ENGINEERING MANUAL

Superior V-Guided Belt Tracking

Universal Motor & Mounting Package

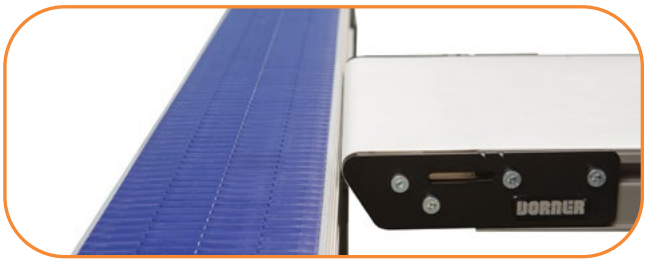
Fast & Simple to Use Online Configurator

Industry-Best Product Transfers

2200 LOW PROFILE
2200 PRECISION MOVE
2700 MEDIUM DUTY

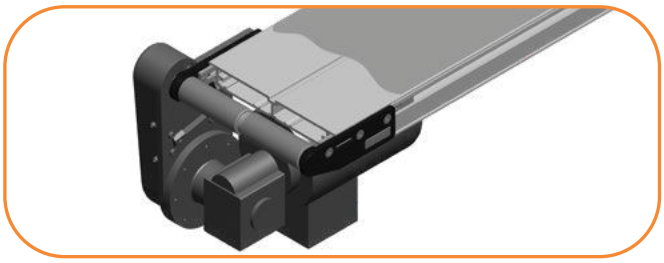
DORNER®
By Columbus McKinnon

English



High Speed Nose Bar Transfers

- 16 mm Nose Bar safely transfers small parts at speeds up to 61 m/min and features V-Guided belting for accurate belt tracking



V-Guided Belt Tracking

- The industries first low profile V-Guided conveyor, eliminates startup belt tracking and keeps the belt running straight

Sleek Frame Designs

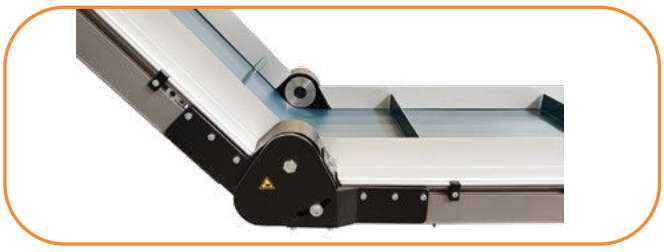
- Sturdy single piece frame construction with a universal T-Slot allows for fast and simple attachment of accessories and guiding with a variety of industry available hardware

Precision Move

- Provides accurate alignment of both time and distance to move products efficiently in assembly automation applications

2700 Medium Duty Conveyors

- 60 mm (2.4 in) roller diameter, widths from 203 mm (8 in) to 914 mm (36 in), larger frame and bearings for greater load capacity



Adjustable Angle LPZs

- Sleek, low profile Z-Frame Conveyors are ideal for product elevation changes and can easily adjust to fit machinery layout

