



# **7350 SERIES CONVEYORS**

Stainless Steel Conveyors for Dry, Wipe Down and Wet Applications





#### Sleek, Low Profile Design - 7200 & 7300 Series\*

• Quick, five-minute belt change for increased uptime

Aqua Gara

- · Rack and pinion for fast, single point belt tensioning
- V-Groove frame with V-Guided belt ensures accurate tracking
- Streamlined design fits where other conveyors do not
- Low profile, single piece frame for quick, easy cleaning
- Quick-clamp rail for easy mounting of bolt-on accessories

#### **Rugged and Durable Design - 7350 Series**

- 304 Stainless Steel frame features open design with minimal horizontal surfaces
- Designed for wipe down and low pressure wash-down with non-caustic chemicals
- · V-guided belt tracking on belted models
- Tip-up tails for access inside the conveyor for cleaning and maintenance
- Safest chain in the industry with chain openings less than 4 mm even on curves
- Unique chain design virtually eliminates friction providing capacity for up to 4 curves on a single conveyor

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Positive Drive Belt

Innovative Chain Design

### **Engineered Solutions**

- Dorner's Engineered Solutions Group can tailor fit AquaGard Conveyors for specific applications and product handling requirements
- With a custom-designed conveyor system in place and the help of highly specialized engineering, your products are processed faster, your services are delivered quicker, and your profits are increased
- Solutions include: chicaning, retracting tails, depositing and rejects, merging, product flow, and more!



### The Benefits of Dorner AquaGard Conveyors

#### **Industry Ready**

- Designed and manufactured to food equipment standards
- · BISSC certified conveyors
- FDA approved materials and components
- · Washdown rated gearmotors and controls

#### A Focus on Speed

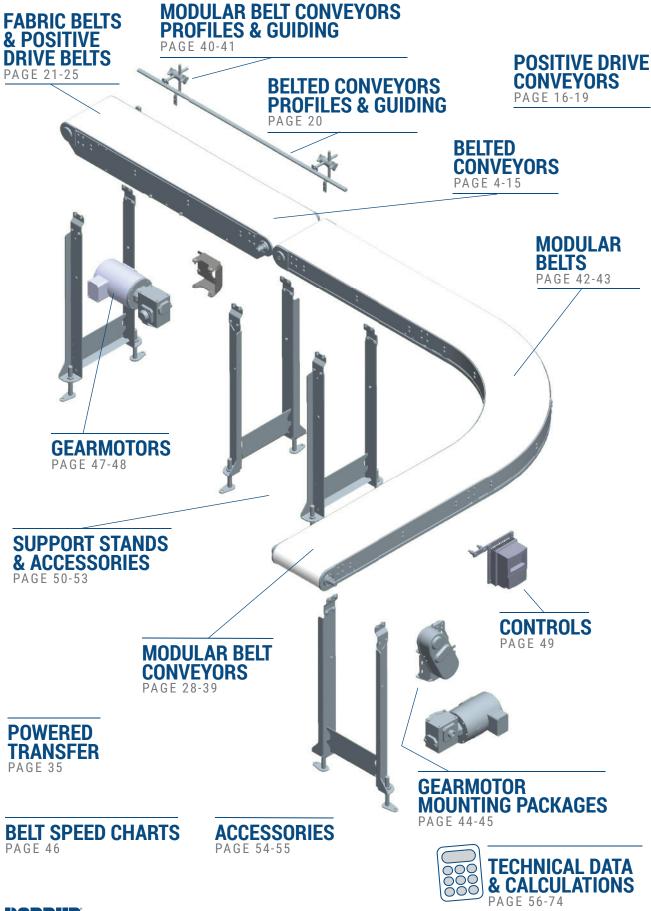
- Dorner sets the industry standard for rapid delivery
- · Sanitary conveyors ship in as little as 10 business days
- Fast and effective design reduces cleaning preparation time

\*Please refer to the AquaGard 7200 & 7300 Series manual for product information.



### **TABLE OF CONTENTS**







### **BELTED CONVEYOR FEATURES**







## **MINIMAL HORIZONTAL SURFACES** FOR EASY TO CLEAN SANITARY SURFACES **SIDE, BOTTOM & CENTER MOUNT MOTOR PACKAGES** FOR APPLICATION FLEXIBILITY **STAINLESS STEEL FLAT SIDES BED RAILS** ALLOW FOR SEGMENTED TO MINIMIZE FLEXIBILITY BELT "STICK-TION" IN WET WHEN MOUNTING **APPLICATIONS** ACCESSORIES, INTERFACING WITH OTHER EQUIPMENT OR TRANSFERRING PRODUCTS **ROBUST STAINLESS GUIDING** BOLT-ON TO 150 MM (6 INCH) TALL







#### **Specifications**

- Loads up to 227 kg (500 lbs) or 98 kg/sq m (20 lbs/sq ft)\*
- Belt speeds up to 91 m/min (300 ft/min)
- Belt widths: 152 mm (6 in) to 914 mm (36 in)
- Conveyor lengths: 915 mm (36 in) to 12190 mm (480 in)
- One revolution of drive pulley moves the belt approximately 280 mm (11 in)
- Bolt-together 304 Stainless Steel Frame
- · Hard chrome coated bearing with FDA H1 food grade grease
- · FDA approved belting and plastic components
- · Open design with minimal horizontal surfaces
- · Suitable for use in wet environments
- Stainless Steel construction for wipe down and low pressure washdown with non-caustic solutions
- V-guide belt tracking



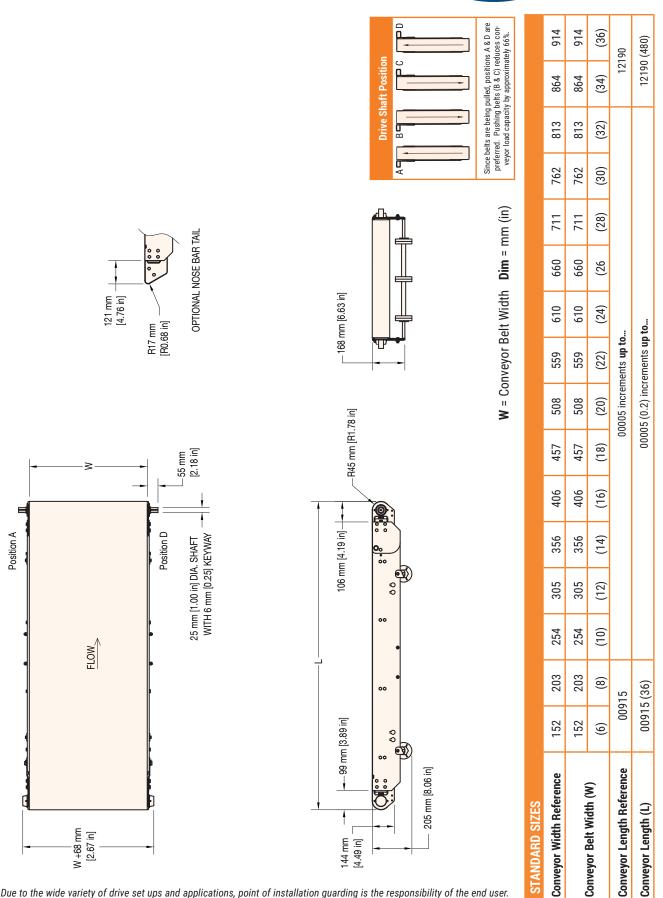
\* Conveyor load capacity depends on conveyor size, incline, motor position, accumulated loads and other factors. \*\* Note: Do not run the conveyor with the tail in the tip-up position.

> Order gearmotor mounting packages and gearmotors separately, see pages 44-48. For support stands and accessories, see page 50-55.



### **FLAT BELT END DRIVE**





Due to the wide variety of drive set ups and applications, point of installation guarding is the responsibility of the end user.







#### **Specifications**

- Loads up to 227 kg (500 lbs) or 98 kg/sq m (20 lbs/sq ft)\*
- Belt speeds up to 91 m/min (300 ft/min)
- Belt widths: 152 mm (6 in) to 914 mm (36 in)
- Conveyor lengths: 1525 mm (60 in) to 25,000 mm (82 ft)
- · Manual or Pneumatic center drive options
- · Bolt-together 304 Stainless Steel Frame
- Hard chrome coated bearing with FDA H1 food grade grease
- FDA approved belting and plastic components
- · Open design with minimal horizontal surfaces
- · Suitable for use in wet environments
- · Stainless Steel construction for wipe down and low pressure washdown with non-caustic solutions

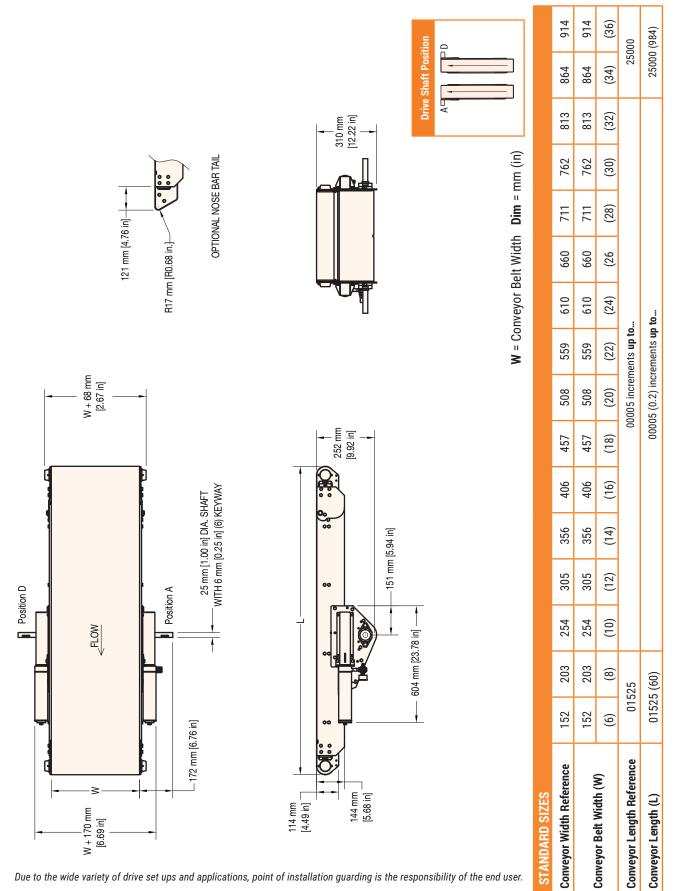


\*\* Note: Do not run the conveyor with the tail in the tip-up position.

Order gearmotor mounting packages and gearmotors separately, see pages 44-48. For support stands and accessories, see page 50-55.







Due to the wide variety of drive set ups and applications, point of installation guarding is the responsibility of the end user.









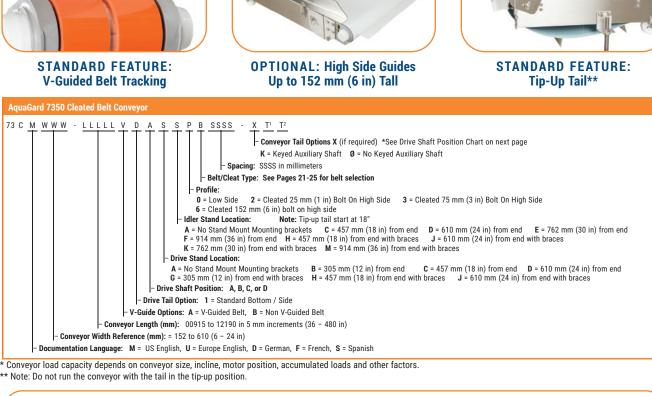
OPTIONAL: Sidewall Cleated Belts for Small Parts





**Specifications** 

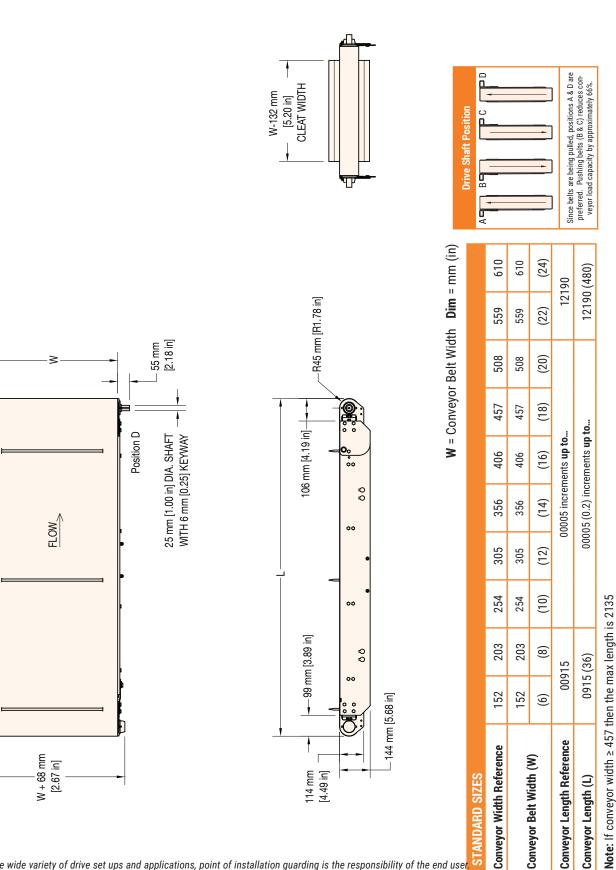
- Loads up to 227 kg (500 lbs) or 98 kg/sq m (20 lbs/sq ft)\*
- Belt speeds up to 91 m/min (300 ft/min)
- Belt widths: 152 mm (6 in) to 610 mm (24 in)
- Conveyor lengths: 915 mm (36 in) to 12190 mm (480 in)
- Cleat heights from 11 mm (0.43 in) to 60 mm (2.63 in)
- · Bolt-together 304 Stainless Steel Frame
- Hard chrome coated bearing with FDA H1 food grade grease
- · FDA approved belting and plastic components
- Cleated belt options include sealed edge, encased and sidewall cleating
- Open design with minimal horizontal surfaces
- · Suitable for use in wet environments
- Stainless Steel construction for wipe down and low pressure washdown with non-caustic solutions



Order gearmotor mounting packages and gearmotors separately, see pages 44-48. For support stands and accessories, see page 50-55.







Due to the wide variety of drive set ups and applications, point of installation guarding is the responsibility of the end user

DORNER

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Position A

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### LPZ (Z-FRAME) FLAT BELT END DRIVE







#### OPTIONAL: Center Drive Module



**STANDARD FEATURE:** 

V-Guided Belt Tracking



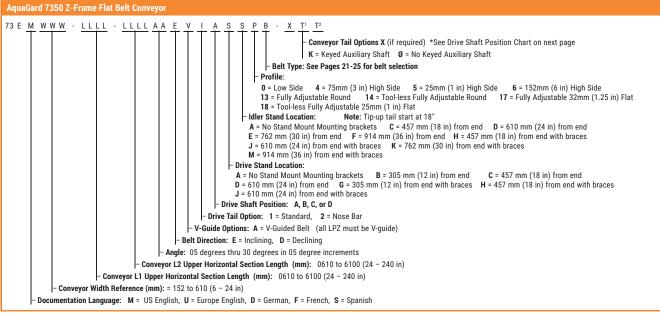
#### OPTIONAL: 32 mm (1.25 in) Nose Bar Tail

#### Specifications

- Loads up to 227 kg (500 lbs) or 98 kg/sq m (20 lbs/sq ft)\*
- Belt speeds up to 91 m/min (300 ft/min)
- Belt widths: 152 mm (6 in) to 610 mm (24 in)
- Conveyor section lengths: 610 mm (24 in) to 6100 mm (240 in)
- Maximum total conveyor length of 12190 mm (480 in)
- Angles from 5 degrees to 30 degrees in 5 degree increments
- · Bolt-together 304 Stainless Steel Frame
- Hard chrome coated bearing with FDA H1 food grade grease
- FDA approved belting and plastic components
- V-guided belt for optimum performance
- · Suitable for use in wet environments
- Stainless Steel construction for wipe down and low pressure washdown with non-caustic solutions



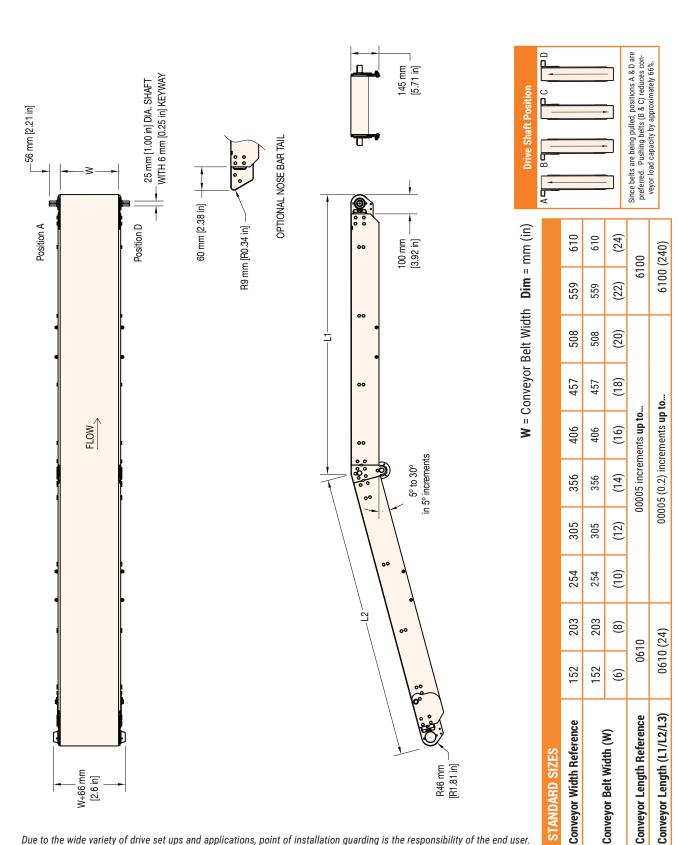
STANDARD FEATURE: Tip-Up Tail\*\*



\* Conveyor load capacity depends on conveyor size, incline, motor position, accumulated loads and other factors.
\*\* Note: Do not run the conveyor with the tail in the tip-up position.

