths</b>                            | 1' – 20'   | 1' – 20'                            | 18" – 40' | 18" – 40'                  | 1' – 20'                           | 3' – 40'           | 3' – 40'                   |
| <b>Infeed Pulley/<br/>Roller Diameter</b> | 1.125"   | 2.250"                              | 2.250"    | (2) @ 1.125"               | 2.250"                             | 2.250"             | (2) @ 1.125"               |
| <b>Drive Pulley/<br/>Roller Diameter</b>  | 1.125"   | 2.250"                              | 2.250"    | 2.250"                     | 2.250"                             | 2.250"             | 2.250"                     |
| <b>Drive Shaft Diameter</b>               | 0.625"   | 0.625"                              | 0.625"    | 0.625"                     | 0.750"                             | 0.750"             | 0.750"                     |
| <b>Frame Depth</b>                        | 1.125"   | 2.480"                              | 2.480"    | 2.480"                     | 2.480"                             | 2.480"             | 2.480"                     |
| <b>Maximum Capacity</b>                   | 40#  | 80#                                 | 80#       | 80#                        | 200#                               | 200#               | 200#                       |
| <b># of T-Slots</b>                       | 1  | 2                                   | 2         | 2                          | 2                                  | 2                  | 2                          |
| <b>Motor Type</b>                         | Gearmotor  | Gearmotor                           | Gearmotor | Gearmotor                  | Motor &<br>Reducer                 | Motor &<br>Reducer | Motor &<br>Reducer         |
| <b>Belt Widths/<br/>Frame Style</b>       | 2", 4", 6", 8",<br>12", & 18" BW's<br>Plate & Rail Frame | Box Beam Frame                      |           | 1", 2", 4",<br>& 6" BW's   | Box Beam Frame                     |                    | 1", 2", 4",<br>& 6" BW's   |
|   |  | Plate & Rail Frame                  |           | 8", 12",<br>& 18" BW's     | Plate & Rail Frame                 |                    | 8", 12",<br>& 18" BW's     |



# The Diebel Series – Tight Transfer Conveyors



## Model D-1300, D-2300, & D-3300 Infeed/Tail End Views



**STANDARD INFEED (D-1300 ONLY)**

**STANDARD INFEED (D-2300 & D-3300)**

**TIGHT TRANSFER INFEED (D-2300 & D-3300)**

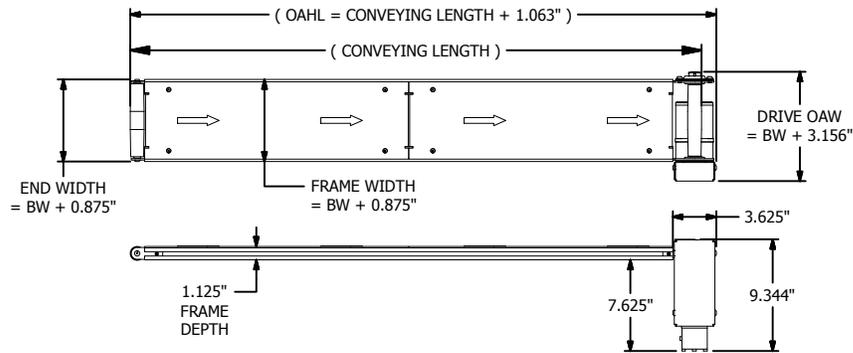
NOTE: ALL DIMENSIONS SHOWN ARE IN INCHES.



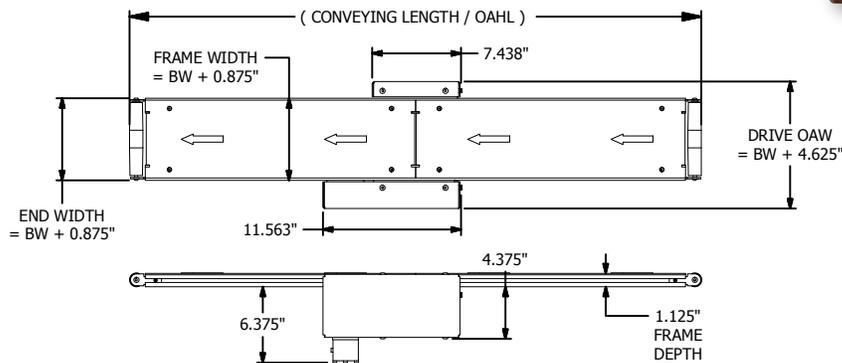
# The Diebel Series Specifications

## Diebel Model D-1300 – Light Duty Applications

### D-1300 End Drive

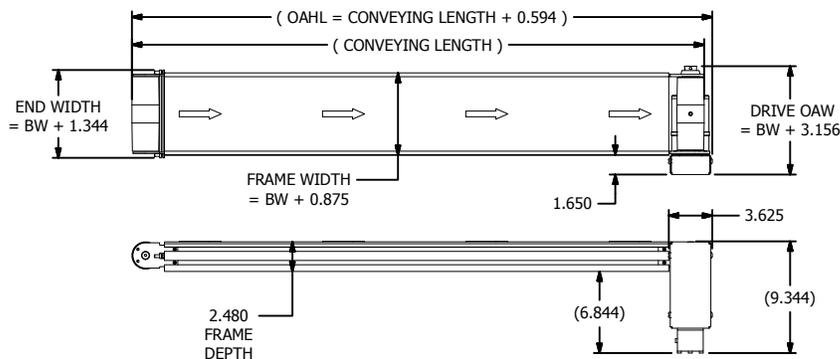


### D-1300 Center Drive



## Diebel Model D-2300 – Medium Duty Applications

### D-2300 End Drive



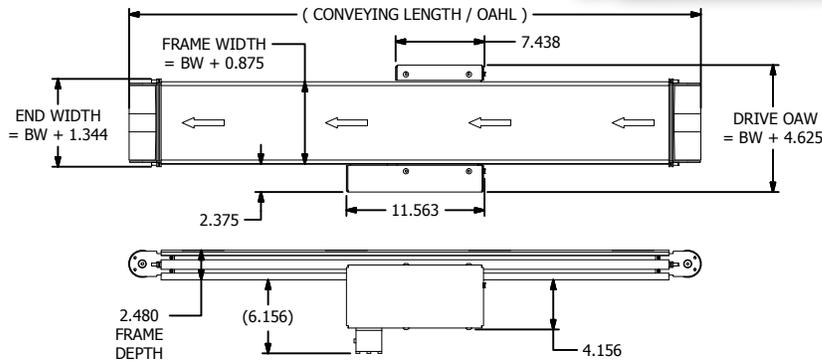
- NOTES: - DIMENSIONS ARE SHOWN IN INCHES AND ARE SUBJECT TO CHANGE.  
 - DRAWINGS SHOW 'STANDARD' DRIVE OPTIONS WITH 'STANDARD' STYLE MOTORS. MOTOR DIMENSIONS CAN VARY.  
 - ARROWS DEPICT PREFERRED BELT TRAVEL / PRODUCT FLOW.  
 - CENTER DRIVES CAN BE PLACED ANYWHERE ALONG THE LENGTH OF THE FRAME EXCEPT THE LAST 3-1/2" FROM EITHER END.