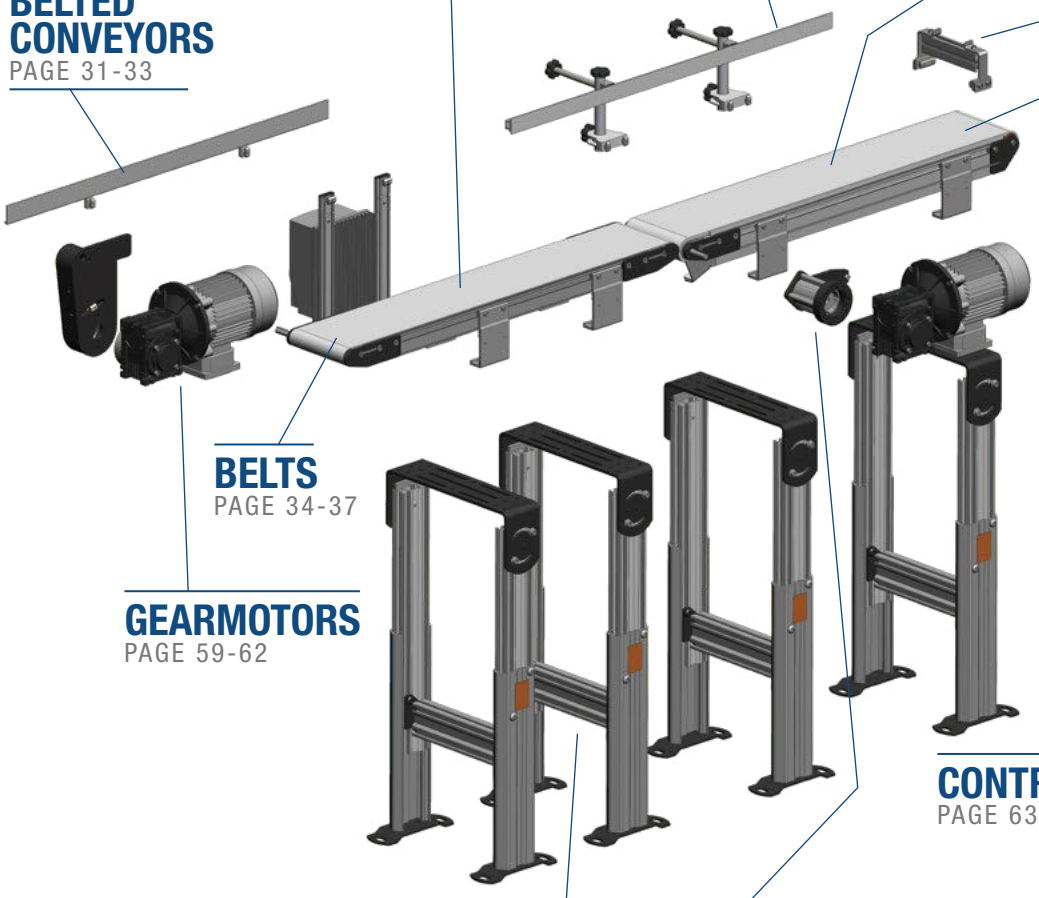
The Benefits of a Dorner 2200/2700 Series Conveyor

Low Maintenance

- Dorners Industry Best V-Guiding provides positive belt tracking, even under demanding side load applications
- Precise rack and pinion belt tensioning allows for fast and simple tensioning
- Sealed for life bearings reduces maintenance

Time Saving

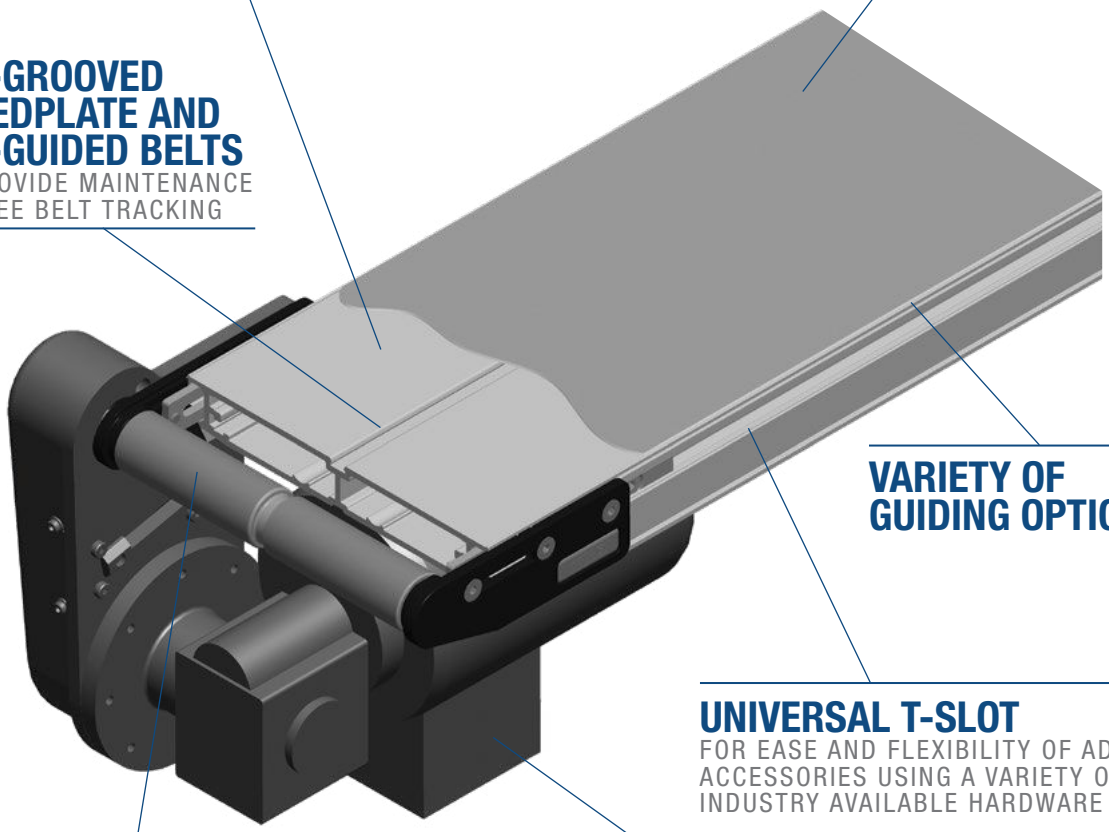
- Dorner's online configurator engineers simple or complex conveyors to meet your needs in minutes
- The industry leading tool delivers a complete 3D CAD assembly model for instant validation of fit
- Dorner provides the industry's fastest lead times with conveyors shipping in as little as 3 business days