Order gearmotor mounting packages and gearmotors separately, see pages 44-48. For support stands and accessories, see page 50-55.





Due to the wide variety of drive set ups and applications, point of installation guarding is the responsibility of the end user.

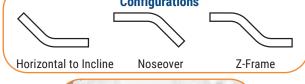




LPZ (Z-FRAME) CLEATED BELT END DRIVE

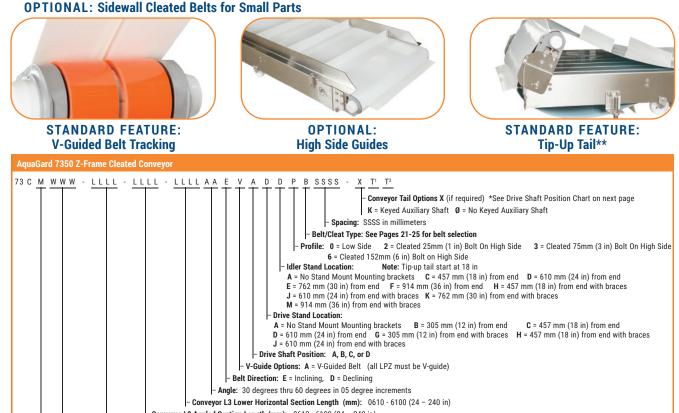


Aqua Gara



#### **Specifications**

- Loads up to 45 kg (100 lbs) or 98 kg/sq m (20 lbs/sq ft)\*
- Belt speeds up to 91 m/min (300 ft/min)
- Belt widths: 152 mm (6 in) to 610 mm (24 in)
- Conveyor section lengths: 610 mm (24 in) to 6100 mm (240 in)
- Maximum total conveyor length of 12190 mm (480 in)
- Angles from 30 degrees to 60 degrees in 5 degree increments
- Cleat heights from 11 mm (0.43 in) to 60 mm (2.63 in)
- · Bolt-together 304 Stainless Steel Frame
- Hard chrome coated bearing with FDA H1 food grade grease
- · FDA approved belting and plastic components
- Cleated belt options include sealed edge, encased and sidewall cleating
- Open design with minimal horizontal surfaces
- · Suitable for use in wet environments
- Stainless Steel construction for wipe down and low pressure washdown with non-caustic solutions



- Conveyor L2 Angled Section Length (mm): 0610 - 6100 (24 - 240 in) - Conveyor L1 Upper Horizontal Section Length (mm): 0610 - 6100 (24 - 240 in)

- Conveyor Width Reference (mm): = 152 to 610 (6 - 24 in)

– Documentation Language: M = US English, U = Europe English, D = German, F = French, S = Spanish

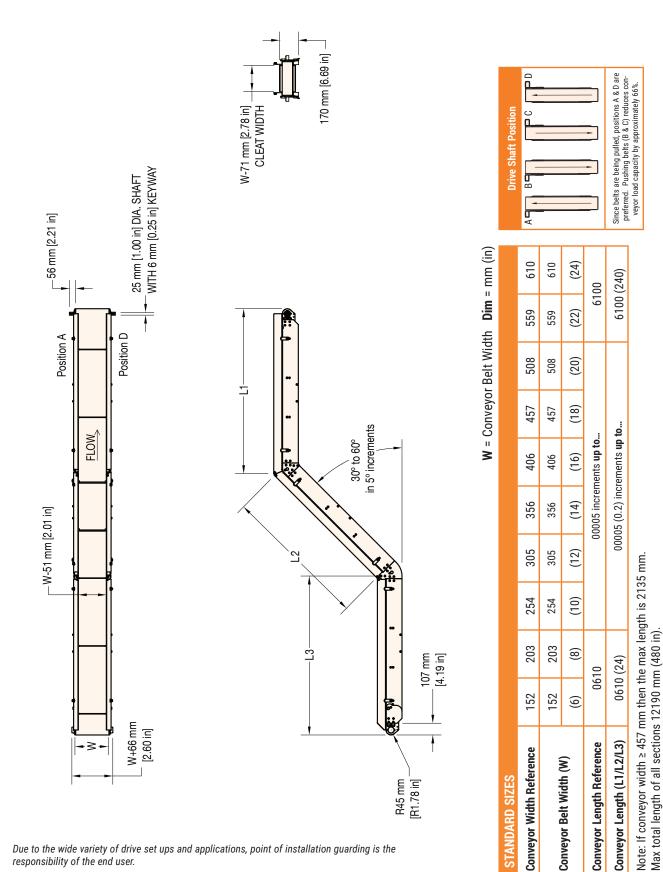
\* Conveyor load capacity depends on conveyor size, incline, motor position, accumulated loads and other factors.

\*\* Note: Do not run the conveyor with the tail in the tip-up position.

Order gearmotor mounting packages and gearmotors separately, see pages 44-48. For support stands and accessories, see page 50-55.







Due to the wide variety of drive set ups and applications, point of installation guarding is the responsibility of the end user.





FDA APPROVED MATERIALS

IN BELTING AND PLASTIC COMPONENTS

#### UHMW WEAR STRIP BED PLATE

ABRASION RESISTANT MATERIALS SUPPORT BELT. TOOL-LESS REMOVAL FOR EASE OF CLEANING

### USDA ACCEPTED BELTING

SOLID URETHANE WON'T ABSORB WATER



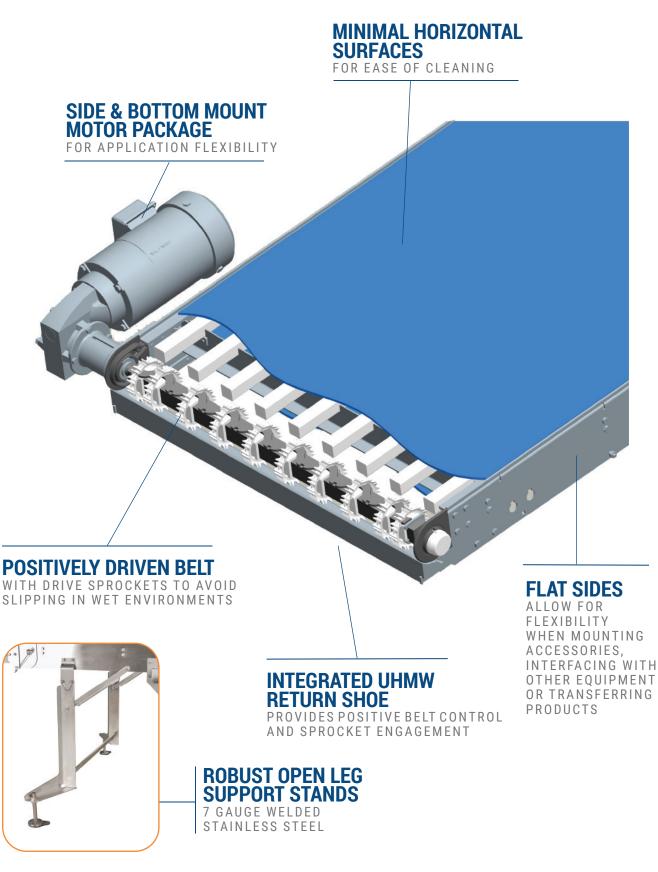
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TIP-UP TAILS\* FOR ACCESS INSIDE CONVEYOR FOR CLEANING AND MAINTENANCE

\*Note: Do not run the conveyor with the tail in the tip-up position.







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### **POSITIVE DRIVE BELT END DRIVE**



#### **Specifications**

- Loads up to 227 kg (500 lbs) or 98 kg/sq m (20 lbs/sq ft)\*
- Belt speeds up to 71 m/min (233 ft/min)
- Belt widths: 152 mm (6 in) to 914 mm (36 in)
- Conveyor lengths: 915 mm (36 in) to 25,000 mm (82 ft)
- Positive driven belt provides greater load capacity and less slip
- · Bolt-together 304 Stainless Steel Frame
- Hard chrome coated bearing with FDA H1 food grade grease
- USDA smooth top positive drive belt (Available in blue or white)
- Open design with minimal horizontal surfaces
- · Suitable for use in wet environments
- Stainless Steel construction for wipe down and low pressure washdown with non-caustic solutions



STANDARD FEATURE: Positively driven drive sprockets and belt to avoid belt slipping



STANDARD FEATURE: Integrated UHMW Return Shoe provides positive belt control and sprocket engagement



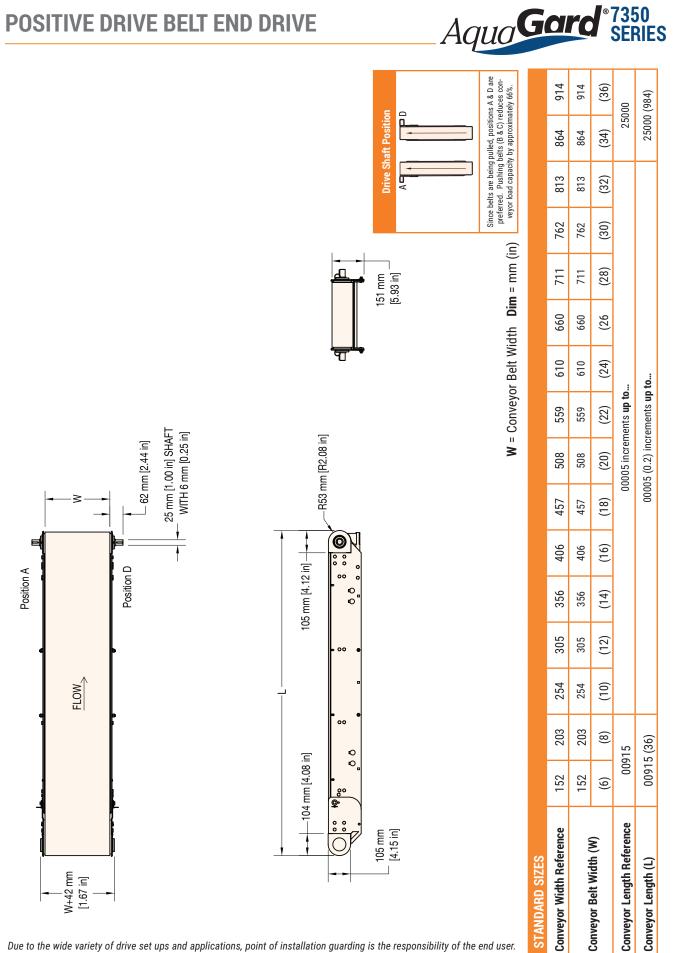
AquaGard 7350 Belted Positive Drive Conveyor 73 P M W W W - LLLL<u>L</u>D<u>A</u> S S ΡP ΒB X T<sup>1</sup> T<sup>2</sup> Convevor Tail Options X (if required) K = Keyed Shaft Ø = No Keyed Auxiliary Shaft - Belt Type: 1 = Smooth Top, 2 = Smooth Top Blue See Page 25 for details Profile (D side) Profile (A side) 04 = 75 mm (3 in) High Side 05 = 25 mm (1 in) High Side 06 = 152 mm (6 in) High Side 01 = Low Side 
 13 = Fully Adjustable Round
 14 = Tool-less Fully Adjustable Round
 17 = Fully Adjustable 32 mm (1.25 in) Flat

 18 = Tool-less Fully Adjustable 25 mm (1 in) Flat
 Note: Tip-up tail start at 18" Idler Stand Location: A = No Stand Mount Mounting brackets C = 457 mm (18 in) from end D = 610 mm (24 in) from end E = 762 mm (30 in) from end  $\mathbf{F}$  = 914 mm (36 in) from end  $\mathbf{H}$  = 457 mm (18 in) from end with braces J = 610 mm (24 in) from end with braces K = 762 mm (30 in) from end with braces M = 914 mm (36 in) from end with braces Drive Stand Location: A = No Stand Mount Mounting brackets B = 305 mm (12 in) from end **C** = 457 mm (18 in) from end **D** = 610 mm (24 in) from end G = 305 mm (12 in) from end with braces H = 457 mm (18 in) from end with braces J = 610 mm (24 in) from end with braces Drive Shaft Position: A or D Drive Tail Type: 1 = Standard Bottom/Side Conveyor Length (mm): 00915 to 25000 in 5 mm increments (36 - 984 in) Convevor Width Reference (mm): = 152 to 914 (6 - 36 in) Documentation Language: M = US English, U = Europe English, D = German, F = French, S = Spanish

\* Conveyor load capacity depends on conveyor size, incline, motor position, accumulated loads and other factors. \*\* Note: Do not run the conveyor with the tail in the tip-up position.

> Order gearmotor mounting packages and gearmotors separately, see pages 44-48. For support stands and accessories, see page 50-55.





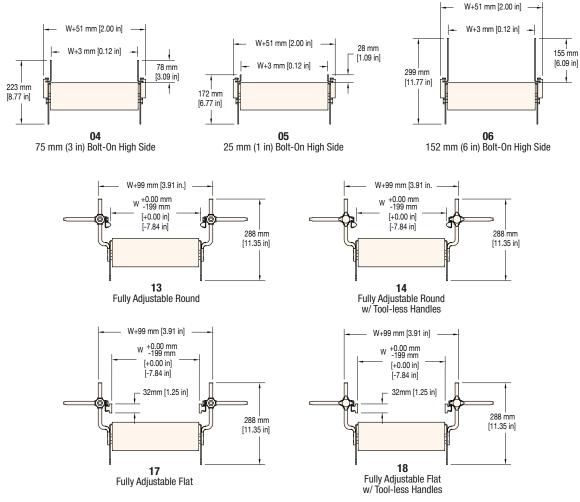
Due to the wide variety of drive set ups and applications, point of installation guarding is the responsibility of the end user.

DORNER

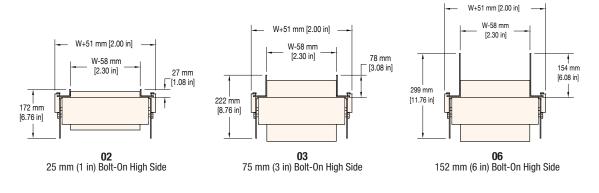




### **FLAT BELT PROFILES**



### **CLEATED BELT PROFILES**



W = Conveyor Belt Width Dim = mm (in)

Due to the wide variety of drive set ups and applications, point of installation guarding is the responsibility of the end user.