# The Diebel Series Specifications

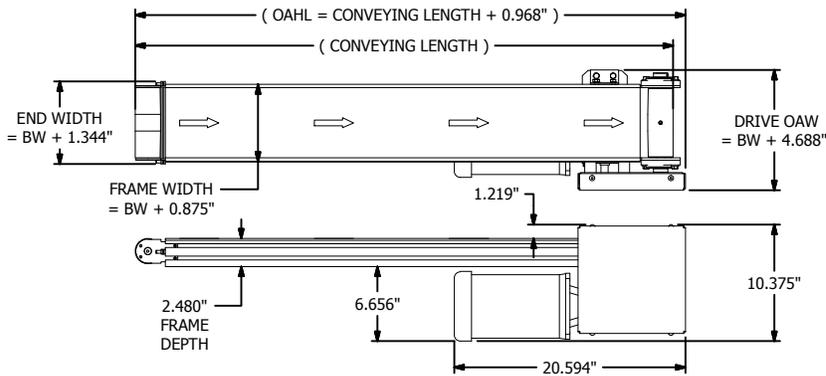
## Diebel Model D-2300 – Medium Duty Applications

### D-2300 Center Drive

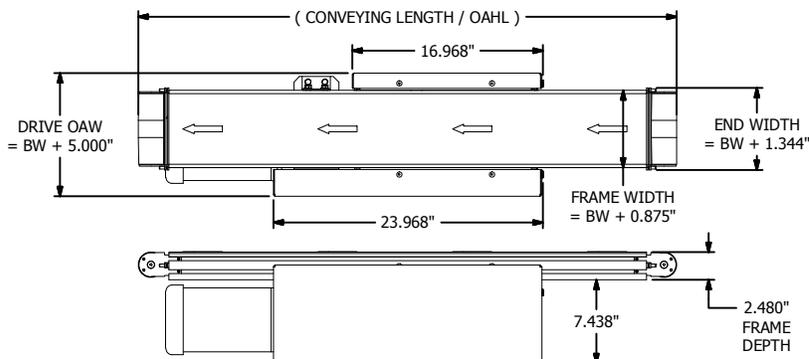


## Diebel Model D-3300 – Heavy Duty Applications

### D-3300 End Drive



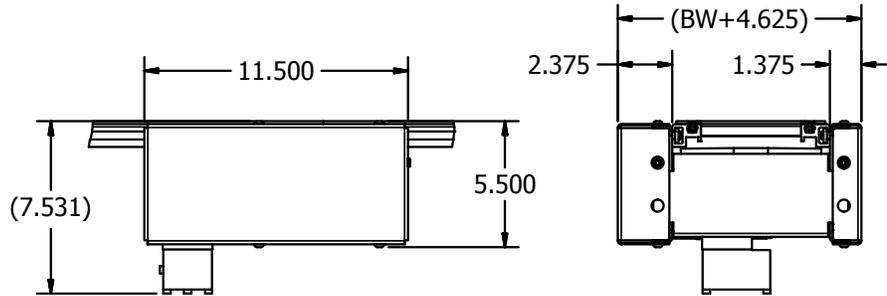
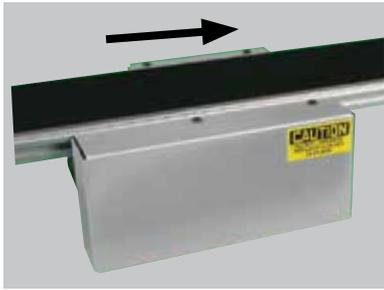
### D-3300 Center Drive



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 - DRAWINGS SHOW 'STANDARD' DRIVE OPTIONS WITH 'STANDARD' STYLE MOTORS. MOTOR DIMENSIONS CAN VARY.  
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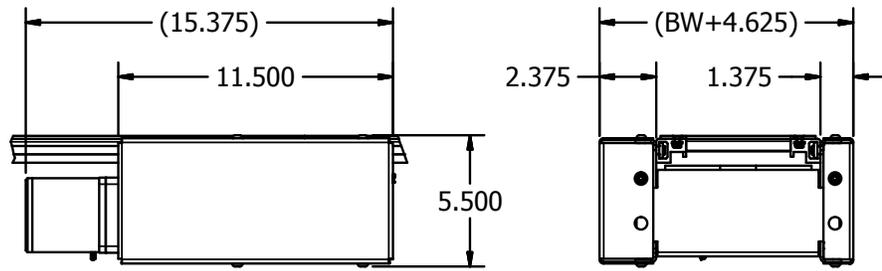
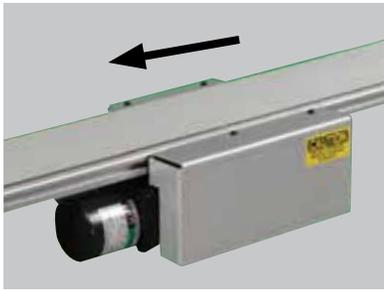


## Model D-1300 Drive Locations



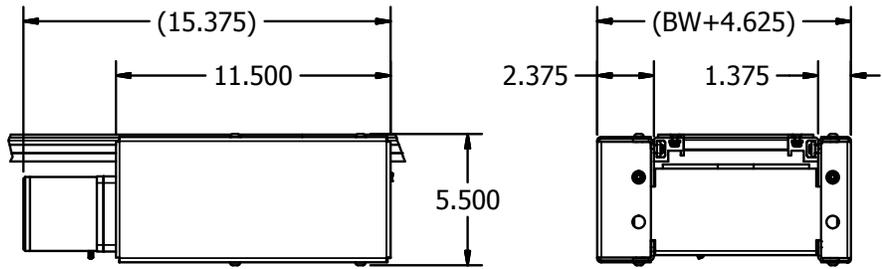
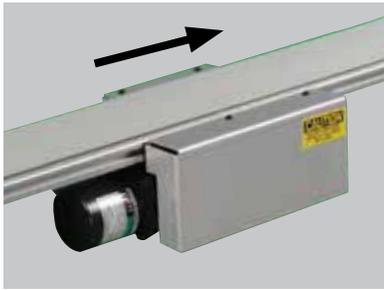
### DRIVE #2

Center Drive • Frame Mount • Inline • Under Belt



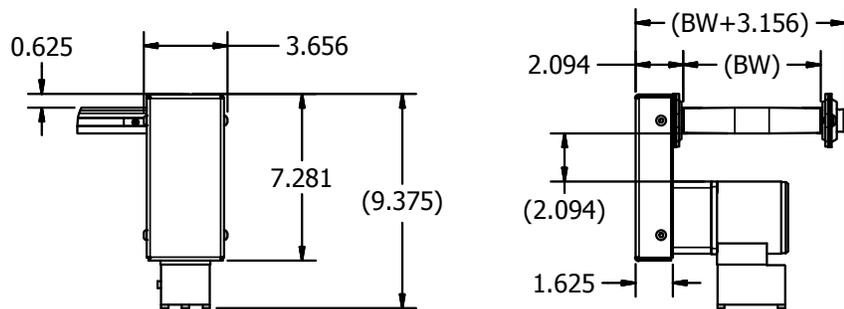
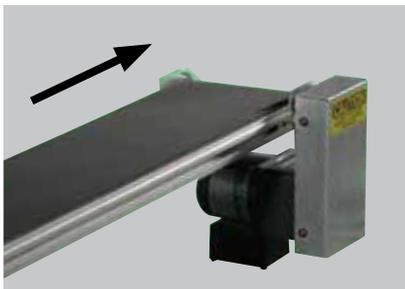
### DRIVE #3