HARD ANODIZED ALUMINUM BEDPLATE
PROVIDES DURABILITY WITHOUT ADDING WEIGHT

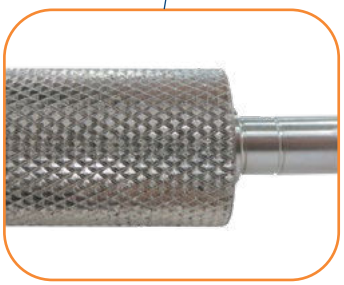
URETHANE BELTING
FOR LONG LIFE AND VIRTUALLY INVISIBLE BELT SPLICE

V-GROOVED BEDPLATE AND V-GUIDED BELTS
PROVIDE MAINTENANCE FREE BELT TRACKING



VARIETY OF GUIDING OPTIONS

UNIVERSAL T-SLOT
FOR EASE AND FLEXIBILITY OF ADDING ACCESSORIES USING A VARIETY OF INDUSTRY AVAILABLE HARDWARE



DIAMOND KNURLED DRIVE ROLLER
FOR INCREASED LOAD CAPACITY

GEARMOTOR
SEALED GEARMOTORS IN SIZES FROM LIGHT LOAD, STANDARD LOAD AND HEAVY LOAD TO MEET YOUR APPLICATION NEEDS.