### **STANDARD BELTING**







S	Standard Belt Selection Guide							Standard belt material is stocked at Dorner, then cut & spliced at the factory for fast conveyor shipment.							
Belt Type - Finger Splice	Belt Type - Plastic Clipper	Belt Type - Metal Clipper	Belt Specifications	V-Guidable	Belt Thickness	Surface Material	Maximum Part Temp. °C (°F)	<b>Coefficient of Friction</b>	FDA Approved	Anti-Static	ESD	Chemical Resistance	Special Characteristics or Applications		
01	A1	1A	FDA Accumulation	х	1.7 (0.067)	Urethane	100 (212)	Low	х	х		Good	Packaging, clean room and inspection		
02	A2	2A	General Purpose	х	1.8 (0.071)	Urethane	100 (212)	Med	х	х		Good	Most versatile belt offering		
03	A3	3A	FDA High Friction	х	1.7 (0.067)	Urethane	100 (212)	High	х	х		Good	Packaging, clean room and inspection		
05	A5	5A	Accumulation	х	1.2 (0.047)	Urethane	100 (212)	V-Low	х	х		Good	Accumulation of products		
06	A6	6A	Static Dissipative	х	1.6 (0.063)	Urethane	80 (176)	V-Low		х	х	Good	Electronics handling		
08	<b>A8</b>	8A	High Friction	х	2.1 (0.083)	PVC	70 (158)	V-High		х		Poor	Conveys up to 35° inclines*		
09			FDA High Friction	х	1.5 (0.059)	Urethane	100 (212)	High	х			Good	Lower no load torque		

Dim = mm (in)

Note: See below for splice details. Plastic Clipper splice requires longer lead times. Clipper splice not available on Z-Frame Series Conveyors.

Note: Belts with V-Guiding may have a slight high spot or rib on the top surface. This rib would run longitudinally along the center of the belt.

Consult factory with applications for which this may cause interference.

\*Incline varies due to factors like dust, fluids and part material.

#### Note: Wet applications are limited to specialty belt types 54, 55, 69 and 70 only (see next page).

#### **BELT SPLICING**



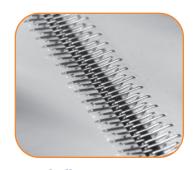
**Finger Splice** 

All belts are available with a standard Thermoformed finger splice. This splice makes the belt continuous and is virtually undetectable. Splice bonding methods vary by belt type. Consult factory for details.



Plastic Clipper\*\*

An optional plastic clipper splice is available for quick removal of belts or when conveyors are installed in tight spaces.



Metal Clipper\*\* An optional metal clipper splice is also available for quick removal of belts or when conveyors are installed in tight spaces.

\*\* Plastic and Metal Clippers are slightly thicker than base belt. Contact factory for details.







**Solid Urethane belt for added sanitary protection –** See belt type 70 below

High Release Cover belt for handling sticky food such as raw dough – See belt type 71 below

#### Note: Wet applications are limited to specialty belt types 54, 55, 69 and 70 only.

Sp	<b>Specialty Belt Selection Guide</b> <i>Specialty belt material is not stocked at Dorner and needs to be custom ordered for your special conveyor needs.</i>										
Belt Type - Finger Splice	Belt Type - Plastic Clipper	Belt Type - Metal Clipper**	Belt Specifications	Belt Thickness	Surface Material	Maximum Part Temp. °C (°F)	Coefficient of Friction	FDA Approved	Chemical Resistance	Moisture Resistance	Special Characteristics or Applications
54	F4	4F	FDA Sealed Edge	1.5 (0.06)	Urethane	80 (176)	Low	x	Good	Good	Packaging, clean room & inspection, wet environment
55	F5	5F	FDA Sealed Edge	1.5 (0.06)	Urethane	80 (176)	High	x	Good	Good	Packaging, clean room & inspection, wet environment
56		6F	Cut Resistant	2.1 (0.08)	Urethane	100 (212)	Med.		Good	Poor	Oily product release, Metal stamping
57		7F	Cut Resistant	2.5 (0.10)	Nitrile	80 (176)	Med.		Poor	Poor	Felt-like, dry metal stamping, glass & ceramic
59	F9	9F	Color Contrasting	1.5 (0.06)	PVC	70 (158)	Med.		Poor	Poor	Black colored, hides overspray from ink jet
60	GO	0G	Color Contrasting	1.2 (0.05)	Urethane	100 (212)	Low	х	Good	Poor	Green colored, Nose Bar
61	G1	1G	Color Contrasting	1.2 (0.05)	Urethane	100 (212)	Low	х	Good	Poor	Blue colored, Nose Bar
63		3G	Electrically Conductive	1.2 (0.05)	Urethane	60 (140)	Low		Good	Poor	Static conductive, electronics handling
64		4G	High Friction	4.4 (0.17)	PVC	90 (194)	V-High		Poor	Poor	Dark Green colored, rough top surface, product cushioning, incline / decline apps
66		6G	Chemical Resistant	1.7 (0.07)	Polyester	100 (212)	Med.	x	V-Good	Poor	Good Cut resistance, metal stamping apps
67		7G	Low Friction Cleated	1.6 (0.06)	Polyester	100 (212)	n/a	x	Good	Poor	Excellent product release, consult factory for part number and how to specify low friction
68	G8		FDA Encased*	2.0 (0.08)	Urethane	100 (212)	Low	х	Good	V-Good	Urethane Enclosed for added sanitary protection
69	G9		FDA Encased*	2.0 (0.08)	Urethane	100 (212)	High	x	Good	V-Good	Urethane Enclosed for added sanitary protection
70			Solid Urethane	2.5 (0.10)	Urethane	100 (212)	Med.	х	Good	V-Good	USDA Approved, wet applications
71			High Release Cover	1.7 (0.07)	Urethane	100 (212)	Low	х	Good	Poor	Raw dough or sticky food product
72			Nose Bar Low Friction	1.2 (0.05)	Urethane	100 (212)	Low	х	Good	Poor	Nose Bar Applications

Dim = mm (in)

Metal Clipper Splices are not available on belts over 1219 mm (48 in) wide.

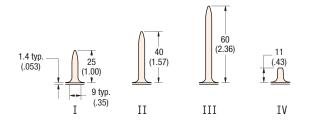
\* Not available in 51 mm (2 in) wide.

\*\*Metal Clipper splices are not sanitary.





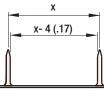




### **Standard Cleated Belt Selection Guide**

Part No.	Base Belt	Belt Thickness, mm (in)	Belt Surface Material	Cleat Height, mm (in)	Cleat Material	Maximum Part Temp. °C (°F)	FDA Approved	Chemical Resistance	Moisture Resistance	Illustration
Α	High Friction	1.4 (0.055)	Urethane	25 (1.00)	Urethane	80 (176)	Yes	Good	Poor	I
В	High Friction	1.4 (0.055)	Urethane	40 (1.57)	Urethane	80 (176)	Yes	Good	Poor	II
C	High Friction	1.4 (0.055)	Urethane	60 (2.36)	Urethane	80 (176)	Yes	Good	Poor	III
G	High Friction	1.4 (0.055)	Urethane	11 (0.43)	Urethane	80 (176)	Yes	Good	Poor	IV
J	Low Friction	1.6 (0.06)	Urethane	25 (1.00)	Urethane	100 (212)	Yes	Good	Poor	I
К	Low Friction	1.6 (0.06)	Urethane	40 (1.57)	Urethane	100 (212)	Yes	Good	Poor	II
L	Low Friction	1.6 (0.06)	Urethane	60 (2.36)	Urethane	100 (212)	Yes	Good	Poor	III
М	Low Friction	1.6 (0.06)	Urethane	11 (0.43)	Urethane	100 (212)	Yes	Good	Poor	IV

### **CLEATED BELT SPACING**



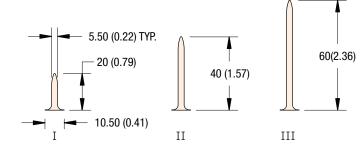
Tolerance  $\pm 2$  (.08)

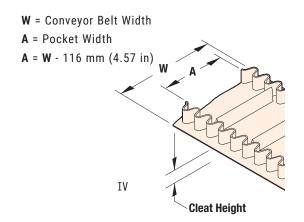
- · Cleat spacing is determined by conveyor length and desired number of cleats
- Minimum spacing = 50 mm (2 in)
- Spacing accuracy = ±2 mm (.08 in)
- Maximum 2135 mm (84 in) conveyor length for 487 mm (18 in) and wider conveyors
- Maximum 508 mm (20 in) cleat spacing for 2135 mm (84 in) and longer conveyors
- For Lengths > 7.3 m (24 ft) Tolerance ±5 mm [.20 in]





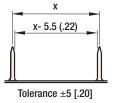
### **SPECIALTY CLEATED BELT PROFILES**



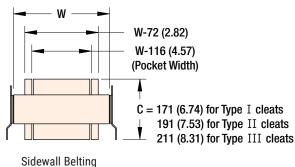


Sp	Specialty Cleated Belt Selection Guide													
	Part No.	Base Belt	Belt Thickness, mm (in)	Belt Surface Material	Cleat Height, mm (in)	Cleat Material	Maximum Part Temp. °C (°F)	FDA Approved	Chemical Resistance	Moisture Resistance	Illustration			
	N	Sealed Edge	1.5 (0.06)	Urethane	20 (0.79)	Urethane	80 (176)	Yes	Good	Good	I			
_	Р	Sealed Edge	1.5 (0.06)	Urethane	40 (1.57)	Urethane	80 (176)	Yes	Good	Good	Ш			
ated	Q	Sealed Edge	1.5 (0.06)	Urethane	60 (2.36)	Urethane	80 (176)	Yes	Good	Good	Ш			
Cleated	R	Encased	2.0 (0.08)	Urethane	0.79 (20)	Urethane	100 (212)	Yes	Good	Very Good	I.			
	S	Encased	2.0 (0.08)	Urethane	40 (1.57)	Urethane	100 (212)	Yes	Good	Very Good	П			
	т	Encased	2.0 (0.08)	Urethane	60 (2.36)	Urethane	100 (212)	Yes	Good	Very Good	Ш			
-	U	Standard	1.5 (0.06)	Urethane	30 (1.18)	Urethane	80 (176)	Yes	Good	Poor	IV			
ateo	v	Standard	1.5 (0.06)	Urethane	50 (1.97)	Urethane	80 (176))	Yes	Good	Poor	IV			
Cle	W	Sealed Edge	1.5 (0.06)	Urethane	30 (1.18)	Urethane	80 (176)	Yes	Good	Good	IV			
Sidewall Cleated	Х	Sealed Edge	1.5 (0.06)	Urethane	50 (1.97)	Urethane	80 (176)	Yes	Good	Good	IV			
ide	Y	Encased	1.5 (0.06)	Urethane	30 (1.18)	Urethane	80 (176)	Yes	Good	Very Good	IV			
S	Z	Encased	1.5 (0.06)	Urethane	50 (1.97)	Urethane	80 (176)	Yes	Good	Very Good	IV			

### SPECIALTY CLEATED BELT SPACING



- Cleat spacing is determined by conveyor length and desired number of cleats
- Minimum spacing = 50 mm (2 in)
- Spacing accuracy = ±5 mm (.20 in)
- Maximum 2135 mm (84 in) conveyor length for 487 mm (18 in) and wider conveyors
- Maximum 508 mm (20 in) cleat spacing for 2135 mm (84 in) and longer conveyors

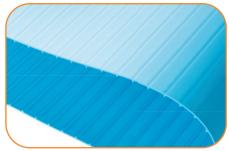


Dim = mm (in)





### **POSITIVE DRIVE BELTING**



#### **Specifications**

- Solid Urethane material
- Drive lugs on 25 mm (1 in) spacing
- Available in Blue or White
- Excellent abrasion and tear resistance

(Also available in white)

Positive	Positive Drive Belt Selection Guide													
Description	Surface Material	Belt Thickness, mm (in)	Maximum Part Temp. C (F)	Sanitation Temperature °C (°F)	USDA Approval	Chemical Resistance	Special Characteristics							
Flat Belt Smooth, Matte Finish	Homogeneous Thermoplastic, FDA Compliant Polyurethane 01 Smooth top white 02 Smooth top blue	6 mm (0.236 in)	-28 to 80 (-20 to 176)	up to 85 (185)	X	Very Good	Smooth Surface							





### **MODULAR BELT CONVEYOR FEATURES**



**TIP-UP TAILS\*** FOR ACCESS INSIDE CONVEYOR FOR CLEANING AND MAINTENANCE (STRAIGHTS ONLY)

#### **INNOVATIVE F CHAIN** CU

WITH CENTER BEARING TO ELEMINATE FRICTION, ALLOWING 4 CURVES ON A SINGLE MOTOR



### SAFEST CURVE CHAIN IN THE INDUSTRY CHAIN OPENINGS LESS THAN 4 MM, EVEN IN

THE CURVES

### **FLAT SIDES**

ALLOW FOR FLEXIBILITY WHEN MOUNTING ACCESSORIES, INTERFACING WITH OTHER EQUIPMENT OR TRANSFERRING PRODUCTS

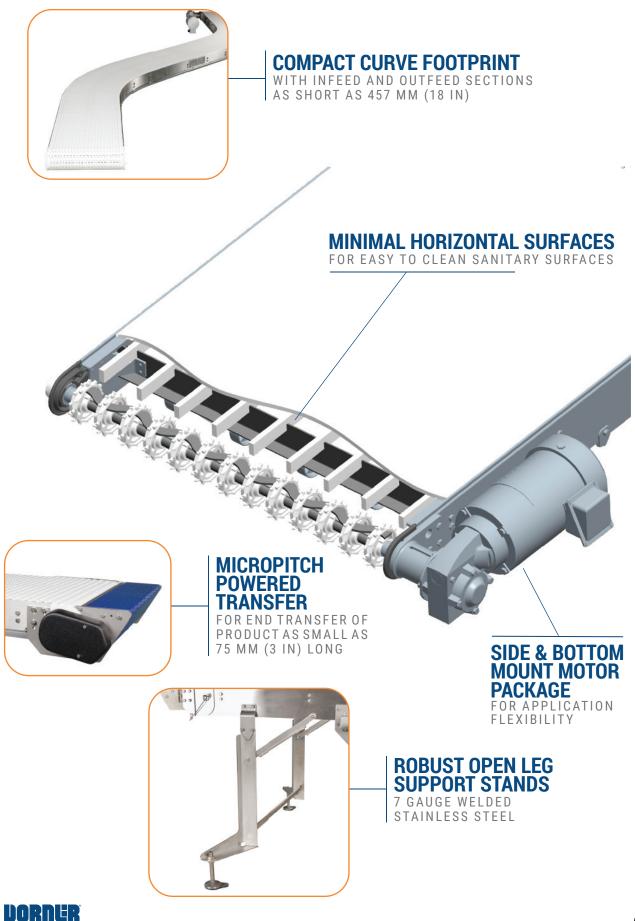


\*Note: Do not run the conveyor with the tail in the tip-up position.

(26)

### **MODULAR BELT CONVEYOR FEATURES**





(27)



### STRAIGHT MODULAR FLAT BELT



#### **Specifications**

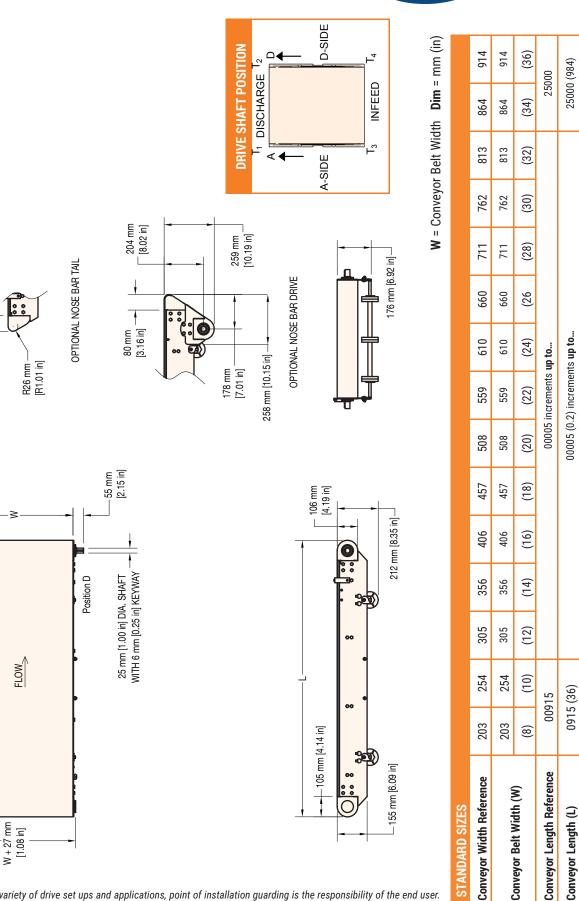
- Loads up to 341 kg (750 lbs) or 98 kg/sq m (20 lbs/sq ft)\*
- Belt speeds up to 78.6 m/min (260 ft/min)
- Belt widths: 203 mm (8 in) to 914 mm (36 in)
- Conveyor lengths: 915 mm (36 in) to 25,000 mm (82 ft)
- Bolt-together 304 Stainless Steel Frame
- · Hard chrome coated bearing with FDA H1 food grade grease
- FDA approved belting and plastic components
- Open design with minimal horizontal surfaces
- · Suitable for use in wet environments
- Stainless Steel construction for wipe down and low pressure washdown with non-caustic solutions



\*\* Note: Do not run the conveyor with the tail in the tip-up position.