Center Drive • Frame Mount • Right Angle • Discharge Facing



### DRIVE #4

Center Drive • Frame Mount • Right Angle • Infeed Facing



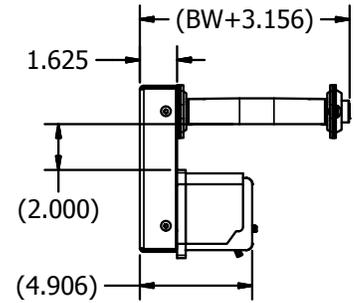
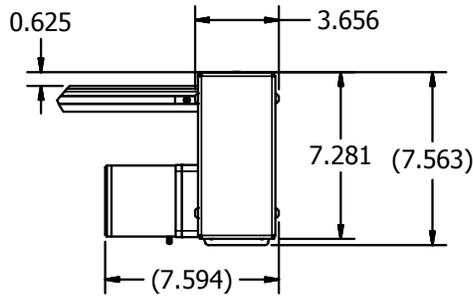
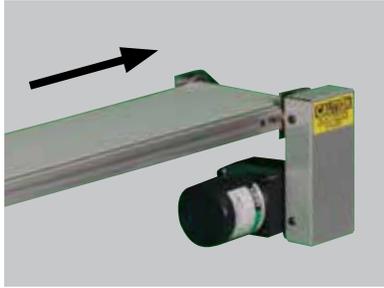
### DRIVE #7

End Drive • Bottom Mount • Inline • Under Belt

- NOTES: - DIMENSIONS ARE SHOWN IN INCHES AND ARE SUBJECT TO CHANGE.  
 - DRAWINGS SHOW 'STANDARD' DRIVE OPTIONS WITH 'STANDARD' STYLE MOTORS. MOTOR DIMENSIONS CAN VARY.  
 - ARROWS DEPICT PREFERRED BELT TRAVEL / PRODUCT FLOW.  
 - CENTER DRIVES CAN BE PLACED ANYWHERE ALONG THE LENGTH OF THE FRAME EXCEPT THE LAST 3-1/2" FROM EITHER END.

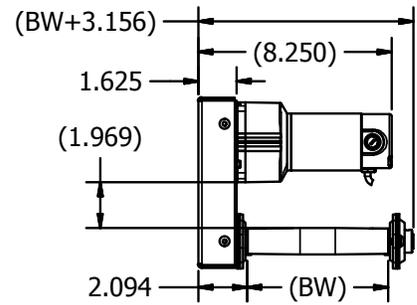
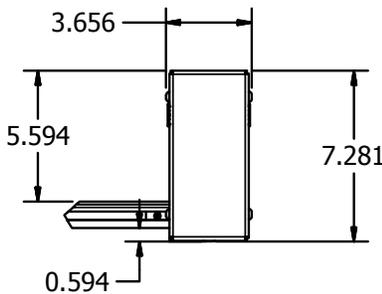
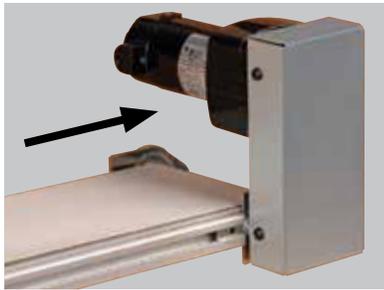


## Model D-1300 Drive Locations



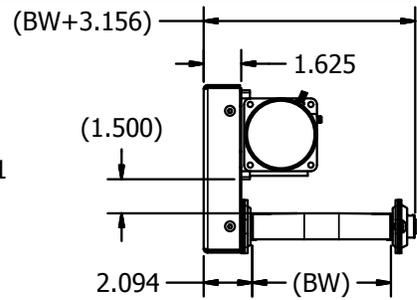
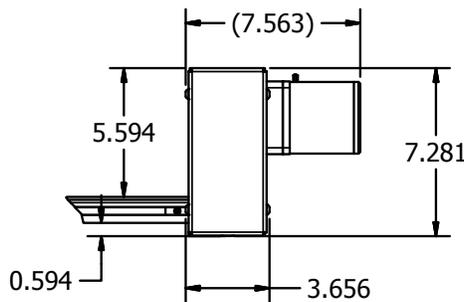
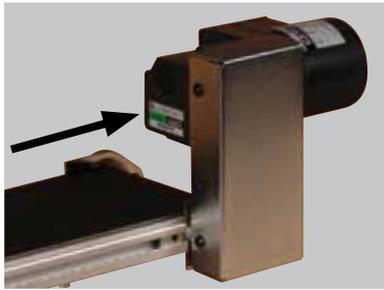
### DRIVE #8

End Drive • Bottom Mount • Right Angle • Infeed Facing



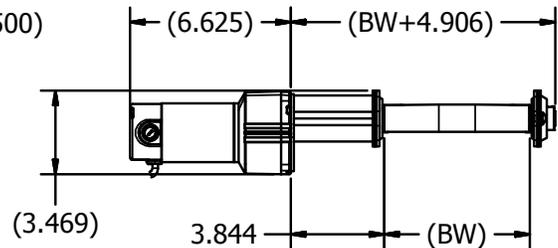
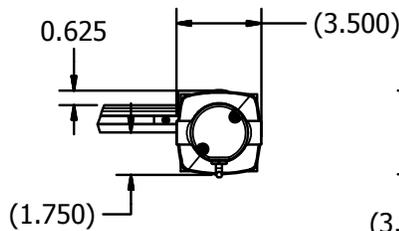
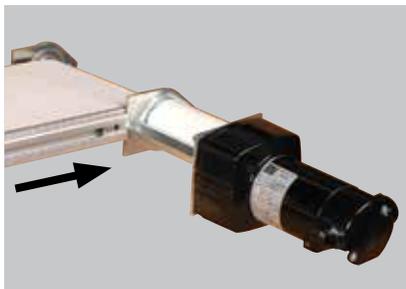
### DRIVE #9

End Drive • Top Mount • Inline • Over Belt



### DRIVE #12

End Drive • Top Mount • Right Angle • Discharge Facing



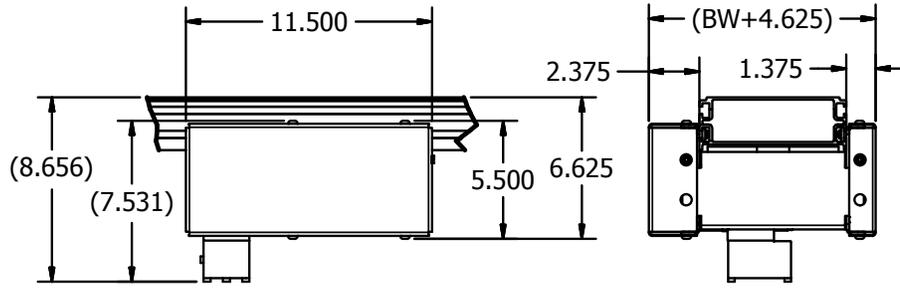
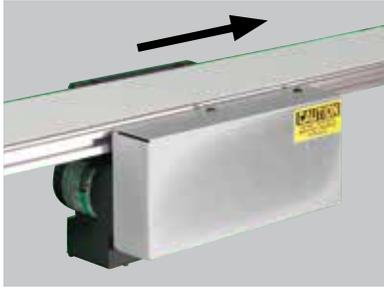
### DRIVE #13