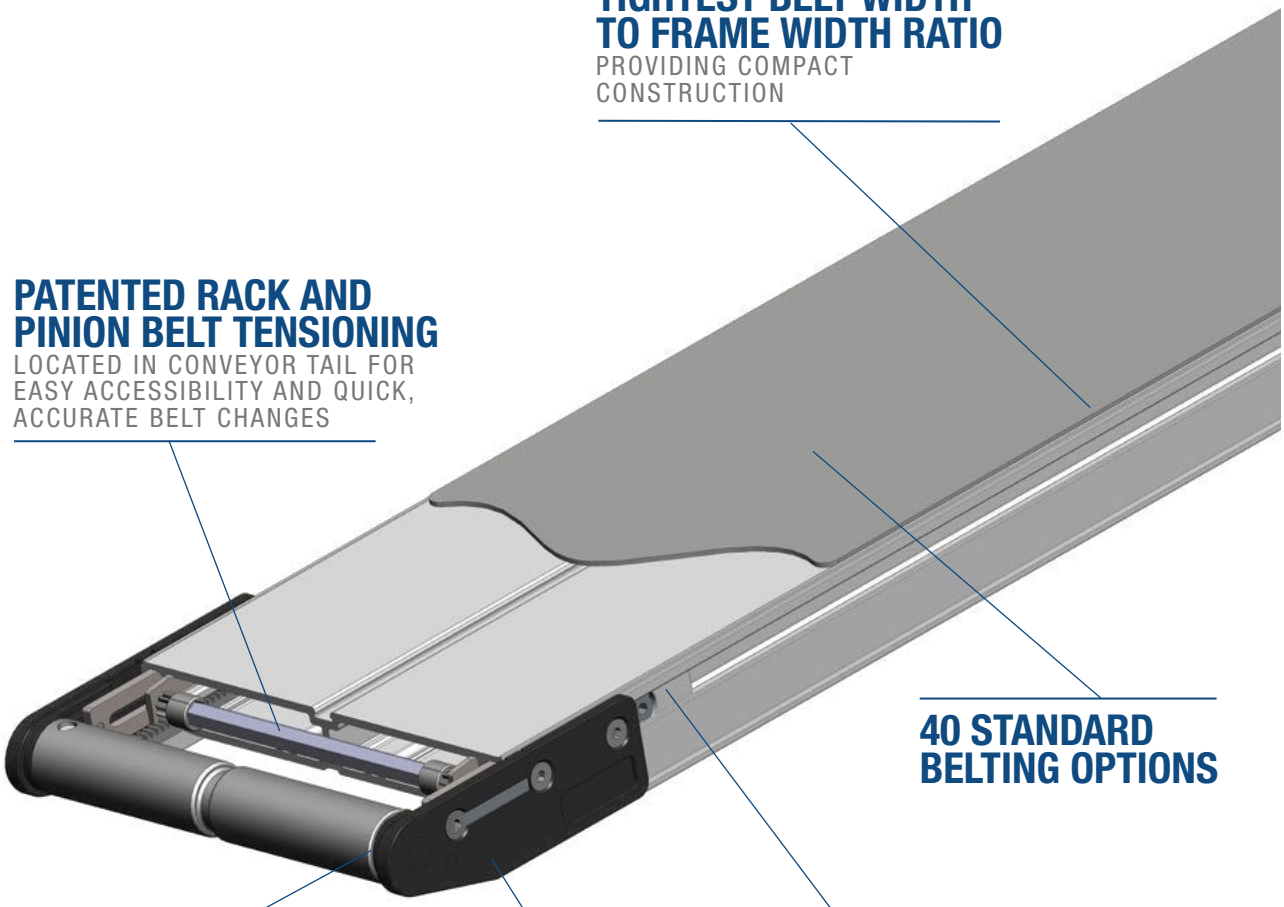
Center Drive

Mid Drive

CENTER AND MID DRIVE OPTIONS
FREES UP SPACE ON BOTH ENDS OF THE CONVEYOR AND INCREASES LOAD CAPACITY

TIGHTEST BELT WIDTH TO FRAME WIDTH RATIO
PROVIDING COMPACT CONSTRUCTION

PATENTED RACK AND PINION BELT TENSIONING
LOCATED IN CONVEYOR TAIL FOR EASY ACCESSIBILITY AND QUICK, ACCURATE BELT CHANGES