Order gearmotor mounting packages and gearmotors separately, see pages 44-48. For support stands and accessories, see page 50-55.





ł

Position A

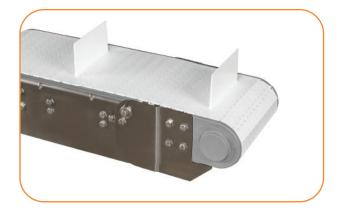
DORNER

Due to the wide variety of drive set ups and applications, point of installation guarding is the responsibility of the end user.





### STRAIGHT MODULAR CLEATED BELT



Features optional tip-up tail

#### **Specifications**

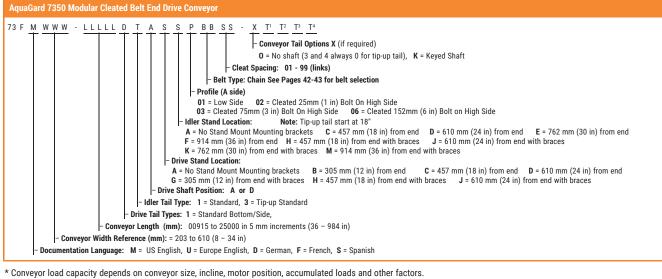
- Loads up to 341 kg (750 lbs) or 98 kg/sq m (20 lbs/sq ft)\*
- Belt speeds up to 78.6 m/min (260 ft/min)
- Belt widths: 203 mm (8 in) to 610 mm (24 in)
- Conveyor lengths: 915 mm (36 in) to 25,000 mm (82 ft)
- Cleat heights from 25 mm (1 in) to 75 mm (3 in)
- · Bolt-together 304 Stainless Steel Frame
- Hard chrome coated bearing with FDA H1 food grade grease
- · FDA approved belting and plastic components
- · Open design with minimal horizontal surfaces
- · Suitable for use in wet environments
- · Stainless Steel construction for wipe down and low pressure washdown with non-caustic solutions



**OPTIONAL: High Side Guides** Up to 152 mm (6 in) tall



**OPTIONAL:** Tip-Up Tail\*\*



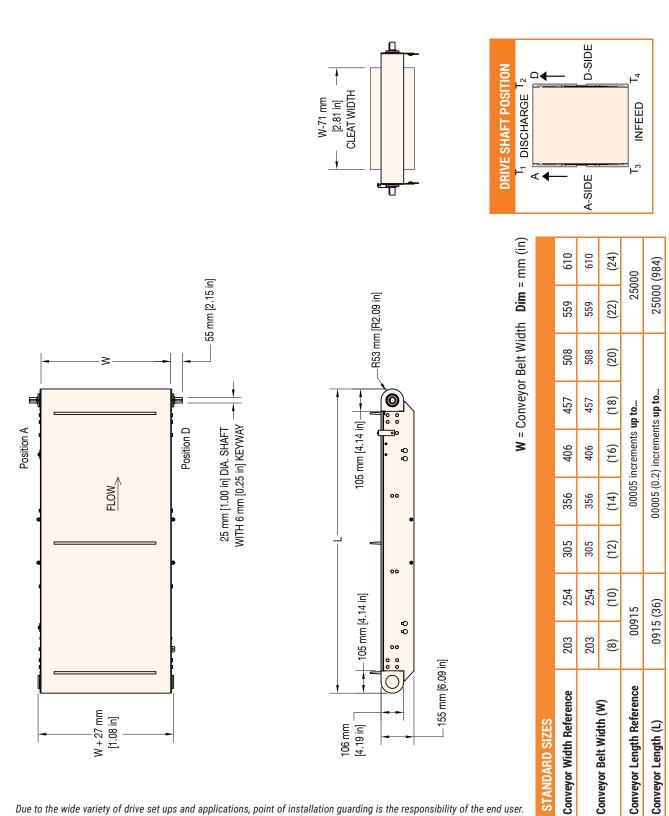
\*\* Note: Do not run the conveyor with the tail in the tip-up position.

Order gearmotor mounting packages and gearmotors separately, see pages 44-48. For support stands and accessories, see page 50-55.



### STRAIGHT MODULAR CLEATED BELT





Due to the wide variety of drive set ups and applications, point of installation guarding is the responsibility of the end user.







#### Specifications

- Loads up to 227 kg (500 lbs) or 98 kg/sq m (20 lbs/sq ft)\*
- Belt speeds up to 78.6 m/min (260 ft/min)
- Belt widths: 152 mm (6 in) to 610 mm (24 in)
- Conveyor section lengths: 460 mm (18 in) to 15240 mm (600 in)
- Curve angles of 45, 90, 135 and 180 degrees
- · Bolt-together Stainless Steel Frame
- Mold to width chain up to 457 mm (18 in) wide
- No chain opening exceeding 4 mm (0.15 in)
- · FDA approved belting and plastic components
- Chain supported with stainless steel center bearing, increasing load capacity and the ability to have up to 4 curves on a single motor
- Optional powered transfer for smooth transfer of parts as short as 75 mm (3 in) in diameter
- · Suitable for use in wet environments
- Stainless Steel construction for wipe down and low pressure washdown with non-caustic solutions



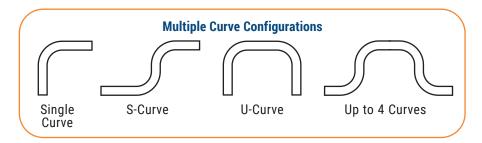
**Curve Innovation** Integrated chain bearing and guide rail eliminates friction



OPTIONAL: Powered Transfer For small parts and maintaining speeds through transfer. Series driven with speeds up to 78.6 m/min (260 ft/min). Transfer parts as short as 75 mm (3 in) long.



STANDARD FEATURE: Flush Top, Low Side Frame

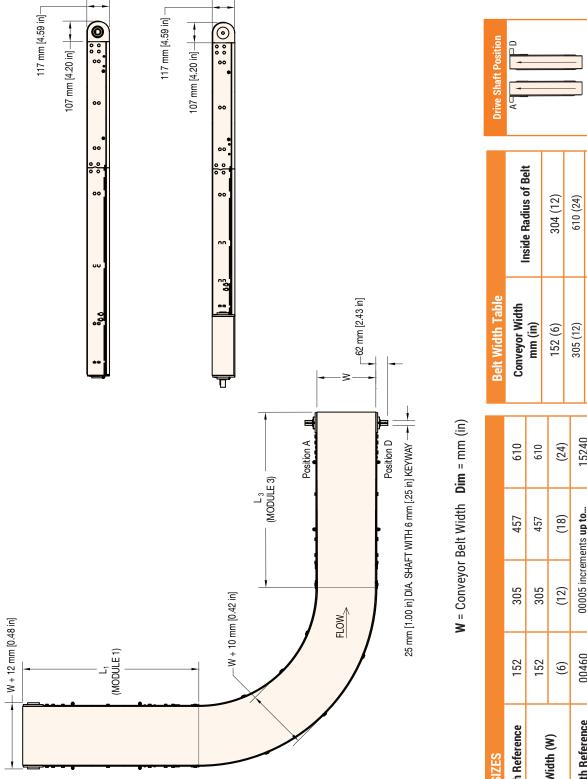


\* Conveyor load capacity depends on conveyor size, incline, motor position, accumulated loads and other factors.

Order gearmotor mounting packages and gearmotors separately, see pages 44-48. For support stands and accessories, see page 50-55.







Due to the wide variety of drive set ups and applications, point of installation guarding is the responsibility of the end user.



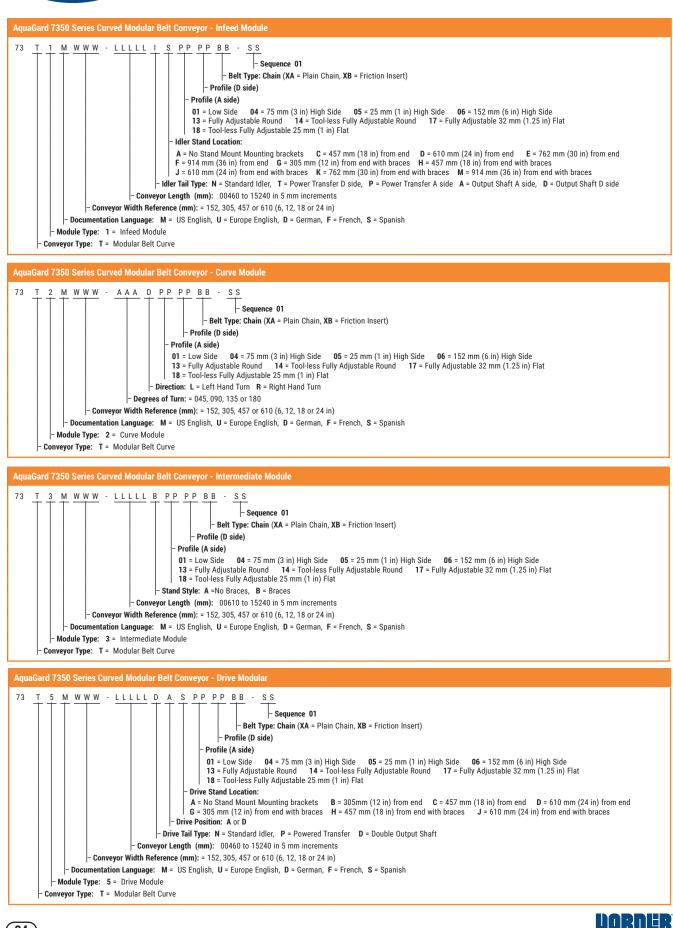


914 (36) 1220 (48) 610 (24) 457 (18)

15240 (600) 15240 00005 (0.2) increments up to ... 00005 increments up to ... NOTE: Total length of all sections cannot exceed 25,000 mm (82 ft) 00460 (18) 00460 **Conveyor Length Reference Conveyor Width Reference** Conveyor Belt Width (W) Conveyor Length (L) **FANDARD SIZES** 

Maximum of 4 curves





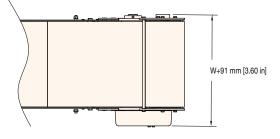
### **POWERED TRANSER**

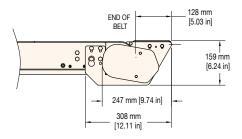




#### **Powered Transfer**

- 13 mm (5 in) diameter roller for small part transfers
- Maintains speed through the transfer
- 8 mm micropitch chain series driven off of tail module
- Conveyor widths 152 mm (6 in) to 914 mm (36 in)
- Belt speeds up to 53 m/min (175 f/min)
- Available as an option on Modular Belt Curve
- · Can be located on drive and/or idler tail









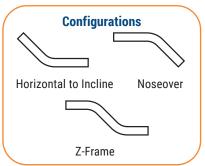
## Aqua Gara

### LPZ (Z-FRAME) MODULAR FLAT BELT



#### **Specifications**

- Loads up to 45 kg (100 lbs) or 98 kg/sq m (20 lbs/sq ft)\*
- Belt speeds up to 78.6 m/min (260 ft/min)
- Belt widths: 203 mm (8 in) to 610 mm (24 in)
- Conveyor section lengths: 610 mm (24 in) to 6100 mm (240 in)
- Maximum total conveyor length of 12190 mm (480 in)
- Angles from 5 degrees to 30 degrees in 5 degree increments
- · Bolt-together Stainless Steel Frame
- · FDA approved belting and plastic components
- · Suitable for use in wet environments
- · Stainless Steel construction for wipe down and low pressure washdown with non-caustic solutions





**OPTIONAL:** 

Friction Insert Belts



**OPTIONAL:** Tip-Up Tail\*\*

\*\* Note: Do not run the conveyor with the tail in the tip-up position.

Order gearmotor mounting packages and gearmotors separately, see pages 44-48. For support stands and accessories, see page 50-55.





25 mm [1.00 in] DIA. SHAFT WITH 6 mm [0.25 in] KEYWAY

Position D

W+31 mm [1.21 in]

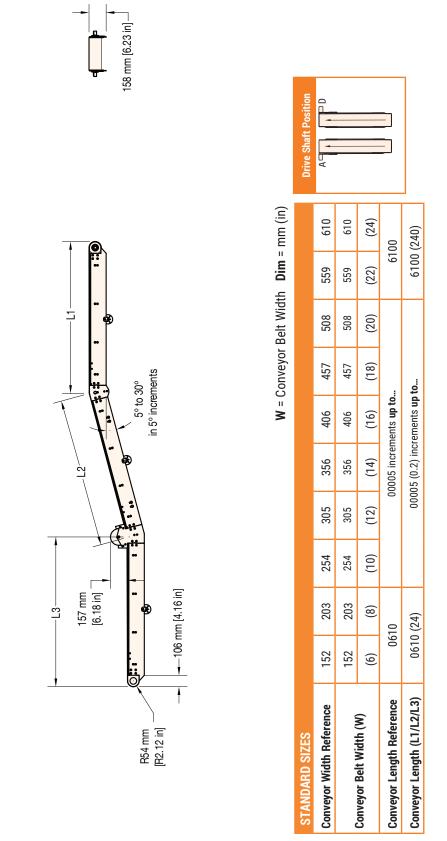
--59 mm [2.33 in]

-≥

FLOW

Position A

-- W-68 mm [2.64 in]



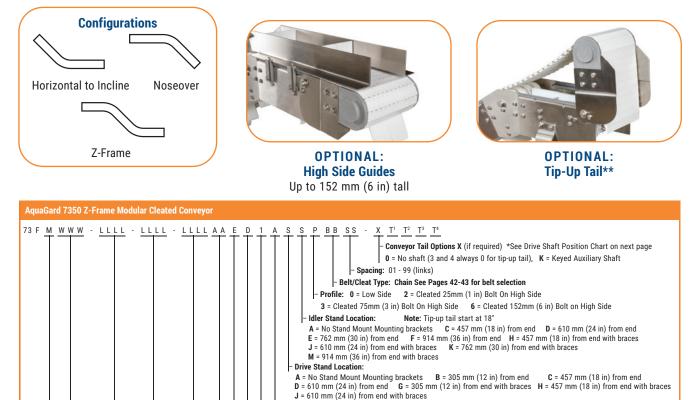


# LPZ (Z-FRAME) MODULAR CLEATED BELT



#### **Specifications**

- Loads up to 45 kg (100 lbs) or 98 kg/sq m (20 lbs/sq ft)\*
- · Belt speeds up to 78.6 m/min (260 ft/min)
- Belt widths: 152 mm (6 in) to 610 mm (24 in)
- Conveyor section lengths: 610 mm (24 in) to 6100 mm (240 in)
- Maximum total conveyor length of 25,000 mm (82 ft)
- · Angles from 30 degrees to 60 degrees in 5 degree increments
- · Bolt-together Stainless Steel Frame
- · FDA approved belting and plastic components
- · Suitable for use in wet environments
- Stainless Steel construction for wipe down and low pressure washdown with non-caustic solutions



- Documentation Language: M = US English, U = Europe English, D = German, F = French, S = Spanish

\* Conveyor load capacity depends on conveyor size, incline, motor position, accumulated loads and other factors.