End Drive • Shaft Mount • Inline

NOTES: - DIMENSIONS ARE SHOWN IN INCHES AND ARE SUBJECT TO CHANGE.  
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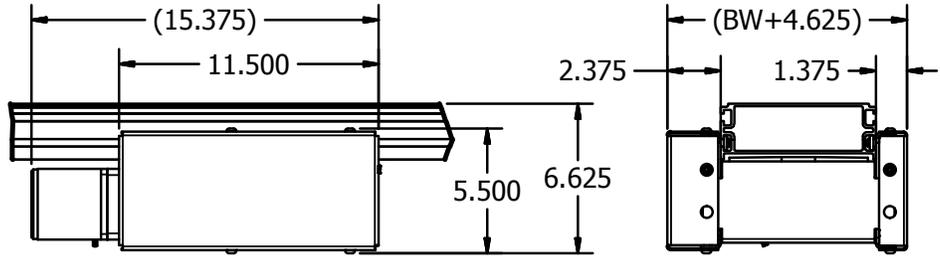
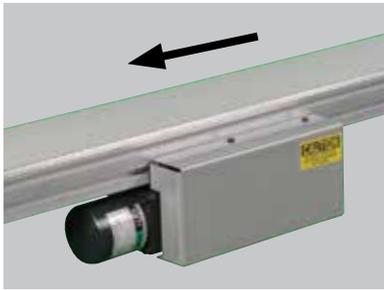


## Model D-2300 Drive Locations



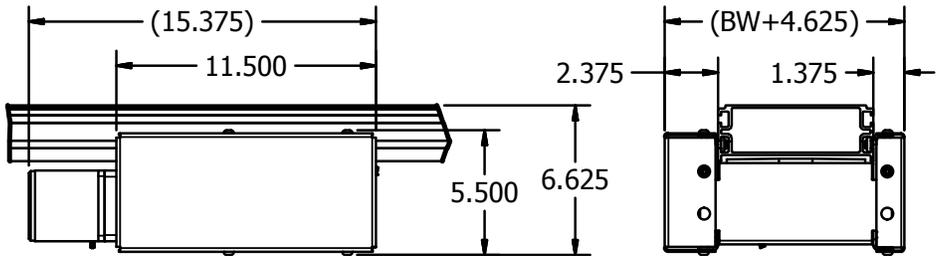
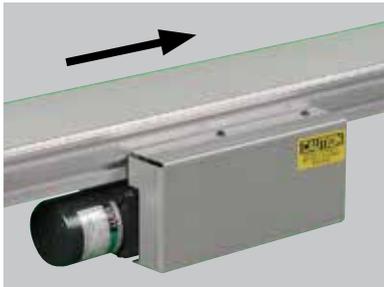
### DRIVE #2

Center Drive • Frame Mount • Inline • Under Belt



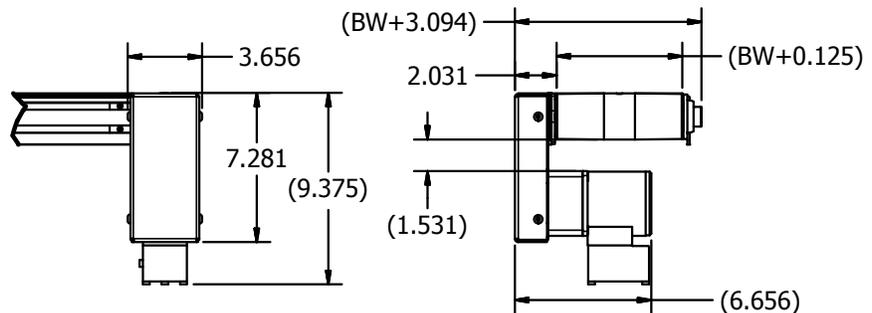
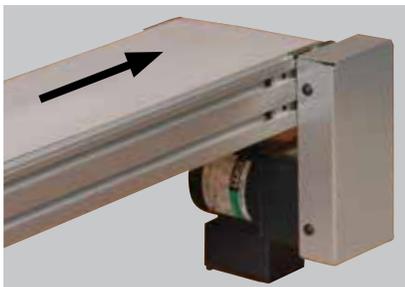
### DRIVE #3

Center Drive • Frame Mount • Right Angle • Discharge Facing



### DRIVE #4

Center Drive • Frame Mount • Right Angle • Infeed Facing



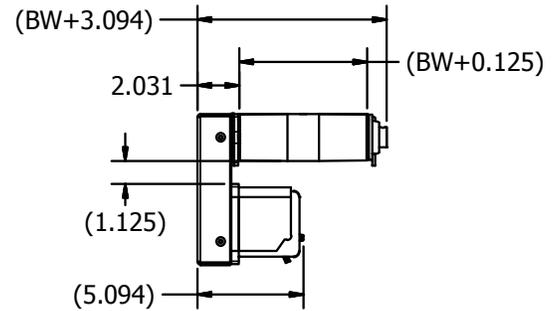
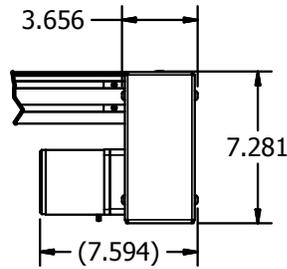
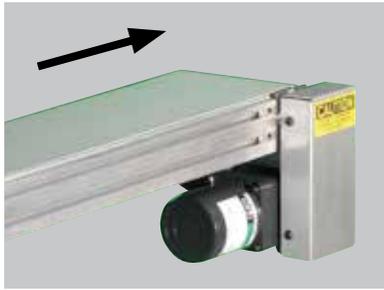
### DRIVE #7

End Drive • Bottom Mount • Inline • Under Belt

- NOTES: - DIMENSIONS ARE SHOWN IN INCHES AND ARE SUBJECT TO CHANGE.  
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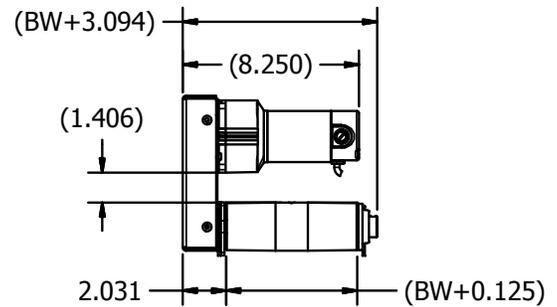
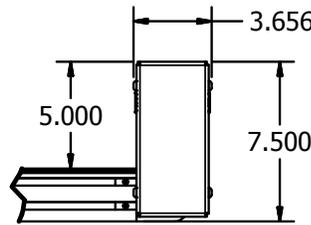
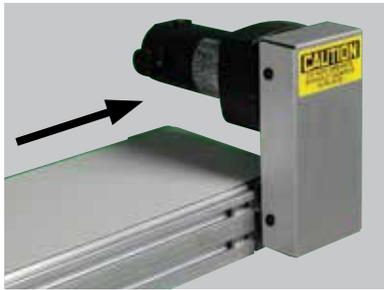


## Model D-2300 Drive Locations



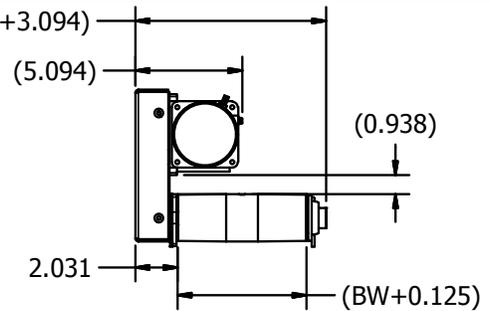
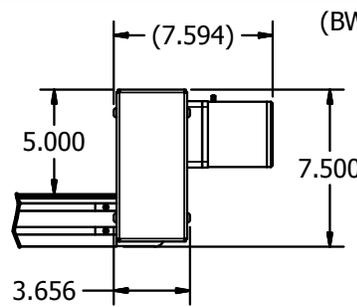
### DRIVE #8