40 STANDARD BELTING OPTIONS

SPHERICAL, SEALED BALL BEARINGS
FOR LONG, MAINTENANCE FREE LIFE

TAIL PLATES
MINIMAL LENGTH TAIL PLATES FOR MAXIMUM T-SLOT EXPOSURE

PRECISE CAM TRACKING
FOR FINE ADJUSTMENTS OF NON V-GUIDED BELTS

16 MM NOSEBAR TAIL OPTIONS
FOR SMALL PART TRANSFERS

CENTER DRIVES
EQUIPPED WITH GAS SPRING BELT TENSION

Specifications

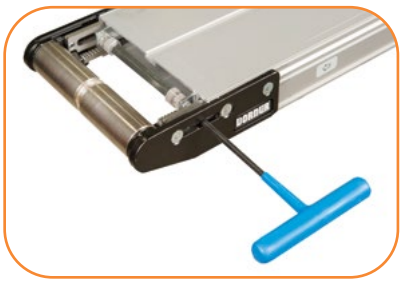
- Loads up to 36 kg*
- Belt speeds up to 122 m/min
- Belt widths: 44 mm to 610 mm
- Conveyor lengths: 457 mm to 5,486 mm
- 32 mm diameter drive and idler pulleys turn approximately 107 mm of belt per revolution
- V-groove bedplate with guided belt provides belt tracking, even under demanding side load applications
  - Cam tracking standard on Non V-Guided belt conveyors
- 12 mm diameter integral drive shaft with auxiliary shaft location options

OPTIONAL:
Fixed and Tension Tail Shafts and Sensor Accessories

Easily allows for common driven applications or monitoring devices to be added

OPTIONAL:
16 mm High Speed Nose Bar Transfer Tail

Available at non-driven end. V-guide supported. Speeds up to 61 m/min



STANDARD FEATURE:
Rack and Pinion

Allows the tail section to be easily slid back for quick belt adjustments and removal

2200 Series Belt End Drive Conveyor

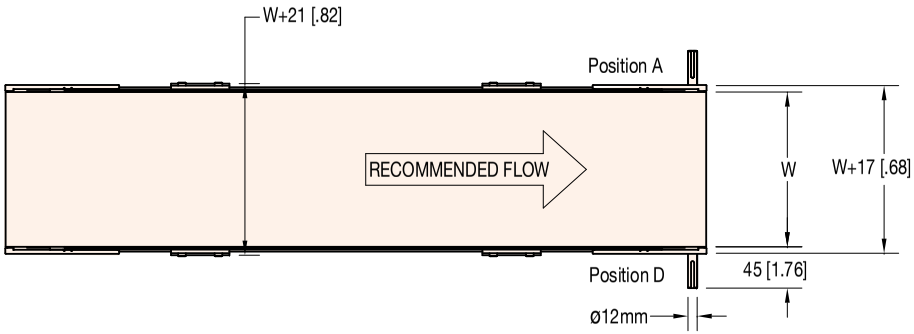
22 ED M WW - LLLL 1 0 A PP PP BB - X T¹ T² T³ T⁴

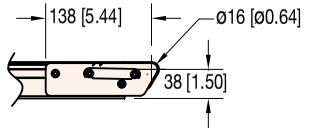
- **Belted ED**
- **Documentation Language:** **U** = Europe English, **D** = German, **F** = French, **S** = Spanish
- **Conveyor Width Reference**
- **Conveyor Length Reference:** LL.LL in feet
- **V-Guide & Mounting Bracket Options:**
  - **1** = Non V-Guided Belt, includes mounting brackets and return rollers
  - **2** = V-Guided Belt, includes mounting brackets and return rollers
  - **3** = Non V-Guided Belt, without mounting brackets and return rollers
  - **4** = V-Guided Belt, without mounting brackets and return rollers
  - **5** = Non V-Guided Belt, without mounting brackets, includes return rollers
  - **6** = V-Guided Belt, without mounting brackets, includes return rollers
- **Idler Tail Type:** **0** = Standard 32 mm, **5** = Nose Bar 16 mm
- **Flow/Drive Shaft Position:** **A, B, C or D**
- **Profile (A side)**
- **Profile (D side)**
- **Belt Type**
- **Conveyor Tail Options X** (if required) *See Drive Shaft Position Chart on next page
  - **A or B** = Drive Shaft (T¹ only)
  - **C or D** = Drive Shaft (T² only)
  - **0** = No Shaft
  - **K** = Keyed Auxiliary Shaft
  - **S** = Stub Shaft
  - **M** = Magnet Location (T³ or T⁴ only)

Profile:
01 – Low side
04 – 76 mm (3") aluminum high side
05 – 38 mm (1 1/2") aluminum high side
09 – 13 mm (1/2") alum
10 – Extruded UHMW
13 – Fully adjustable guiding - 20 mm (0.8") UHMW
14 – Tool-less fully adjustable guiding - 20 mm (0.8") UHMW
33 – Fully adjustable guiding - 53 mm (2.1") UHMW
34 – Tool-less fully adjustable guiding - 53 mm (2.1") UHMW
43 – Fully adjustable guiding - Aluminum Face
44 – Tool-less fully adjustable guiding - Aluminum Face

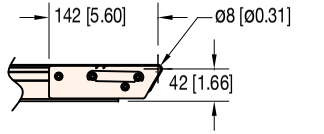
* Conveyor load capacity depends on conveyor size, incline, motor position, accumulated loads and other factors.