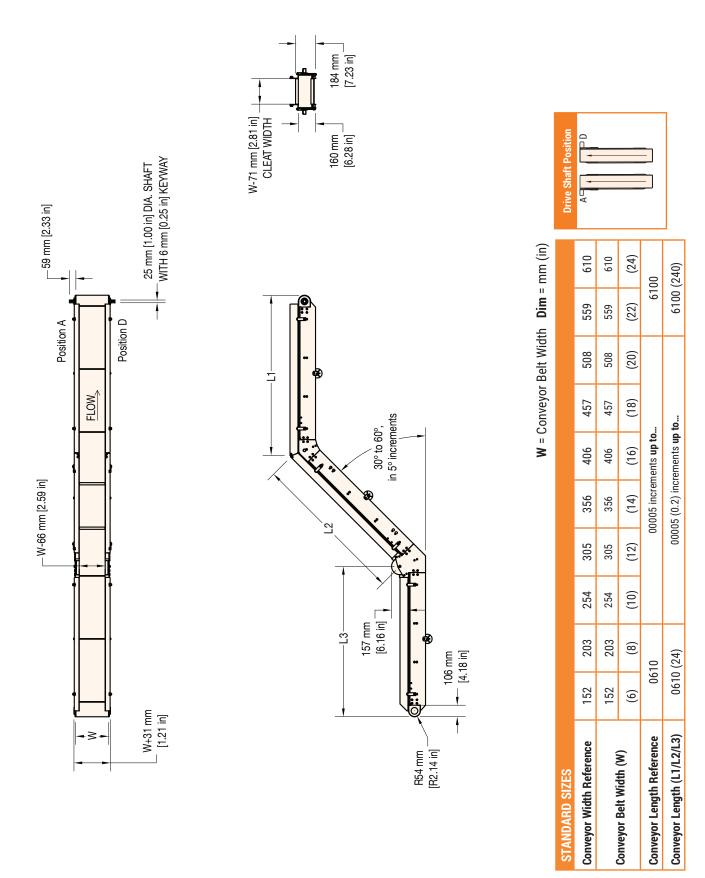
\*\* Note: Do not run the conveyor with the tail in the tip-up position.

Order gearmotor mounting packages and gearmotors separately, see pages 44-48. For support stands and accessories, see page 50-55.



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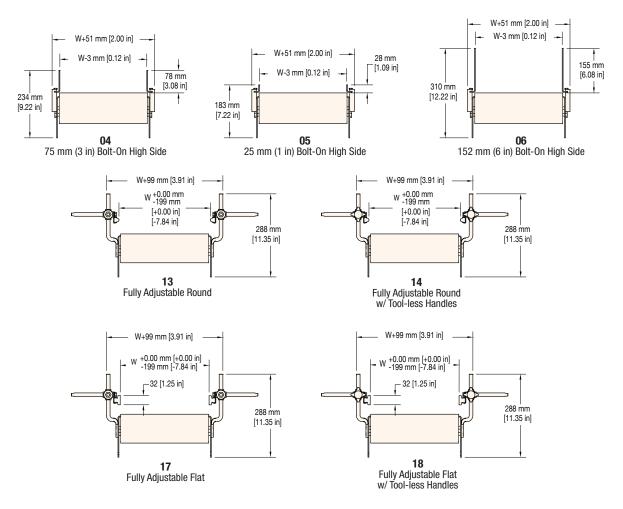
## LPZ (Z-FRAME) MODULAR CLEATED BELT







## **MODULAR BELT PROFILES**



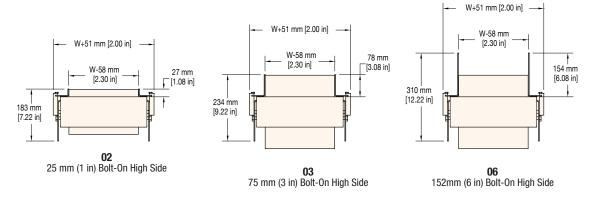
**W** = Conveyor Belt Width **Dim** = mm (in)

Due to the wide variety of drive set ups and applications, point of installation guarding is the responsibility of the end user.





## **CLEATED MODULAR BELT PROFILES**



**W** = Conveyor Belt Width **Dim** = mm (in)

Due to the wide variety of drive set ups and applications, point of installation guarding is the responsibility of the end user.





## MODULAR BELT TYPES



## **Flat Top Belts**

provide a closed surface for complete product support, easy wiping.



## **Flush Grid Belts**

provide an open surface for better drainage, cleaning or air flow/cooling.



### **Friction Inserts**

are available for incline applications. Inserts may be placed along entire length of the belt or spaced on 51 mm (2 in), 102 mm (4 in), 152 mm (6 in) or 305 mm (12 in) centers. Friction inserts are indented 51 mm (2 in) from each belt edge.



### **Curve Belts**

provide a tight radius, space saving corner. Side tabs ensure positive belt tracking with a flush top design. Stainless bearings reduce friction providing capability of up to (4) corners.



### **Cleated Belts**

provide a sturdy cleat for elevation at steep inclines. Cleats available in 25 mm (1 in) and 76 mm (3 in) heights.





#### Modular Belt Selection Guide

Modula			IL Selection		uiue											
	Belt Type	Part Number Reference	Description mm (in)	% Open	Pitch mm (in)	Belt Thickness mm (in)	Color	Belt Material	Rod Material	Minimum Product Temperature C (F)	Maximum Product Temperature C (F)***	FDA / CFIA Approved*	Chemical Resistance	Wear Resistance	Maximum Incline / Decline (degrees)**	Nose Bar Idler Diameter mm (in)
	ve v	MA	Flat top	0	25 (1)	11 (.43)	White	Acetal	Polyethylene	-40 (-40)	102 (215)	Y	Good	V-Good	5	N/A
	d Driv Pulle	MB	Flat top	0	25 (1)	11 (.43)	White	Polypropylene	Polypropylene	5 (40)	135 (275)	Y	V-Good	Good	5	N/A
telts	Standard Drive & Idler Pullev	МС	Flush grid	35	25 (1)	10 (.39)	White	Acetal	Polypropylene	5 (40)	93 (200)	Y	Good	V-Good	5	N/A
Straight Flat Belts	s s	MD	Flush grid	35	25 (1)	10 (.39)	White	Polypropylene	Polypropylene	5 (40)	105 (220)	Y	V-Good	Good	5	N/A
ight	e or	MG	Flat top	0	13 (.5)	10 (.39)	White	Acetal	Nylon	-40 (-40)	93 (200)	Y	Good	Good	5	25 (1)
Stra	r Driv ar Idl	MH	Flat top	0	13 (.5)	10 (.39)	White	Polypropylene	Nylon	5 (40)	105 (220)	Y	V-Good	V-Good	5	25 (1)
	Nose Bar Drive or Nose Bar Idler	MJ	Flush grid	25	13 (.5)	10 (.39)	White	Acetal	Nylon	-40 (-40)	93 (200)	Y	Good	Good	5	25 (1)
	ů N N	MK	Flush grid	25	13 (.5)	10 (.39)	White	Polypropylene	Nylon	5 (40)	105 (220)	Y	V-Good	V-Good	5	25 (1)
		NA	Flat Top w/25 (1) Cleats Flat Top	0	25 (1)	11 (.43)	White	Acetal	Polyethylene	-40 (-40)	102 (215)	Y	Good	V-Good	60	N/A
	lley	NB	w/25 (1) Cleats	0	25 (1)	11 (.43)	White	Polypropylene	Polypropylene	5 (40)	135 (275)	Y	V-Good	Good	60	N/A
Belts	ller Pu	NC	Flat Top w/75 (3) Cleats	0	25 (1)	11 (.43)	White	Acetal	Polyethylene	-40 (-40)	102 (215)	Y	Good	V-Good	60	N/A
raight	and Id	ND	Flat Top w/75 (3) Cleats	0	25 (1)	11 (.43)	White	Polypropylene	Polypropylene	5 (40)	135 (275)	Y	V-Good	Good	60	N/A
Cleated Straight Belts	d Drive	NE	Flush Grid w/25 (1) Cleats	35	25 (1)	10 (.39)	Blue/ White <sup>†</sup>	Acetal	Polypropylene	5 (40)	93 (200)	Y	Good	V-Good	60	N/A
Cle	Standard Drive and Idler Pulley	NF	Flush Grid w/25 (1) Cleats	35	25 (1)	10 (.39)	White	Polypropylene	Polypropylene	5 (40)	105 (220)	Y	V-Good	Good	60	N/A
	Ś	NG	Flush Grid w/75 (3) Cleats	35	25 (1)	10 (.39)	Blue/ White <sup>+</sup>	Acetal	Polypropylene	5 (40)	93 (200)	Y	Good	V-Good	60	N/A
		NH	Flush Grid w/75 (3) Cleats	35	25 (1)	10 (.39)	White	Polypropylene	Polypropylene	5 (40)	105 (220)	Y	V-Good	Good	60	N/A
Friction Top	Standard Idler Pullev	See Table Below	Flat top w/friction inserts	0	25 (1)	14 (.55)	White	Polypropylene	Polypropylene	5 (40)	60 (140)	Y	V-Good	Poor	30	N/A
Fricti	Star Star	See Table Below	Flush grid w/fric- tion inserts	35	25 (1)	14 (.55)	White	Polypropylene	Polypropylene	5 (40)	60 (140)	Y	V-Good	Poor	30	N/A
Curved Flat Belts	Standard and Nose Bar Idler Pullev	ХА	Plain Chain	0	25 (1)	13 (.51)	White	Acetal	Polypropylene	-20 (-4)	60 (140)	Y	Good	V-Good	5	N/A
Curved F	Stands Nose Bar I	ХВ	Friction Insert	0	25 (1)	13 (.51)	White	Acetal	Polypropylene	-20 (-4)	60 (140)	Y	Good	V-Good	30	N/A

\* FDA = Food and Drug Administration, CFIA = Canadian Food Inspection Agency \*\* Temperature, environmental conditions, product materials and product configuration effect the maximum incline or decline. Product testing is recommended.

\*\*\* These do not indicate ambient running conditions. Ambient temperature range is -1 to 38 C (30 to 100 F).

Product temperature is dependent on length of time product is in direct contact with belt surface. Product testing is recommended.

<sup>†</sup>Belt color dependent on belt width selection

FRICTION TOP STRAIGHT PLASTIC CHAIN: Part number reference chart					
Flat Top w/ Friction Inserts Part Number Reference	TA	ТВ	TC	TD	TE
Flush Grid w/ Friction Inserts Part Number Reference	N/A	TF	TG	TH	TJ
Friction Insert Spacing	25 mm (1 in)	51 mm (2 in)	102 mm (4 in)	152 mm (6 in)	305 mm (12 in)



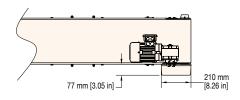
Note: Friction Top not available on nose bar drives

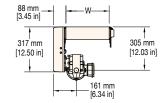
#### **GEARMOTOR MOUNTING PACKAGE & GEARMOTOR SELECTION STEPS**

- Step 1: Select a Gearmotor Mounting Package (below).
- **Step 2:** Use the **Belt Speed Chart** (page 46) to determine your desired belt speed based on conveyor type and mount package. See Gearmotor column.
- Step 3: Locate the appropriate gearmotor chart (pages 47-48) in terms of **Painted** vs. Stainless Steel based on your gearmotor chart numbers

### Bottom Mount Package, 90° Gearmotor

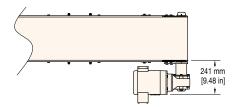
Aqua Gara

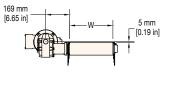




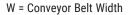
- Includes stainless steel gearmotor mounting bracket, timing belt, plated pulleys, guard and mounting hardware
- · Conveyor belt speed can be adjusted with optional ratio pulley kits

#### Side Mount Package, 90° Gearmotor



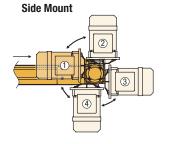


· Includes stainless steel gearmotor bracket, coupling and mounting hardware

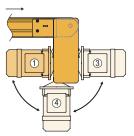


W = Conveyor Belt Width

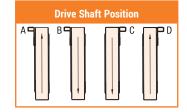
#### 90° Gearmotor Location Options







Due to the wide variety of drive set ups and applications, point of installation guarding is the responsibility of the end user. **Note:** Conveyor and gearmotor are not included in the mounting package and must be ordered separately. Dimensions = mm (in)

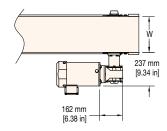


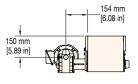


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#### Nose Bar Mount Package, 90° Gearmotor





· Includes stainless steel gearmotor mounting bracket and mounting hardware

W = Conveyor Belt Width

7350 Series: Gearmotor Mount Packages
7 3       X       B       S       S       T       S       A       G       S       C       S         -       -       -       -       -       -       Conveyor Sprocket: 30 = 30 Tooth, Blank = Side Drive         -       -       Gearmotor Sprocket: 30 = 30 Tooth, Blank = Side Drive       -       -       Gearmotor Sprocket: 30 = 30 Tooth, Blank = Side Drive         -       -       Drive Position: A or D       -       Gearmotor Size: S = Standard Load       -         -       -       Gearmotor Type: H = 90°       -       -       -       -
- Drive Type: S = Side C = Center B = Bottom N = Nosebar P = Side and Powered Transfer
- Configuration: S = Straight C = Curve     - Conveyor Type: B = Belt C = Chain/Positive Drive     - Language: Z = Universal

Due to the wide variety of drive set ups and applications, point of installation guarding is the responsibility of the end user.





Fixed S	peed										
		Belt S	Speed				Mount F	Package	Pulle	ey Kit	
Belted C	onveyor	Modul	ar Belt	Positive I	Drive Belt	RPM From Gearmotor	Bottom	Side	Drive	Driven	Gearmotor Chart
ft/min	m/min	ft/min	m/min	ft/min	m/min		BULLOIII	Side	Pulley	Pulley	
26	8	30	9	30	9	29	Х	Х	30	30	1,2
33	10	36	11	36	11	29	Х		36	30	1,2
39	12	46	14	46	14	44	Х	Х	30	30	1,2
49	15	52	16	52	16	44	Х		36	30	1,2
52	16	59	18	59	18	58	Х	Х	30	30	1,2
62	19	72	22	72	22	58	Х		36	30	1,2
79	24	89	27	89	27	87	Х	Х	30	30	1,2
95	29	105	32	105	32	87	Х		36	30	1,2
108	33	118	36	118	36	117	Х	Х	30	30	1,2
128	39	141	43	144	44	117	Х		36	30	1,2
161	49	177	54	177	54	175	Х	Х	30	30	1,2
194	59	213	65	213	65	175	Х		36	30	1,2

Variable	Speed										
		Belt S	speed			RPM at	Mount F	Package	Pulle		
Belted C	onveyor	Modular Belt		Positive Drive Belt		60Hz Gearmotor	Bottom	Side	Drive	Driven	Gearmotor Chart
ft/min	m/min	ft/min	m/min	ft/min	m/min	Geannotor	Dottom	oluo	Pulley	Pulley	
3 to 26	1 to 8	3 to 30	1 to 9	3 to 30	1 to 9	29	Х	Х	30	30	3,4
3 to 33	1 to 10	4 to 36	1 to 11	4 to 36	1 to 11	29	Х		36	30	3,4
4 to 39	1 to 12	5 to 46	1 to 14	5 to 46	1 to 14	44	Х	Х	30	30	3,4
5 to 49	1 to 15	5 to 52	2 to 16	5 to 52	2 to 16	44	Х		36	30	3,4
5 to 52	2 to 16	6 to 59	2 to 18	6 to 59	2 to 18	58	Х	Х	30	30	3,4
6 to 62	2 to 19	7 to 72	2 to 22	7 to 72	2 to 22	58	Х		36	30	3,4
8 to 79	2 to 24	9 to 89	3 to 27	9 to 89	3 to 27	87	Х	Х	30	30	3,4
10 to 95	3 to 29	10 to 105	3 to 32	10 to 105	3 to 32	87	Х		36	30	3,4
11 to 108	3 to 33	12 to 118	4 to 36	12 to 118	4 to 36	117	Х	Х	30	30	3,4
13 to 128	4 to 39	14 to 141	4 to 43	14 to 144	4 to 44	117	Х		36	30	3,4
16 to 161	5 to 49	18 to 177	5 to 54	18 to 177	5 to 54	175	Х	Х	30	30	3,4
19 to 194	6 to 59	21 to 213	7 to 65	21 to 213	7 to 65	175	Х		36	30	3,4