End Drive Bottom Mount • Right Angle • Infeed Facing



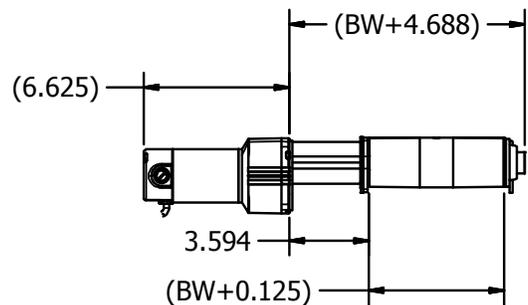
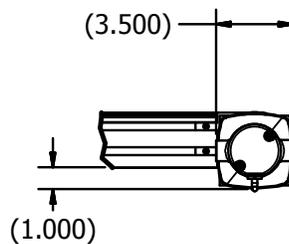
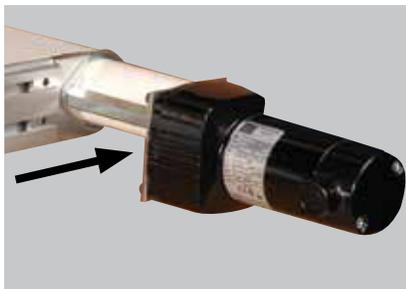
### DRIVE #9

End Drive • Top Mount • Inline • Over Belt



### DRIVE #12

End Drive • Top Mount • Right Angle • Discharge Facing



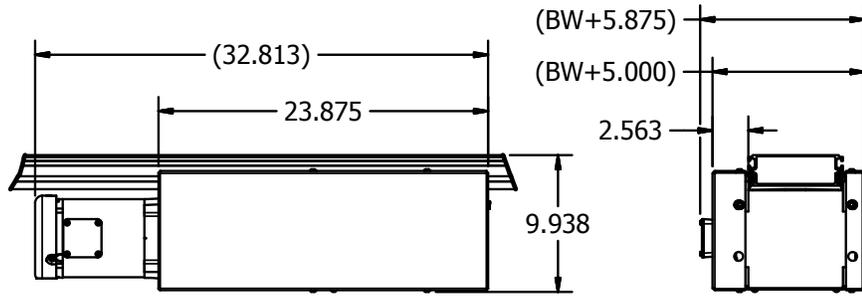
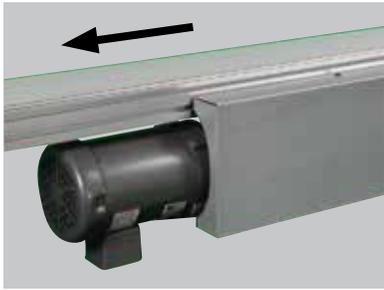
### DRIVE #13

End Drive • Shaft Mount • Inline

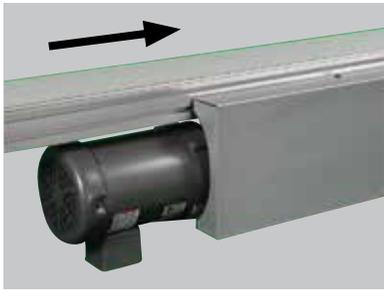
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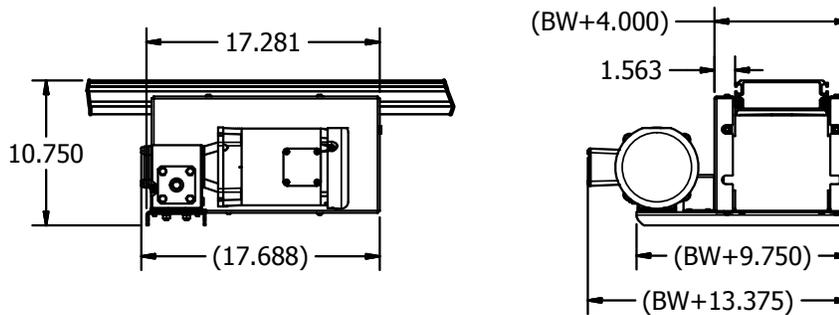
## Model D-3300 Drive Locations



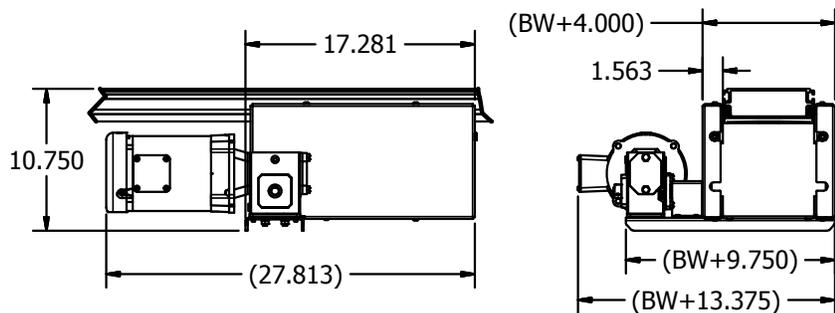
**DRIVE #19** Center Drive • Frame Mount • Right Angle • Discharge Facing



**DRIVE #20** Center Drive • Frame Mount • Right Angle • Infeed Facing



**DRIVE #21** Center Drive • Shaft Mount • Right Angle • Discharge Facing

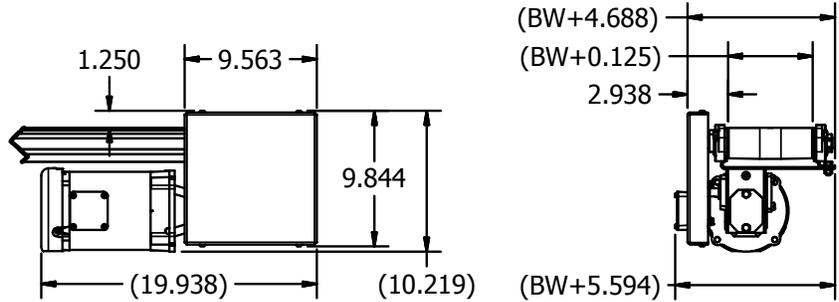
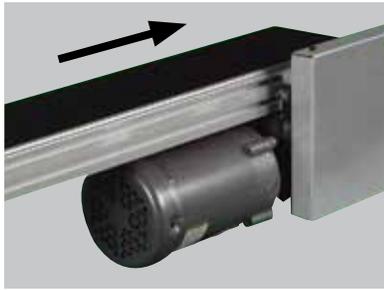


**DRIVE #22** Center Drive • Shaft Mount • Right Angle • Infeed Facing

NOTES: - DIMENSIONS ARE SHOWN IN INCHES AND ARE SUBJECT TO CHANGE.  
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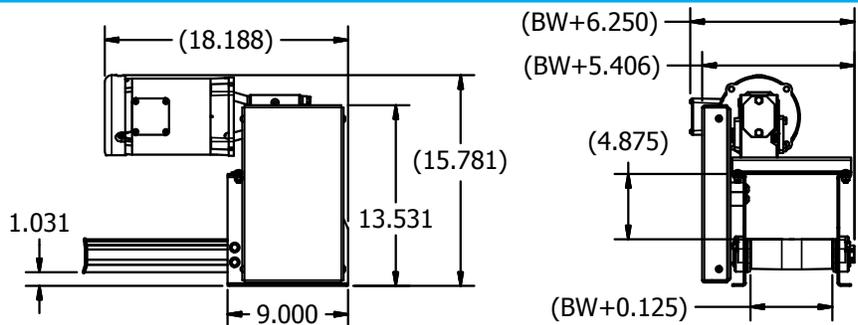
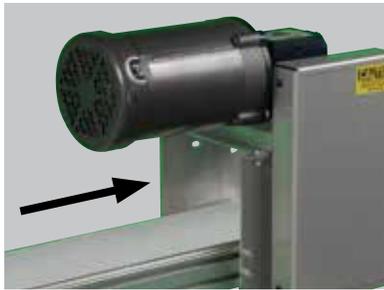