Order gearmotor mounting packages and gearmotors separately, see pages 48-62
For support stands and accessories, see page 66-67

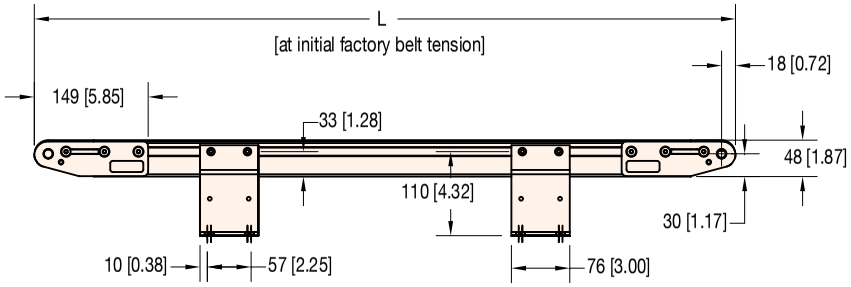


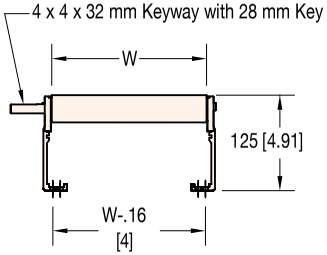


OPTIONAL 16 mm (5/8 in) NOSE BAR TRANSFER



OPTIONAL 8 mm (5/16 in) NOSE BAR TRANSFER



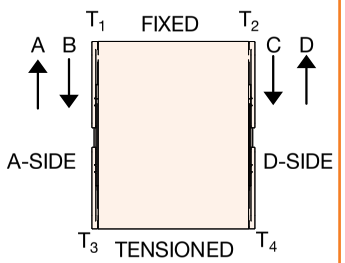


W = Conveyor Belt Width **Dim = mm** (in)

STANDARD SIZES												
Conveyor Width Reference	02	04	06	08	10	12	14	16	18	20	22	24
Conveyor Belt Width (W)	44 mm	95 mm	152 mm	203 mm	254 mm	305 mm	356 mm	406 mm	457 mm	508 mm	559 mm	610 mm
Conveyor Length Reference	0150	0001 increments **up to...**									1800	
Conveyor Length (L)	457 mm	3 mm increments **up to...**									5,486mm*	

NOTE: Lengths over 3657 mm available in widths 152 mm and wider only.
NOTE: Conveyor longer than 3,658 mm will be constructed using two equal length frames.
***NOTE:** Max length varies based on tail section.

DRIVE SHAFT POSITION



Since belts are being pulled, positions A & D are preferred. Pushing belts (B & C) reduce conveyor load capacity by approximately 66%.

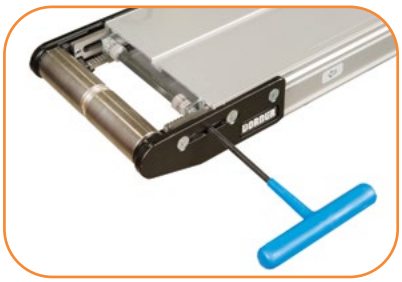
Center Drive

Compact Mid Drive
Small footprint to fit in tight spaces

Specifications

- Loads up to 54 kg* (Center Drive)
  Loads up to 36 kg* (Mid Drive)
- Belt speeds up to 122 m/min
- Belt widths: 44 mm to 610 mm
- Conveyor lengths: 457 mm to 7,315 mm
- 32 mm diameter drive and idler pulleys turn approximately 107 mm of belt per revolution
- V-groove bedplate with guided belt provides belt tracking, even under demanding side load applications
  - Cam tracking standard on Non V-Guided belt conveyors
- 12 mm diameter integral drive shaft with auxiliary shaft location options