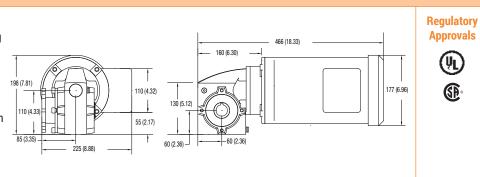


### **Fixed Speed**

#### Chart 1 • Nema 56C Regulatory 444 (17.47) • IP 55 Protection Rating 160 (6.30) -**Approvals** · Sealed Gearmotor with 193 (7.60) . 165 (6.50) ŲL H1 FDA approved Lubricant 104 (4.09) /m 130 (5.12) ŧ Į. · FDA approved white epoxy 110 (4.33) 58 (2.27) SP painted motor 85 (3.35) ł Aluminum gearbox with 60 (2.36) 212 (8.35) 60 (2.36) sanitary coating · Totally enclosed non-ventilated motor • 3 Phase, 60 Hz in.-Part Number RPM kW Volts FLA Hp Nm lbs. 71M060HS423FN 442 29 0.5 0.37 230/460 1.6/0.8 50 71M040HS423FN 44 0.5 0.37 230/460 1.6/0.8 486 55 55 71M030HS423FN 58 0.74 208-230/460 3.5-3.2/1.6 487 1 71M020HS423FN 87 0.74 208-230/460 3.5-3.2/1.6 407 46 1 71M015HS423FN 117 0.74 208-230/460 3.5-3.2/1.6 470 53 1 71M010HS423FN 208-230/460 442 50 175 1.5 1.11 4.6-4.2/2.1

#### Chart 2

- Nema 56C
- IP 55 Protection Rating
- Sealed Gearmotor with H1 FDA approved Lubricant
- Stainless Steel motor
- Aluminum gearbox with sanitary coating
- Totally enclosed non-ventilated motor
- 3 Phase, 60 Hz



Part Number	RPM	Нр	kW	Volts	Volts FLA		Nm
71M060HZS423FN	29	0.5	0.37	230/460	1.6/0.8	442	50
71M040HZS423FN	44	0.5	0.37	230/460	1.6/0.8	486	55
71M030HZS423FN	58	1	0.74	208-230/460	3.5-3.2/1.6	487	55
71M020HZS423FN	87	1	0.74	208-230/460	3.5-3.2/1.6	407	46
71M015HZS423FN	117	1	0.74	208-230/460	3.5-3.2/1.6	470	53
71M010HZS423FN	175	1.5	1.11	208-230/460	4.6-4.2/2.1	442	50

**CE** Note: When buying a gearmotor only without the starter, the customer must supply their own on/off switch and motor overload protection to comply with the CE Safety Directive.

FLA = Full Load Amperes Some motors and gear reducers may normally operate hot to the touch. Consult factory for specific operating temperatures. Note: Dimensions = mm (in)





Regulatory

**Approvals** 

(YL)

**SP** 

165 (6.50)

444 (17.47)

160 (6.30)

/m

60 (2

.36

0

130 (5.12)

60 (2.36) -

### Variable Speed

#### Chart 3



- IP 55 Protection Rating
- Sealed Gearmotor with H1 FDA approved Lubricant
- FDA approved white epoxy painted motor
- Aluminum gearbox with sanitary coating
- Totally enclosed non-ventilated motor

193 (7.58)

85 (3.35)

110 (4.33)

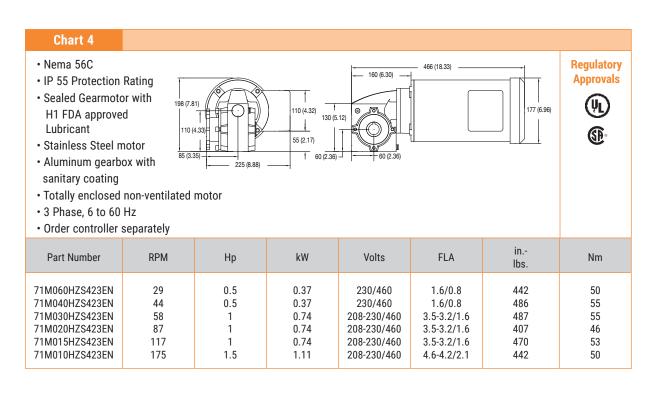
131 (5.1

• 3 Phase, 6 to 60 Hz

Order controller	separately						
Part Number	RPM	Нр	kW	Volts	FLA	in Ibs.	Nm
71M060HS423EN 71M040HS423EN 71M030HS423EN 71M020HS423EN 71M015HS423EN 71M010HS423EN	29 44 58 87 117 175	0.5 0.5 1 1 1 1.5	0.37 0.37 0.74 0.74 0.74 1.11	230/460 230/460 208-230/460 208-230/460 208-230/460 208-230/460	1.6/0.8 1.6/0.8 3.5-3.2/1.6 3.5-3.2/1.6 3.5-3.2/1.6 4.6-4.2/2.1	442 486 487 407 470 442	50 55 55 46 53 50

104 (4.09)

58 (2.29)



**CE** Note: When buying a gearmotor only without the starter, the customer must supply their own on/off switch and motor overload protection to comply with the CE Safety Directive.

**FLA =** Full Load Amperes Some motors and gear reducers may normally operate hot to the touch. Consult factory for specific operating temperatures. **Note:** Dimensions = mm (in)

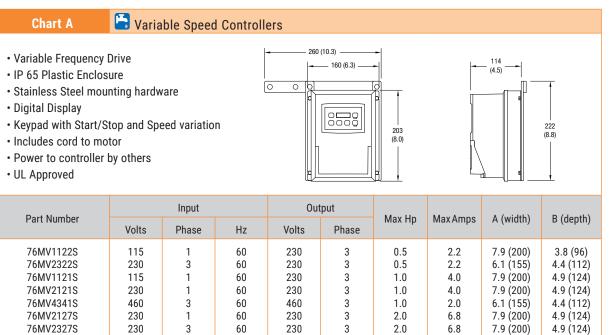






4.9 (124)

### **Variable Speed Controllers**



460

3

2.0

3.4

7.9 (200)

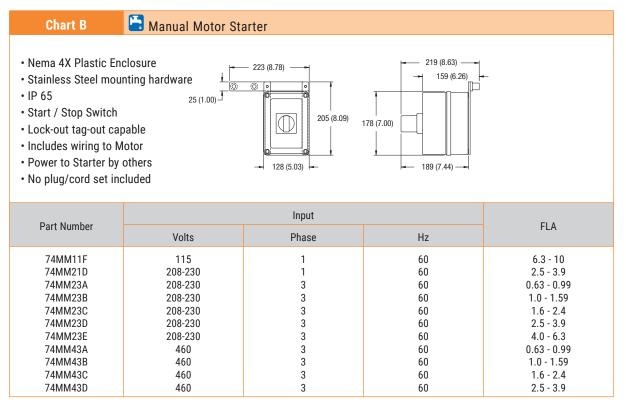
### MANUAL MOTOR STARTER

460

3

60

76MV4347S



FLA = Full Load Amperes







Dimensions = mm (in)



## **SUPPORT STANDS**



### **Tall Supports Stands**

- · Welded tubular Stainless Steel construction brushed to #4 finish
- ±50 mm (2 in) of adjustment
- Adjustable angle connecting plate from Ø to 60 degrees
- · Includes diagonal brace for stability
- · Tall Support Stands require the use of floor anchors
- For available heights see page 52



**Fixed Foot** 



### Low Height Supports Stands

- All components are Stainless Steel brushed to #4 finish
- ±51 mm (2 in) of adjustment
- Fixed Foot self-aligns 10° for sloped floors
- Caster is swivel locking
- · Horizontal conveyor mounts only
- For available heights see page 52





Swivel Locking Caster Model

**Fixed Foot Model** 

Dimensions = mm (in) Note: Due to the wide variety of conveyor and stand options along with possible configurations, stability of the final setup is the responsibility of the end user.



51



Support Stand Hei	ghts									
		Fixed	l Foot		Caster Foot					
Туре	Shortes	st Stand	Tallest	t Stand	Shortes	st Stand	Tallest Stand			
	Minimum Top Of Belt	Maximum Top Of Belt								
Fixed Height	350 (13.8)	450 (17.71)	1900 (74.8)	2000 (78.7)	450 (17.71)	550 (21.6)	2000 (78.7)	2100 (82.7)		
Tall Support	1850 (72.8)	1950 (76.8)	2400 (94.5)	2500 (98.4)	N/A	N/A	N/A	N/A		
Short Height	200 (7.87)	300 (11.8)	275 (10.8)	375 (14.7)	300 (11.8)	400 (15.7)	375 (14.7)	475 (18.7)		

Note: Dimensions = mm (in)

Height increments of 25 mm (1 in)

Top of belt heights for Modular Belt Curve are 25 mm shorter

Fixed Height Sup	port S	tands	Widths	\$*												
Conveyor Width	152	203	254	305	356	406	457	508	559	610	660	711	762	813	864	914
Conveyor Belt	152	203	254	305	356	406	457	508	559	610	660	711	762	813	864	914
Width (W)	(6)	(8)	(10)	(12)	(14)	(16)	(18)	(20)	(22)	(24)	(26)	(28)	(30)	(32)	(34)	(36)
	282	333	384	435	486	536	587	638	689	740	790	841	892	943	994	1044
Stand width	(11)	(13)	(15)	(17)	(19)	(21)	(23)	(25)	(27)	(29)	(31)	(33)	(35)	(37)	(39)	(41)

\*Dimensions shown are nominal. Contact factory for specific layout and dimensions.

\*Contact factory for Tall and Low Height Support Stand configurations.

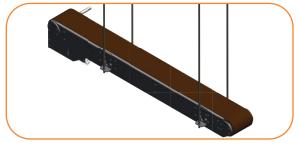
7350 Series: Support Stands
73       H       X       WWW       -       HHHH       HHHH       S       S       T       F         -Foot:       F       -Foot:       F       Fixed Foot       B       Fixed Foot with Brace (brace not on low height stands)         C       C       Caster with Brace (brace not on low height stands)       -       -       -         -Stand Type:       AM       = Angle Mount       AR       = Angle Mount w/ Outriggers         LH       = Low Height Support Stand       TA       = Tall Angle Mount         - Configuration:       S       S Straight       C       = Chain (Modular Belt)         - Maximum Top of Belt Height       = 0100 mm (4 in) more than minimum       -       -       Minimum Top of Belt Height       = 0200 to 2400 in 25 mm increments (8 – 94 in)         - Language:       Z       = Universal       -

Dimensions = mm (in)





### **Horizontal Ceiling Supports**



### Specifications

**Specifications** 

Part Number

both sides of conveyor

· All components are Stainless Steel brushed to #4 finish

· All components are Stainless Steel brushed to #4 finish

**73ACS** 

· Includes a pair of mounting brackets and hardware for support on

• Compatible with 12 mm (0.5 in) threaded support rod (not provided) Mounting block pivots to support incline mounts from 0° to 60°

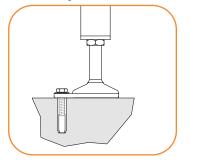
- · Includes a pair of mounting brackets and hardware for support on both sides of conveyor
- Compatible with 12 mm (0.5 in) threaded support rod (not provided)



### **Adjustable Angle Ceiling Supports**



### Sanitary Floor Anchor Kits - Type 1

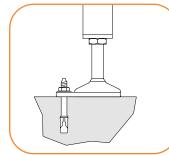


#### Specifications

- 10 mm (.375 in) x 40 mm (1.57 in) drop in
- Stainless Steel
- · Anchor is flush with floor upon removal of bolt
- Two (2) per anchor kit

Part Number FAS-1

### Sanitary Floor Anchor Kits - Type 2



#### Specifications

- 10 mm (.375 in) x 70 mm (2.75 in)
- Stainless Steel
- · Threaded anchor bolt protrudes above floor after installation
- Two (2) per anchor kit

Part Number FAS-2

Dimensions = mm (in)





### **Accessory Mounting Bar**



### Specifications

- Used for mounting adjustable devices such as photoeyes and sensors
- $\boldsymbol{\cdot}$  Can be mounted directly to frame or in combination with guide brackets
- Includes 1248 mm (48 in) long bar with (3) mounting brackets (Bar can be cut to length as needed)
- Compatible with Value Guide blocks (VG-021-02)
- All brackets and fasteners are Stainless Steel

Part Number	517509	Bar Assembly 1248 mm (48 in) long
-------------	--------	-----------------------------------

### Photo Eye and Reflector Mounting Brackets



#### Specifications

- Mounts standard 18 mm (0.71 in) barrel or nose mount photo eyes or sensors
- · Attach bracket or accessories without frame modifications
- · Adjustable along the length of the conveyor
- Adjustable height and angle positioning
- · All adjustment screws located outside the food zone
- (3) Photo Eye Types
  - Thru beam includes (2) mounts
  - Reflector includes (1) photo eye mount and (1) reflector mound (reflector included)
- Accessory Mounting Bar Style: (3) Mount versions:
  - To fixed post (does not include mounting post)
  - To fixed post (includes mounting post)
  - To accessory mounting bar (includes Value Guide Block and adjustable post)

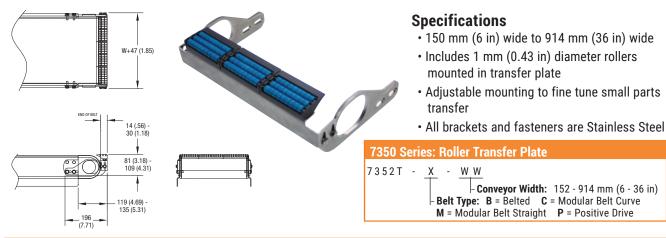
	7350 Series: Photo Eye Bracket - Accessory Mounting Bar Style
7	7352 PM - FP
	Post Type: NP = Fixed Post w/o post included FP = Fixed Post w/ post included
	AM = Accessory Mount
	- Mount Type: PM = Photoeye Mount RM = Reflective Mount
L	CM = Convergent Mount

Dimensions = mm (in)





### **Roller Transfer Plate**



### **Overhead Guide**



### Specifications

- · For part hold down or cover closing
- · Adjustable height and position across width
- · Round nose UHMW guide with stainless steel backing
- Lengths: 914 mm (36 in) to 3048 mm (1200 in) in 25 mm (1 in) increments
- · Horizontal Brackets provided for every 609 mm (24 in) of length
- · Available in standard adjustable and tool-less adjustable mount styles
- · All brackets and fasteners are Stainless Steel
- Does not include vertical mounting post. To be used with profiles 13 thru 18 or upper guide assembly

#### 7350 Series: Overhead Guide

7352HG A - LL - Guide Length: 914 - 3048 mm (36 - 120 in) - Guide Type: A = Adjustable T = Tool-less



#### Specifications

- Widths: 152 mm (6 in) to 1524 mm (60 in) available in 50 mm (2 in) increments
- Lengths: 610 mm (24 in) to 25375 mm (999 in) available in 25 mm (1 in) increments maximum section lengths of 2997 mm (118 in)
- Tool-less hook design for fast removal and rapid cleaning
- Provides a 50 mm (2 in) window for clean-out access without removal
- All pans equipped with a 25 mm (1 in) containment lip on all sides
- · Contact factory for additional options and ordering

Dimensions = mm (in)





### **Regulatory Approvals:**

#### **Conveyors:**

All Dorner 7350 Series standard conveyors (not including gearmotors and controllers) are CE approved. CE approval follows the provisions of the following directives; Machine Directive 2006/42/EC, EU Low Voltage Directive 2006/95/EC, and EMC Directive 2004/108/EC. All conveyors are marked with the CE symbol on the Dorner serial number tag located on the conveyor frame. Contact the factory for the CE Declaration of Conformity.

All Dorner 7350 Series standard conveyors (not including gearmotors and controllers) are designed and manufactured in accordance with the restrictions defined in the "Restriction of Hazardous Substances" directive, citation 2002/95/EC, commonly known as RoHS. All conveyors are marked with the RoHS symbols on the Dorner serial number tag located on the conveyor frame.

#### **Gearmotors and Controllers:**

All Dorner 7350 Series gearmotors and controllers carry one or more of the following approvals. Products are not covered by each approval. Please see the appropriate part number on the Gearmotor and controller charts located in this manual. In addition, regulatory symbols are located on the product information tags located on the product.