## Model D-3300 Drive Locations



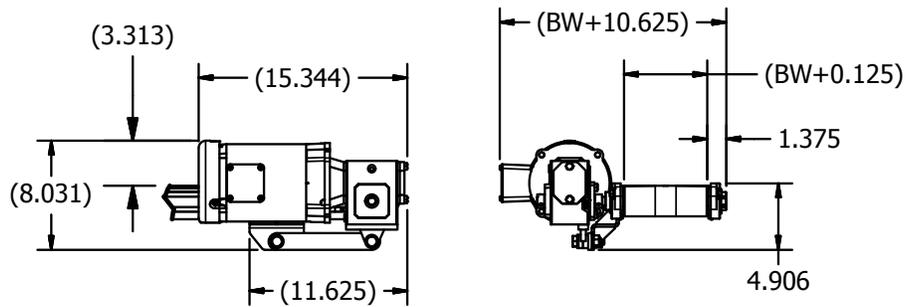
### DRIVE #23

End Drive • Bottom Mount • Right Angle • Infeed Facing



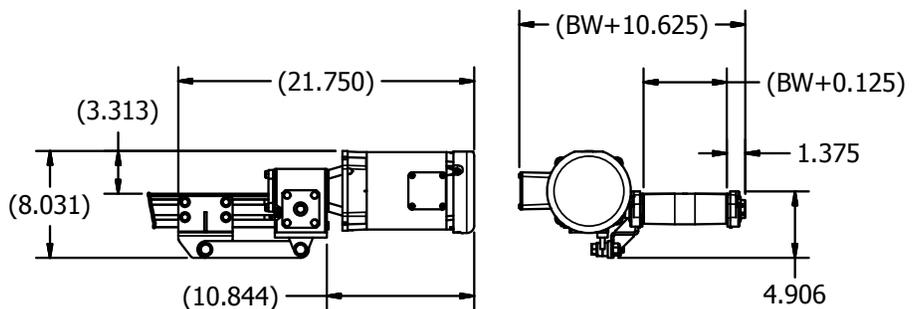
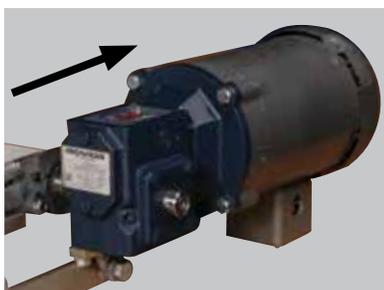
### DRIVE #24

End Drive • Top Mount • Right Angle • Infeed Facing



### DRIVE #27

End Drive • Shaft Mount • Right Angle • Infeed Facing



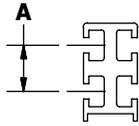
### DRIVE #28

End Drive • Shaft Mount • Right Angle • Discharge Facing

NOTES: - DIMENSIONS ARE SHOWN IN INCHES AND ARE SUBJECT TO CHANGE.  
 - DRAWINGS SHOW 'STANDARD' DRIVE OPTIONS WITH 'STANDARD' STYLE MOTORS. MOTOR DIMENSIONS CAN VARY.  
 - ARROWS DEPICT PREFERRED BELT TRAVEL / PRODUCT FLOW.  
 - CENTER DRIVES CAN BE PLACED ANYWHERE ALONG THE LENGTH OF THE FRAME EXCEPT THE LAST 3-1/2" FROM EITHER END.

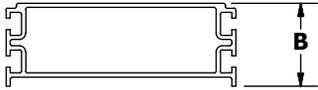


## Diebel Series Conveyor Frames



### 1" Extrusion

Used for D-2300 Series 1" Belt Width



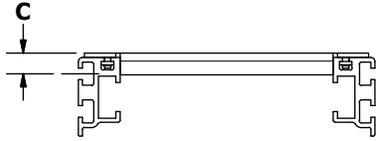
### Box Beam Extrusions (D-2300 & D-3300 Series)

Used for D-2300 & D-3300 Series Belt Widths  
2", 4", & 6"



### Low Profile (D-1300 Series Only)

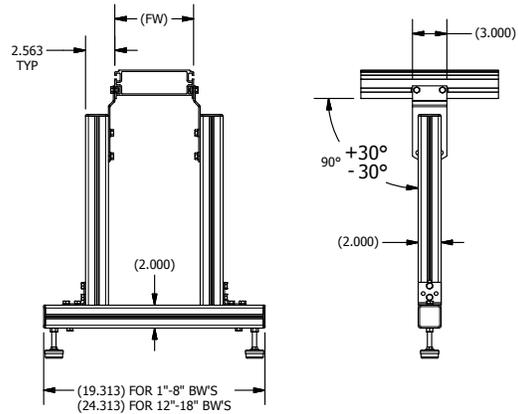
Used for D-1300 Series Belt Widths  
2", 4", 6", 8", 12", & 18"



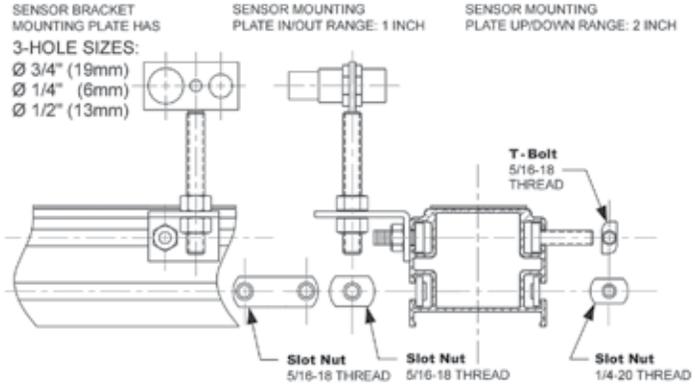
### Plate & Rail Frame (D-2300 & D-3300 Series)

Used for D-2300 & D-3300 Series Belt Widths  
8", 12", & 18"

## Diebel Series Standard Support Leg Configuration



## Sensor Brackets



Frame Dimensions by Type and Associated Belt Widths

| Frame Type         | Dimensions                   |                          |  | Overall Frame Width |       |       |       |       |        |        |
|--------------------|------------------------------|--------------------------|--|---------------------|-------|-------|-------|-------|--------|--------|
|                    | T-Slots Center-to-Center 'A' | Overall Frame Height 'B' | Center of Top T-Slot to Top-of-Frame 'C' | Diebel Belt Widths  |       |       |       |       |        |        |
|                    |                              |                          |  | 1"                  | 2"    | 4"    | 6"    | 8"    | 12"    | 18"    |
| 1" Extrusion       | 1.03"                        | 2.18"                    | 0.50"                                    | 1.20"               | N/A   | N/A   | N/A   | N/A   | N/A    | N/A    |
| Box Beam Extrusion | 1.25"                        | 2.48"                    | 0.62"                                    | N/A                 | 2.88" | 4.88" | 6.88" | N/A   | N/A    | N/A    |
| Low Profile        | N/A                          | 1.13"                    | 0.63"                                    | N/A                 | 2.88" | 4.88" | 6.88" | 8.88" | 12.88" | 18.88" |
| Plate & Rail       | 1.25"                        | 2.48"                    | 0.62"                                    | N/A                 | 2.88" | 4.88" | 6.88" | 8.88" | 12.88" | 18.88" |

## Diebel Series Side Fence & Guide Systems

Adjustable Rails (Light Duty)



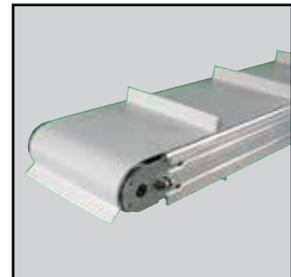
Adjustable Rails (Heavy Duty)



Fixed Rails (.5" to 3.5" high)

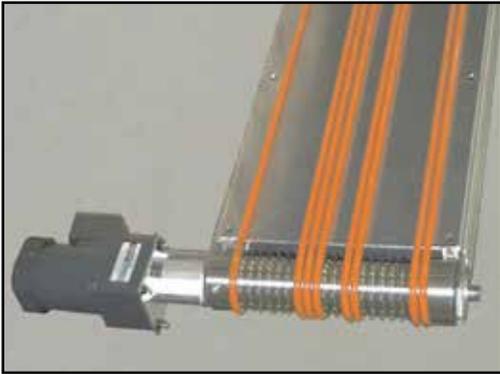


Cleats up to 1.5" high





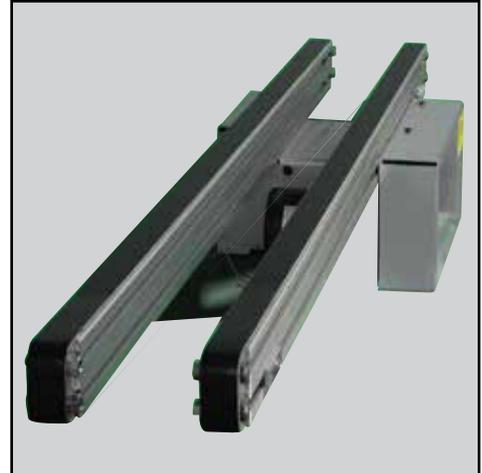
# The Diebel Series – Specialty Conveyors



O-Ring belting for uniquely shaped parts and specific contact point requirements.



Product reorienting – 90° bump and turn



Dual Belt Conveyor



Conveyors as short as 12”.



Side transfer from belt to belt.



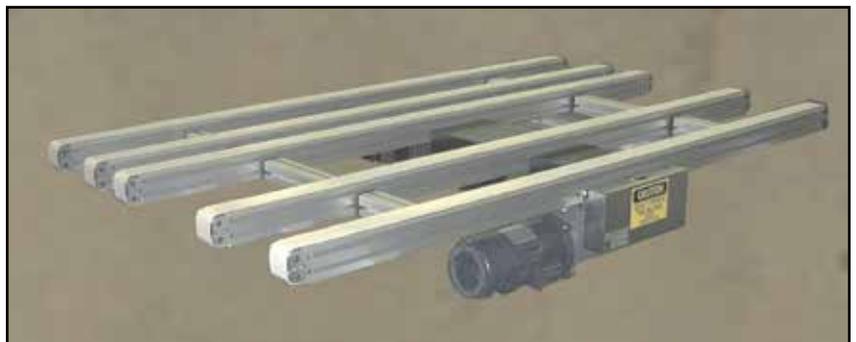
Tight Transfer Feeding – 90° Turn



Product reorienting – 180° flip leading edge maintained.



“Z” configuration conveyors with or without cleated belting.



Multiple belts with one drive for special parts handling.



# The Diebel Series

| GENERAL PURPOSE   | COMMON DIEBEL SERIES BELTS   |   |
|---|--|---|
|    | <p><b>*2 Ply 70 Blank PVC x IMPG (Spec #251)</b><br/>           This oil and cut resistant PVC cover is the ideal surface for general purpose conveying. The monofilament (multi-plyed-2 plies or more) style construction provides strength and flexibility. This belt runs smooth, flat and quiet because the bottom is impregnated (coated) with a filler material resulting in a soft and level, low noise surface.</p>  | <p><b>(Temp. Range 20°F to 180°F) (.093" Thick)</b></p> |
|    | <p><b>2 Ply Black Polyurethane x IMPG, Highly Conductive (ACS Type D Belt)</b><br/>           (ACS Type D belt – black) Used for conducting static charges from a product to the conveyor.</p>   | <p><b>(Temp. Range –22°F to 176°F) (.05" Thick)</b></p> |
| ACCUMULATION  |  |   |
|    | <p><b>2 Ply White Polyurethane, Anti-Static, Non-Adhesive (ACS Type A Belt)</b><br/>           Used with accumulators or diverters. Approved by FDA/USDA for food, chemical and pharmaceutical applications. Easy to clean. Anti-static. Finger-spliced endless belt.</p>  | <p><b>(Temp. Range 5°F to 176°F) (.05" Thick)</b></p>   |
|    | <p><b>2 Ply Gray Polyurethane x IMPG, Non-Adhesive (ACS Type XVT Belt)</b><br/>           Used with harse environments like cut metal or stampings. Good accumulation.</p>   | <p><b>(Temp. Range –4°F to 176°F) (.06" Thick)</b></p>  |
| ROUGH TOP   |  |   |
|    | <p><b>*2 Ply Black Longitudinal Ribbed Top x Bare Back (Spec #253X)</b><br/>           This belt is designed for high and steep incline applications. The longitudinal raised ribbed surface literally grips and holds the parts being conveyed. This belt will run smooth, flat and quiet due to the bare back low friction, low noise surface. This belt is especially suited for plastic totes. This s a good belt for steep inclines/declines.</p>   | <p><b>(Temp. Range 15°F to 175°F) (.09" Thick)</b></p>  |
|   | <p><b>*2 Ply Gray PVC Rough Top, Diamond Pattern (ACS Type C Belt – Gray)</b><br/>           Very adhesive. Used for steep inclines – textured with 1/16" inverted diamond pattern.</p>  | <p><b>(Temp. Range 23°F to 122°F) (.07" Thick)</b></p>  |
| URETHANE  |  |   |
|  | <p><b>*2 Ply Green Urethane x IMPG Back (Spec #249)</b><br/>           An economical yet high quality thin urethane belt with excellent cut and gouge resistance. This is an excellent choice for conveying sharp parts where an abundance of oil is present. This belt runs smooth, flat and quiet because the bottom is impregnated (coated) with a filler material resulting in a soft and level, low noise surface. This smooth top belt is also a good choice for light duty accumulating applications.</p> | <p><b>(Temp. Range 20°F to 180°F) (.050" Thick)</b></p> |
| WHITE BELTS   |  |   |
|  | <p><b>*2 Ply White PVC (Spec #224)</b><br/>           Anti-static, FDA and USDA accepted general food conveying belt. This low cost belt is ideal for general transporting any food product and in an all non-marking applications.</p>  | <p><b>(Temp. Range 20°F to 180°F) (.031" Thick)</b></p> |
|  | <p><b>1 Ply White Urethane x IMPG Bottom (Spec #222)</b><br/>           This belt has a smooth non-adhesive white urethane top cover. Excellent choice for cooling tunnels and applications requiring a high release surface. This belt runs smooth, flat and quiet because the bottom is impregnated (coated) with a filler material resulting in a soft and level, low noise surface.</p>  | <p><b>(Temp. Range 20°F to 180°F) (.031" Thick)</b></p> |
|  | <p><b>White PTFE Teflon Impregnated – Non-Adhesive (ACS HTT Belt)</b><br/>           Used for gluing and heat-sealing applications. Works well for high heat (480°F). Good release characteristics. Finger-spliced endless belt.</p>   | <p><b>(Temp. Range 4°F to 176°F) (.06" Thick)</b></p>   |
|  | <p><b>*2 Ply White Urethane x IMPG Bottom (Spec #223)</b><br/>           This belt's smooth non-adhesive white urethane top cover is ideal for applications where added strength and good release characteristics are required. It runs smooth, flat and quiet because the bottom is impregnated (coated) resulting in a soft and level, low noise surface. FDA and USDA accepted.</p>   | <p><b>(Temp. Range 20°F to 180°F) (.062" Thick)</b></p> |
|  | <p><b>*2 Ply White Polyurethane, Anti-Static, Slightly Adhesive (ACS Type B Belt – White)</b><br/>           Slightly adhesive used for slight inclines, FDA/USDA Approved Thermo)</p>   | <p><b>(Temp. Range –22°F to 176°F) (.05" Thick)</b></p> |