CE	CE Marking on a product is a manufacturer's declaration that the product complies with the essential requirements of the relevant European health, safety and environmental protection legislation, in practice by the Product Directives. CE Marking on a product ensures the free movement of the product within the European Union (EU).
RoHS	This directive restricts (with exceptions) the use of six hazardous materials in the manu- facture of various types of electronic and electrical equipment. It is closely linked with the Waste Electrical and Electronic Equipment Directive (WEEE) 2002/96/EC which sets collection, recycling and recovery targets for electrical goods and is part of a legislative initiative to solve the problem of huge amounts of toxic e-waste.
<b>91</b> °	The UL Recognized Component mark is for products intended to be installed in another device, system or end product. This Recognized Component Mark is for the United States only. When a complete product or system containing UL Recognized Components is evaluated, the end-product evaluation process can be streamlined.
c <b>FL</b> <sup>®</sup> us	The UL Recognized Component mark is for products intended to be installed in another device, system or end product. This Recognized Component Mark is for the United States and Canada. When a complete product or system containing UL Recognized Components is evaluated, the end-product evaluation process can be streamlined.
<b>()</b>	CSA International (Canadian Standards Association), is a provider of product testing and certification services for electrical, mechanical, plumbing, gas and a variety of other products. Recognized in the U.S., Canada and around the world, CSA certification marks indicate that a product, process or service has been tested to a Canadian or U.S. stan- dard and it meets the requirements of an applicable CSA standard or another recognized document used as a basis for certification.
culus	The UL Listing Mark means UL found that representative product samples met UL's safety requirements. These requirements are primarily based on UL's own published standards for safety. The C-UL-US Mark indicates compliance with both Canadian and U.S. requirements. The products with this type of Mark have been evaluated to Canadian safety requirements and U.S. safety requirements.





### **Baking Industry Standards and Certifications:**

AquaGard 7350 Series Conveyors are often used in food production or food packaging areas where proper design of equipment is essential to maintain proper food safety. AquaGard 7350 Series conveyors are designed for light wash down environments typically seen in packaged food, dry food production or confectionary production. In these applications the correct installation and application of the conveyor is critical to the proper running of the conveyor and maintaining proper food safety. The end user must ensure that the conveyor belts are properly tracked and the conveyor is properly installed as defined by Dorner.

All AquaGard 7350 Series products are designed and constructed to be used in dry food or packaged food production environments. The following AquaGard products have gone through testing and certification and are certified to BISSC standard, design requirements for Conveyors section of ANSI/ASB/Z50.2-2015.

7350 Series Belted Conveyor 7350 Series Modular Belt Conveyor 7350 Series Positive Drive Belted Conveyor

Contact the factory for copy of the certification.







### **Materials and Chemical Resistance:**

Conveyor Frames, Plastics and Modular Belting				
The following is a list of base materials used in the 7350 Series conveyor:				
Material Conveyor Component				
Acetal Copolymer, POM	Acetal Copolymer, POM Modular Belts, molded bearing housings			
Polypropylene, PP	Modular Belts			
Polyamide, PA	Adjustable Guide Support Brackets			
UHMW-PE Modular Belt Slide Rail, Adjustable Guide Face				
Thermoplastic Elastomer, TPE	Modular Belt Friction Insert			

The materials used in the 7350 Series product can resist many chemicals, however some should be avoided. Avoid the following:

- · Acids with PH less than 4
- Bases with PH higher than 9

#### **Resistance to Materials: Conveyor Frames, Plastics and Modular Belting**

The following table provides the resistance to materials used in the conveyor to several chemicals. Application testing is recommended to determine long term material durability.

<b>Legend:</b> 1 = Very good resistance   2 = Good resistance   3 = Moderate resistance   4 = Not recommended   X = no data available					
Acids	Acetal POM	Polypropylene	Polyamide PA	UHMW-PE	
Acetic acid	3	1	4	1	
Benzoic acid	3	1	4	1	
Boric acid	3	1	2	1	
Citric acid	3	1	2	1	
Chromic acid	4	1	4	1	
Hydrofluoric acid	4	1	4	1	
Hydrochloric acid	4	1	4	1	
Hydro cyanic acid	4	х	4	1	
Nitric acid	4	1	4	1	
Oleic acid	3	1	2	1	
Oxalic acid	4	1	2	1	
Phosphoric acid	4	1	4	1	
Sulphuric acid	4	2	4	1	
Tartaric acid	3	1	2	1	
Basic Compounds	Acetal POM	Polypropylene	Polyamide PA	UHMW-PE	
Ammonia	1	1	2	1	
Calcium hydroxide	1	Х	2	1	
Caustic soda	1	Х	2	1	
Potassium hydroxide	1	1	2	1	





#### **Resistance to Materials: Conveyor Frames, Plastics and Modular Belting** (continued)

 Legend:

 1 = Very good resistance | 2 = Good resistance | 3 = Moderate resistance | 4 = Not recommended | X = no data available

Salts	Acetal POM	Polypropylene	Polyamide PA	UHMW-PE
Potassium bicarbonate	2	Х	2	1
Potassium permanganate	2	2	4	1
Sodium cyanic	2	Х	2	1
Sodium hydrochloride	3	Х	4	1
Acid salt	2	X	3	1
Basic salt	1	X	2	1
Neutral salt	1	Х	2	1
Organic Compounds	Acetal POM	Polypropylene	Polyamide PA	UHMW-PE
Acetone	1	1	1	1
Aniline	2	1	3	1
Benzene	1	3	2	4
Benzine	2	Х	2	3
Butyl alcohol	2	х	2	1
Carbon disulphide	1	3	2	3
Carbon tetrachloride	1	3	1	3
Chloroform	1	4	3	4
Ethyl acetate	1	1	2	1
Ethyl alcohol	1	Х	2	1
Heptane	2	1	1	2
Methyl alcohol	1	Х	2	1
Methyl ethyl ketone	1	2	1	2
Nitrobenzene	2	2	2	1
Phenol	3	1	4	1
Gases	Acetal POM	Polypropylene	Polyamide PA	UHMW-PE
Carbon dioxide	3	1	1	1
Carbon monoxide	2	х	1	1
Chlorine	2	4	4	3
Hydrogen Sulfide	3	1	1	1
Sulphur dioxide	2	1	3	1
Other	Acetal POM	Polypropylene	Polyamide PA	UHMW-PE
Carbon tetrachloride	1	3	1	3
Beer	1	1	2	1
Fruit juice	1	2	2	1
Gasoline	1	1	2	1
Milk	1	1	1	1
Oil	1	3	1	1
Vinegar	1	1	2	1





#### Belting:

The following is a list of the top coat materials used in 7350 Series conveyor belting:

Material	Belt Number		
Urethane	01, 02, 03, 05, 06, 09, 54, 55, 56, 53, 60, 61, 63, 68, 69, 72, 73, 75, 76, 77		
PVC (non FDA approved)	08, 18, 59, 64		
Silicone	50, 80, 81		
Polyester	66		
Nitrile	57		
Urethane (hard)	58		

#### **Resistance to Materials: Belting**

The following table provides the resistance to belt materials used in the conveyor to several chemicals. Application testing is recommended to determine long term material durability.

<b>Legend:</b> 1 = Good resistance   3 = Limited resistance   4 = Not recommended						
Materials	Urethane	PVC (non FDA)	Silicone	Polyester	Urethane (hard)	
Chemicals						
Acetic acid (glacial acetic acid)	4	3	1	1	4	
Acetic acid 10 %	3	1	1	3	1	
Acetic anhydride	3	4	1	1	4	
Acetone	4	4	1	3	4	
Aluminium salts	1	1	1	1	1	
Alum	1	1	1	1	1	
Ammonia, aqueous	3	1	1	3	1	
Ammonia, gaseous	1	1	3	1	1	
Ammonium acetate	1	1	1	1	1	
Ammonium carbonate	1	1	1	1	1	
Ammonium chloride	1	1	1	1	1	
Ammonium nitrate	1	1	1	1	1	
Ammonium phosphate	1	1	1	1	1	
Ammonium sulphate	1	1	1	1	1	
Amyl alcohol	1	4	3	1	1	
Aniline	3	3	3	4	4	
Barium salts	1	1	1	1	1	
Benzaldehyde	4	4	4	4	4	
Benzine (see also Motor fuels)	1	3	3	1	1	
Benzoic acid	1	1	1	1	1	
Benzol	3	4	4	3	3	
Boric acid	1	1	1	1	1	
Boric acid, solution	1	1	1	1	1	
Bromine	4	4	4	4	4	
Bromine water	4	3	1	4	3	
Butane, gaseous	1	1	1	1	1	
Butane, liquid	1	1	1	1	1	
Butyl acetate	4	4	4	3	4	
n-Butyl alcohol	1	3	1	1	1	
Calcium chloride	1	1	1	1	1	





<b>Legend:</b> 1 = Good resistance   3 = Limited resistance   4 = Not recommended					
Materials	Urethane	PVC (non FDA)	Silicone	Polyester	Urethane (hard)
Calcium nitrate	1	1	1	1	1
Calcium sulphate	1	1	1	1	1
Carbon disulphide	4	4	3	4	4
Carbon tetrachloride	3	4	4	4	3
Chlorine, liquid	4	4	4	4	4
Chlorine, gaseous, dry	4	4	4	4	4
Chlorine, gaseous, wet	4	4	4	4	4
Chlorine water	4	1	3	4	3
Chlorobenzene	4	4	4	4	4
Chloroform	4	4	4	4	4
Chlorosulphonic acid	4	4	4	4	4
Chromic acid	4	4	4	4	4
Chromium salts	1	1	1	1	1
Chromium trioxide	1	1	1	1	1
Citric acid	4	1	1	1	4
Copper salts	1	1	1	1	3
Cresols	3	3	3	4	3
Cresols, aqueous	3	3	3	3	3
Cyclohexane	4	4	4	1	4
Cyclohexanol	4	4	4	4	4
Cyclohexanone	4	4	4	4	4
Decahydronaphthalene	4	4	4	4	4
Dibutyl phthalate	3	4	1	4	4
Diethyl ether	4	4	4	4	4
Dimethyl formamide	4	4	3	4	4
1.4 Dioxan	4	4	3	4	4
Ether	4	4	4	4	4
Ethyl acetate	4	4	4	3	4
Ethyl alcohol, non-denatured 100%	1	3	3	1	1
Ethyl alcohol, non-denatured 96%	1	3	3	1	1
Ethyl alcohol, non-denatured 50%	1	3	3	1	1
Ethyl alcohol, non-denatured 10%	1	3	1	1	1
Ethyl benzene	4	4	4	4	4
Ethyl chloride	4	4	4	4	4
Ethylene chloride	4	4	4	4	4
2-Ethyl hexanol	1	3	1	1	1
Formaldehyde	1	3	1	3	1
Formic acid, dilute	4	1	1	3	3
Glycerine	1	1	1	1	1
Glycerine, aqueous	1	1	1	1	1
Glycol	1	3	1	1	1
Glycol, aqueous	1	1	1	1	1
Heptane	1	3	3	1	1
Hexane	1	3	3	1	1
Hydrochloric acid, conc.	3	1	4	3	1





<b>Legend:</b> 1 = Good resistance   3 = Limited resistance   4 = Not recommended					
Materials	Urethane	PVC (non FDA)	Silicone	Polyester	Urethane (hard)
Hydrochloric acid 10 %	3	1	1	1	1
Hydrofluoric acid 40 %	4	4	4	4	4
Hydrogen chloride, gaseous, dilute	3	1	3	3	1
Hydrogen chloride, gaseous, conc.	3	3	3	4	3
Hydrogen peroxide 10%	3	1	1	3	1
Hydrogen sulphide	3	3	3	3	3
Iron salts (sulphate)	1	1	1	1	1
Isooctane	1	3	3	1	1
Isopropyl alcohol	1	3	1	1	1
Lactic acid	1	3	1	1	1
Magnesium salts	1	1	1	1	1
Mercury	1	1	1	1	1
Mercury salts	1	1	1	1	1
Methyl alcohol, aqueous 50 %	3	3	1	1	1
Methyl alcohol (methanol)	1	3	1	1	1
Methyl ethyl ketone	4	4	1	3	4
Methylene chloride	4	4	4	4	4
Naphthalene	3	4	4	3	4
Nickel salts	1	1	1	1	1
Nitric acid	4	3	4	4	4
Nitrobenzene	4	4	1	3	4
Octane (see also isooctane)	1	3	4	1	1
Oleic acid	1	3	4	1	1
Oxalic acid	1	1	1	1	1
Ozone	1	3	3	1	3
Perchloroethylene	4	4	4	4	4
Phenol	3	3	1	4	3
Phenol, aqueous	4	3	1	4	3
Phosphoric acid 85 %	4	1	1	3	1
Phosphoric acid 50 %	1	1	1	1	1
Phosphoric acid 10 %	1	1	1	1	1
Phosphorus pentoxide	1	1	1	1	1
Potash lye 50 %	4	1	4	3	4
Potash lye 25 %	4	1	4	1	4
Potash lye 10 %	4	1	3	1	4
Potassium carbonate (potash)	1	1	1	1	1
Potassium chlorate	1	1	1	1	1
Potassium chloride	1	1	1	1	1
Potassium dichromate	1	1	1	1	1
Potassium iodide	1	1	1	1	1
Potassium nitrate	1	1	1	1	1
Potassium permanganate	1	1	1	1	1
Potassium persulphate	1	1	1	1	1
Potassium sulphate	1	1	1	1	1
Propane, gaseous	1	1	1	1	1





<b>Legend:</b> 1 = Good resistance   3 = Limited resistance   4 = Not recommended					
Materials	Urethane	PVC (non FDA)	Silicone	Polyester	Urethane (hard)
Propane, liquid	1	1	1	1	1
Pyridine	4	4	3	4	4
Silver salts	1	1	1	1	1
Soda lye 50% (see potash lye)	4	1	4	4	4
Soda lye 25%	4	1	4	3	4
Soda lye 10%	4	1	3	1	4
Sodium bisulphite	1	1	1	1	1
Sodium carbonate (natron)	1	1	1	1	1
Sodium carbonate (soda)	1	1	1	1	1
Sodium chlorate	1	1	1	1	1
Sodium chloride (common salt)	1	1	1	1	1
Sodium hydroxide (caustic soda)	4	1	4	1	4
Sodium hypochlorite	1	1	1	3	1
Sodium nitrate	1	1	1	1	1
Sodium nitrite	1	1	1	1	1
Sodium perborate	1	1	1	1	1
Sodium phosphate	1	1	1	1	1
Sodium sulphate (Glauber salt)	1	1	1	1	1
Sodium sulphide	1	1	1	1	1
Sodium sulphite	1	1	1	1	1
Sodium thiosulphate (fixing salt)	1	1	1	1	1
Stearic acid	1	1	1	1	1
Succinic acid	1	1	1	1	1
Sulphur	1	1	1	1	1
Sulphur dioxide	3	3	3	3	4
Sulphuric acid 96%	4	4	4	4	4
Sulphuric acid 50%	4	3	4	3	4
Sulphuric acid 25%	4	3	3	1	3
Sulphuric acid 10%	4	3	1	1	3
Tartaric acids	1	1	1	1	1
Tetrachloroethane	4	4	4	4	4
Tetrachloroethylene (perchloroethylene)	4	4	4	4	4
Tetrahydrofuran	4	4	4	4	4
Tetrahydronaphthalene	4	4	4	4	4
Thiophene	4	4	4	4	4
Tin II chlorides	1	1	1	1	1
Toluene	4	4	4	4	4
Trichloroethylene	4	4	4	4	4
Urea, aqueous	1	1	1	1	1
Water	1	1	1	1	1
Xylene	4	4	4	3	4
Zinc salts	1	1	1	1	1





1 = Good resistanc		<b>egend:</b> ed resistance	4 = Not rec	ommended	
Materials	Urethane	PVC (non FDA)	Silicone	Polyester	Urethane (hard)
Products					
Alum	1	1	1	1	1
Anti-freeze*	1	3	1	1	1
Aqua regia	4	4	4	4	4
Asphalt	1	3	3	1	1
Battery acid	4	4	4	4	4
Benzine	1	3	3	1	1
Bleaching lye (12.5%)	1	1	1	1	3
Bone oil	1	3	4	1	1
Borax	1	1	1	1	1
Brake fluid* Bosch	1	3	1	1	3
Brake fluid* Skydrol	4	4	3	4	4
Chloride of lime (aqueous suspension)	1	1	1	1	3
Chlorine (active)	4	4	4	4	4
Chrome baths* (technical)	1	3	3	1	1
Chromosulphuric acid	4	4	4	4	4
Cresol solution	3	3	4	4	4
Diesel oil	1	1	3	1	1
Fertilizer salts	1	1	1	1	1
Fixing salt	1	1	1	1	1
Floor wax	1	3	3	1	1
Formalin	1	3	3	1	1
Fuel oils*	1	1	3	1	1
Furniture polish*	1	3	3	1	1
Gypsum	1	1	1	1	1
Ink*	1	1	1	1	1
Linseed oil	1	3	1	1	1
Litex (styrene)	4	4	4	4	4
Mineral oils (non-aromatic)	1	1	1	1	1
Moth balls	3	4	3	3	3
Diesel oil*	1	1	3	1	1
Petrol (gasoline) DIN51635	1	3	3	1	1
Petrol, regular	1	3	3	1	1
Petrol, super	3	4	3	1	3
Motor oils*	1	1	1	1	1
Oil no. 3 (ASTM)	1	3	1	1	1
Oleum	4	4	4	4	4
Paraffin	1	1	1	1	1
Paraffin oil	1	1	1	1	1
Petroleum	1	3	3	1	1
Petroleum ether	1	3	4	1	1
Photographic developer	1	1	1	1	1



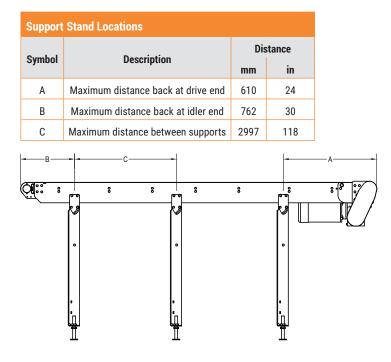


### **Bearings and Lubrication:**

All bearings on AquaGard 7350 Series Conveyors are sealed and lubricated for life. No grease zerk is available and no greasing over the life of the product is required.

All gearmotors used on AquaGard 7350 Series conveyor are sealed and may be mounted in any position. Changing gear oil lubrication may be needed over the life of the gearbox. Please check the appropriate gearmotor manual for instructions.

### **Support Stand Locations:**

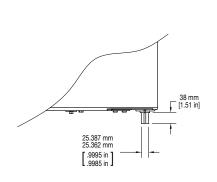


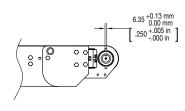


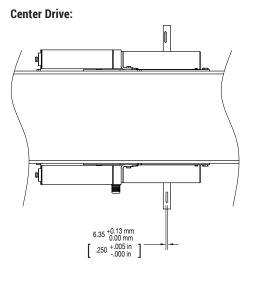


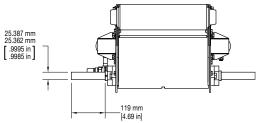
### **Conveyor Drive Shaft Tolerances:**

#### End Drive, Belted and Modular Belt:









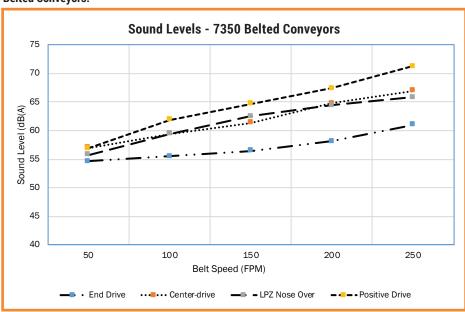




### **Conveyor Noise Level (Decibel Ratings)**

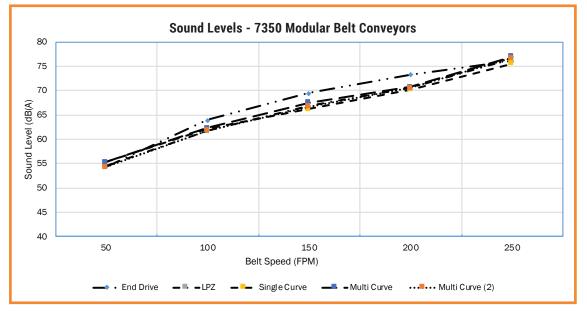
The actual noise level generated by the conveyor depends on several factors; the installation configuration, the product running on the conveyor, the surrounding equipment, the conveyor options and belt speed. The noise level generated by the conveyor is typically less than the general noise level of factory equipment.

Generally a higher belt speed will result in a higher noise level. In addition modular belt conveyors will run slightly louder than belted conveyors. The following charts provide basic decibel ratings for a typical conveyor arrangements.



#### Belted Conveyors:

#### **Modular Belt Conveyors:**







### **Maximum Load Capacity**

The following Load Capacity Charts **do not** take into account the conveyor configuration, length or gearmotor selection. Your specific conveyor may not be capable of the maximum load condition. Please confirm your maximum load per application with the Dorner DTools program at www.dornerconveyors.com.

All load capacities shown are non-accumulated evenly distributed loads.

7350 Series Belted End Drive Conveyor						
Belt	Width	Pulling	the Belt	Pushing	the Belt	
mm	in	Kg	Lb	Kg	Lb	
152	6	114	250	57	125	
203	8	136	300	68	150	
254	10	159	350	80	175	
305	12	182	400	91	200	
356	14	205	450	103	225	
406	16	227	500	114	250	
457	18	227	500	114	250	
508	20	227	500	114	250	
559	22	227	500	114	250	
610	24	227	500	114	250	
660	26	227	500	114	250	
711	28	227	500	114	250	
762	30	227	500	114	250	
813	32	227	500	114	250	
864	34	227	500	114	250	
914	36	227	500	114	250	

#### 7350 Series Belted Center Drive Conveyor

1550 Selles Delleu Geliter Diwe Golweyol					
Belt	Width	Pulling the Belt			
mm	in	Kg	Lb		
152	6	114	250		
203	8	136	300		
254	10	159	350		
305	12	182	400		
356	14	205	450		
406	16	227	500		
457	18	227	500		
508	20	227	500		
559	22	227	500		
610	24	227	500		
660	26	227	500		
711	28	227	500		
762	30	227	500		
813	32	227	500		
864	34	227	500		
914	36	227	500		





## Maximum Load Capacity (continued)

7350 Series Modular Belt Conveyor			
Belt Width		Pulling the Belt	
mm	in	Kg	Lb
203	8	205	450
254	10	227	500
305	12	250	550
356	14	273	600
406	16	295	650
457	18	318	700
508	20	341	750
559	22	341	750
610	24	341	750
660	26	341	750
711	28	341	750
762	30	341	750
813	32	341	750
864	34	341	750
914	36	341	750
914	36	227	500

7350 Series Belted Z-Frame Conveyor					
Belt	Width	Pulling the Belt		Pushing	the Belt
mm	in	Kg	Lb	Kg	Lb
152	6	45	100	23	50
203	8	45	100	23	50
254	10	45	100	23	50
305	12	45	100	23	50
356	14	45	100	23	50
406	16	45	100	23	50
457	18	45	100	23	50
508	20	45	100	23	50
559	22	45	100	23	50
610	24	45	100	23	50



## Maximum Load Capacity (continued)

7350 Series Modular Belt Z-Frame Conveyor			
Belt \	Belt Width		the Belt
mm	in	Kg	Lb
203	8	45	100
254	10	45	100
305	12	45	100
356	14	45	100
406	16	45	100
457	18	45	100
508	20	45	100
559	22	45	100
610	24	45	100

7350 Series Modular Belt Curve Conveyor			
Belt Width		Pulling the Belt	
mm	in	Kg	Lb
152	6	182	400
305	12	227	500
457	18	227	500
610	24	227	500

7350 Series Positive Drive Belt Conveyor			
Belt	Belt Width		the Belt
mm	in	Kg	Lb
203	8	136	300
254	10	159	350
305	12	182	400
356	14	205	450
406	16	227	500
457	18	227	500
508	20	227	500
559	22	227	500
610	24	227	500
660	26	227	500
711	28	227	500
762	30	227	500
813	32	227	500
864	34	227	500
914	36	227	500





### No Load Torque:

No load torque is the amount of torque required to turn an empty conveyor. The torque value varies by conveyor length and configuration. The following charts provide basic values for an average length conveyor. Your specific conveyor may not be have a higher value. Please confirm your no load torque and maximum load per application with the Dorner DTools program at www.dornerconveyors.com.

Belted Conveyor No Load Torque			
Belt Width mm (in)	Belted End Drive Nm (in-lbs)	Belted Center Drive Nm (in-lbs)	
152 (6)	0.9 (8)	7.9 (70)	
203 (8)	1.1 (10)	8.6 (76)	
254 (10)	1.5 (13)	9.2 (81)	
305 (12)	1.7 (15)	9.9 (88)	
356 (14)	2.3 (20)	10.2 (90)	
406 (16)	2.3 (20)	10.2 (90)	
457 (18)	2.8 (25)	10.5 (93)	
508 (20)	3.1 (27)	10.9 (96)	
559 (22)	3.1 (27)	11.2 (99)	
610 (24)	3.4 (30)	11.9 (105)	
660 (26)	3.7 (33)	12.5 (111)	
711 (28)	3.7 (33)	12.5 (111)	
762 (30)	4 (35)	13.2 (117)	
813 (32)	4.3 (38)	13.8 (122)	
864 (34)	4.3 (38)	13.8 (122)	
914 (36)	4.3 (38)	14.8 (131)	

#### Straight Modular Belt Conveyor:

The no load torque on modular belt straight conveyors is dependent on the conveyor length and width. Use the following formula to determine no load torque. Where:

L = conveyor length (mm) W = conveyor width (mm) BW = belt weight (kg) = (W/1000)\*((L\*2)/1000)\*8.7 kg/square meter PD = sprocket pitch diameter (mm) = 99 mm

No load Torque (Nm) = BW\*(0.3)\*((PD/2)/1000)\*9.8

Example: 7350 V2 Series Straight Modular Belt, 610 mm wide x 7000 mm long Belt weight (kg) = (610/1000)\*((7000\*2)/1000)\*8.7 = 74.3 kgNo load torque (Nm) = 74.3\*0.3\*((99/2)/1000)\*9.8 = 10.8 NmNo load torque (in-lb) = (Nm)\*8.851 = 10.8\*8.851 = 95.4 in-lb

#### **Curve Modular Belt Conveyor:**

The torque calculations for curve conveyors are complicated and are very dependent on the conveyor save and configuration. Please confirm your no load torque and maximum load per application with the Dorner DTools program at www.dornerconveyors.com.





### **Belting and Coefficient of Friction**

The coefficient of friction is used to determine the load a conveyor can carry. It effects a conveyor in two ways: the friction that exists between the conveyor belt and the bed surface, and if accumulating product, the friction that exists between the conveyor top surface and the product.

#### Coefficient of Friction, between the bottom of the conveyor belt and bed surface:

Product	Surfaces	Application Condition	<b>Coefficient of Friction</b>
7350 Series Belted	Impregnated polyester fabric to anod- ized aluminum bed plate	Dry	0.33
7350 Series Modular Belt	Acetal modular belt to UHMW wear strips	Dry	0.30

#### Coefficient of Friction, between the top surface of conveyor belt and product:

7350 Series Belt				
The following table provides the coefficient of friction between steel product and various belt top surfaces. All factors below are assuming dry conditions.				
Belt Number Top Surface Material and Type Coefficient of Friction				
01, 54, 58, 68, 73, 81	Smooth hard urethane	0.40		
02, 59, 60, 61, 66, 72, 76, 79 Smooth medium urethane 0.50				
03, 19, 55, 69, 75, 77, 78, 80 Glossy soft urethane >1.0, do not accumulate				
05, 06, 50, 53, 63 Impregnated polyester fabric 0.20				
08, 18, 64 PVC, Very High friction >1.0, do not accumulate				

#### 7350 Series Modular Belt

The following table provides the coefficient of friction between acetal modular belt and various products. All factors below are assuming dry conditions.

Product Being Accumulated	Typical Coefficient of Friction
Steel	0.25
Glass	0.20
Aluminum	0.25
Plastic	0.25
Wood	0.30
Paper and Cardboard	0.30





### **Calculating Conveyor Load Capacity**

There are several factor that effect the overall conveyor load of AquaGard 7350 Series Conveyor. These include:

- Conveyor size and configuration
- Conveyor speed
- Application temperature
- Product accumulation
- · Number of starts and stops per hour

Located online at www.dornerconveyors.com is the Dorner conveyor configuration tool, DTools. This tool allows you to configure your conveyor layout and determine the maximum load capacity for the conveyor. It is suggested that this program be used to calculate the conveyor load as the calculation is quite complicated. This configuration program however does not take into account temperature, dirty conditions, and conveyor starts and stops. If these conditions are part of your application please use the load reducing factors as shown below.

Temperature Factor				
Ambient temperature can negatively affect the capacity of the conveyor.				
Temperature F	Temperature C	Temperature Factor		
-4	-20	1.0		
32	0	1.0		
68	20	1.0		
104	40	0.9		
140	60	0.8		

Maximum Load = (Load from DTools)(Temperature Factor)(Start/Stop Factor)

#### Start / Stop Factor

Frequent Start / Stops of the conveyor can negatively affect the capacity of the conveyor. All start / stop applications must use a soft start mechanism such as a Frequency Inverter with a 1 second acceleration cycle.

Application Condition	Start / Stop Factor
Continuous Run or 1 start/stop per hour	1.0
Maximum 10 starts/stop per hour	0.83
Maximum 30 starts/stop per hour	0.70
Greater than 30 starts/stop per hour	0.62





### **Calculating Conveyor Belt Speed:**

#### AquaGard 7350 Series Conveyors:

To calculate the conveyor belt speed you need to know the following factors:

- DR = Drive roller diameter or drive sprocket pitch diameter (mm)
  - = 89 mm (3.5 in) for end and center drive belted conveyors
  - = 99 mm (3.9 in) for end drive modular belt conveyors
  - = 99 mm (3.9 in) for end positive drive belt conveyors
- TD = Number of teeth of pulley located at drive roller (if equipped)
- TG = Number of teeth of pulley located at gearmotor (if equipped)
- RPM = Revolutions per minute of gearmotor

Belt Speed (m/min) = RPM\*(TD/TG)\*(DR/1000)\*3.14

#### Example:

AquaGard 7350 Series Belted End Drive, bottom mount with a 36 tooth pulley located at the drive roller and a 30 tooth pulley located on the gearmotor. The gearmotor is a 10:1 ratio with 173 rpm output.

Belt Speed (m/min) = (173)\*(36/30)\*(89/1000)\*3.14 Belt speed (m/min) = 58 m/min Belt speed (ft/min) = 58 m/min\*(3.28) = 190 ft/min No load torque (Nm) = 74.3\*0.3\*((99/2)/1000) = 1.1 Nm No load torque (in-lb) = (Nm)\*8.851 = 1.1\*8.851 = 9.77 in-lb





### Dorner AquaGard Conveyors are Best for:

- Baking
- Packaged Foods
- Pet Foods
- 7200 & 7300 Series Specifications\*
  - Belted and Cleated Belt Models
  - Loads up to 27 kg (60 lbs)
  - Widths: 44 mm (1.75 in) to 457 mm (18 in)

  - · Available in straights only

Snack Foods

Secondary Packaging

Tight Transfers

- Confectionary
- Elevation Changes
- And More!



### 7350 Series Specifications

- · Belted, Cleated Belt, Modular Belt, Modular Cleated Belt Models and Positive Drive Options
- Loads up to 341 kg (750 lbs)
- Widths: 152 mm (6 in) to 914 mm (36 in)
- Lengths: 914 mm (3 ft) to 25,000 mm (82 ft)
- FDA approved belting and plastic components
- 304 Stainless Steel frame

Straights

Available in straights, curves or Z-Frame configurations



Curves (Modular Belt Only)

LPZ (Z-Frames), Nose Over



& Horizontal to Incline



Options



Nose Bar Transfers Powered Transfers Variety of Guiding Options Other options available including Roller Transfers, Chutes, Drip Pans, Formed Angle Stands, Hoppers and more. \*Please refer to the AquaGard 7200 & 7300 Series manual for product information.







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