# The Diebel Series

## Speeds/Motors/Controllers/Options

| Standard Speed Ranges   |  |  |
|---|--|--|
| Model D-1300  | Model D-2300   | Model D-3300   |
| 2-100 FPM   | 5-100 FPM  | 10-100 FPM   |
| Standard Gear Motors  |  | Standard Motor   |
| 1/30 HP   | 1/17 HP  | 1/3, 1/2 HP  |
|  |  |   |
| <b>AC</b><br>200V (1 or 3 phase)<br>220V (1 or 3 phase)<br>230V (1 or 3 phase)    | <b>DC</b><br>110V (1 phase)<br>115V (1 phase)<br>230V (3 phase)                    | <b>AC &amp; DC</b><br>115/230V (1 phase)<br>230/460V (3 phase)<br>230/460V (3 phase) |

| Standard AC Controller  | Standard DC Controller  |   |
|---|---|---|
|  |  |  |

## Custom Designed Pre-wired Systems

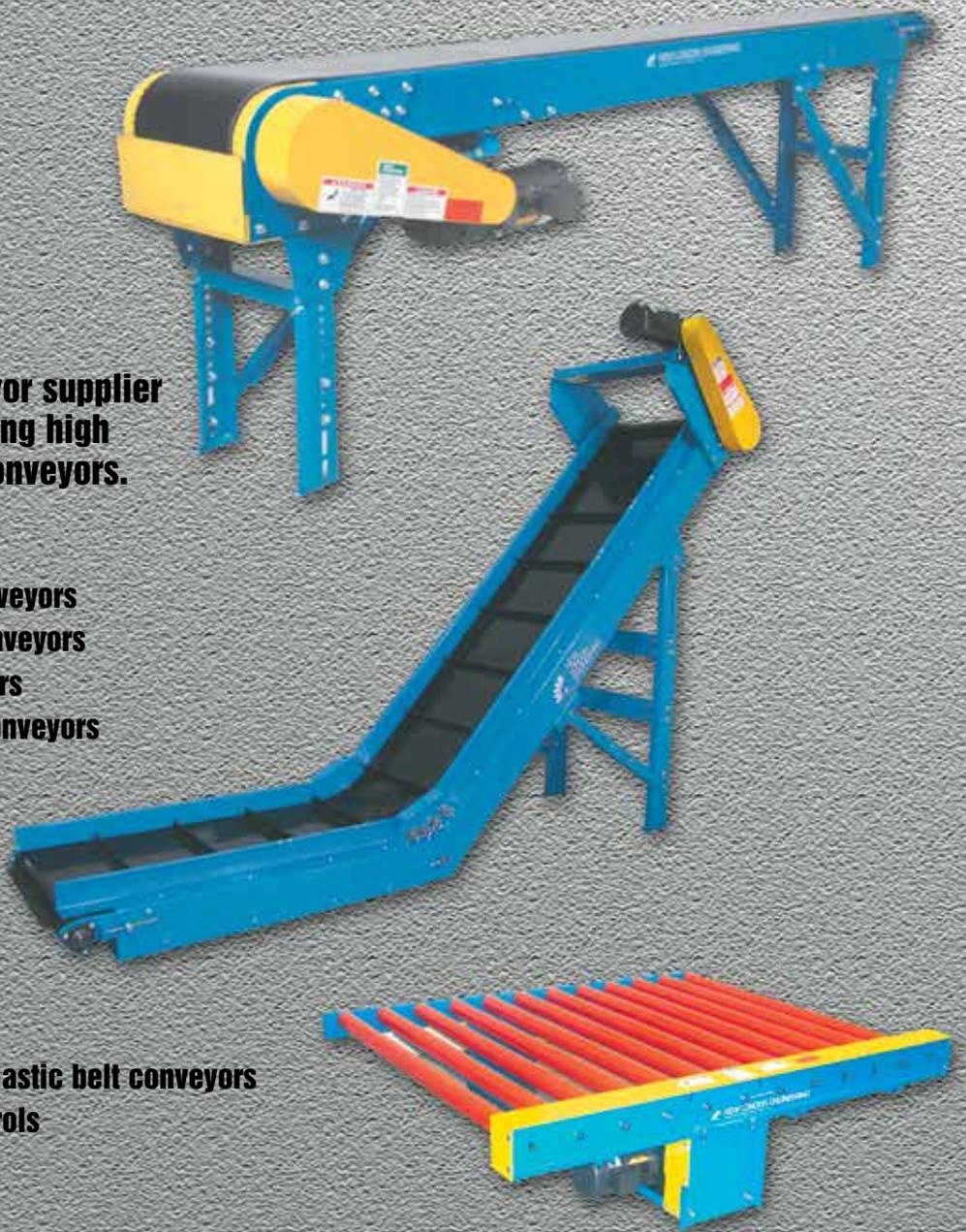
Whether your project includes packaging, material handling or automation, New London Engineering can custom design an electrical control panel for you. Simply tell us what you want the system to do and we will build the electrical system.



# CUSTOM AND STANDARD CONVEYORS

**We are a full line conveyor supplier specializing in engineering high quality, quick delivery conveyors.**

- Accumulation Conveyors
- Belt Driven Live Roller Conveyors
- Bulk Material Handling Conveyors
- Cleated Belt Parts Conveyors
- Chain Driven Live Roller Conveyors
- Chain Transfers
- Drag Conveyors
- Floor-to-Floor Conveyors
- Gravity Roller
- Magnetic Conveyors
- Pallet Dispensers
- Power Roller Conveyors
- PlastiTrak - A full line of plastic belt conveyors
- Quick Start Electrical Controls
- Slat Conveyors
- Slider Bed Conveyors
- Specialty Conveyors
- SteelTrak - Hinged Steel Belt Conveyors
- ToughTrak - Tough and durable thin line conveyors
- Turntables
- UpTime Express - 24 hour shipments
- V-Belt Conveyors
- Wire Mesh Conveyors



## REPLACEMENT PARTS

For easy part identification,  
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