OPTIONAL:
16 mm High Speed Nose Bar Transfer Tail
Available at non-driven end. V-guide supported. Speeds up to 61 m/min



STANDARD FEATURE:
Rack and Pinion
Allows the tail section to be easily slid back for quick belt adjustments and removal

Center Drive
Equipped with gas spring belt tension

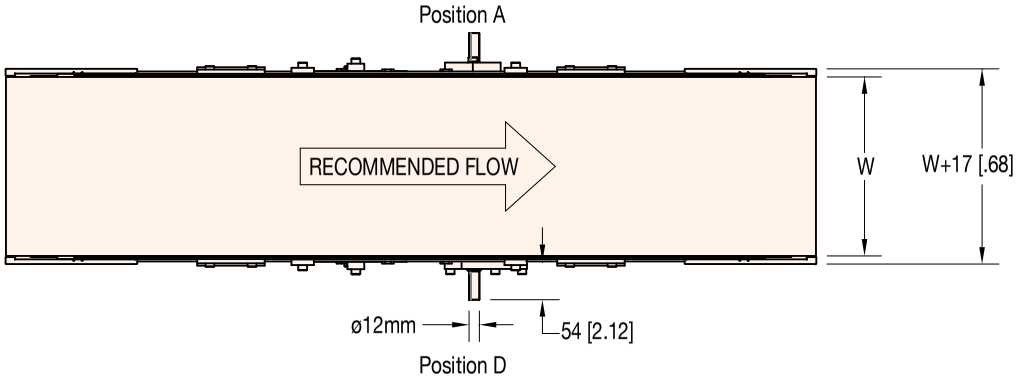
2200 Series Belt Mid/Center Drive Conveyor

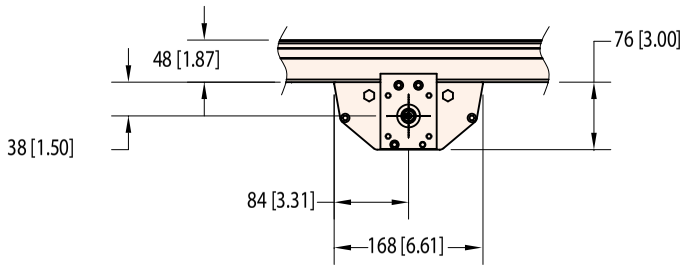
22 CD M WW - LLLL 1 0 1 A PP PP BB - X T¹ T² T³ T⁴

- **Conveyor Tail Options X** (if required) *See Drive Shaft Position Chart on next page
  - **0** = No Shaft
  - **K** = Keyed Auxiliary Shaft
  - **S** = Stub Shaft
  - **M** = Mag Location (T^3 or T^4 only)
- **Belt Type**
- **Profile (D side)**
- **Profile (A side)**
- **Center/Mid Drive Shaft Position:** **A** = A side, **D** = D side, **E** = Both sides
- **Tension Tail Type:** **0** = Standard 32 mm, **5** = Nose Bar 16 mm
- **Fixed Tail Type:** **0** = Standard 32 mm, **5** = Nose Bar 16 mm
- **V-Guide & Mounting Bracket Options:**
  - **1** = Non V-Guided Belt, includes mounting brackets and return rollers
  - **2** = V-Guided Belt, includes mounting brackets and return rollers
  - **3** = Non V-Guided Belt, without mounting brackets and return rollers
  - **4** = V-Guided Belt, without mounting brackets and return rollers
  - **5** = Non V-Guided Belt, without mounting brackets, includes return rollers
  - **6** = V-Guided Belt, without mounting brackets, includes return rollers
- **Conveyor Length Reference:** LL.LL in feet
- **Conveyor Width Reference**
- **Documentation Language:** **U** = Europe English, **D** = German, **F** = French, **S** = Spanish
- **Drive Type:** **CD** = Center Drive, **MD** = Mid Drive

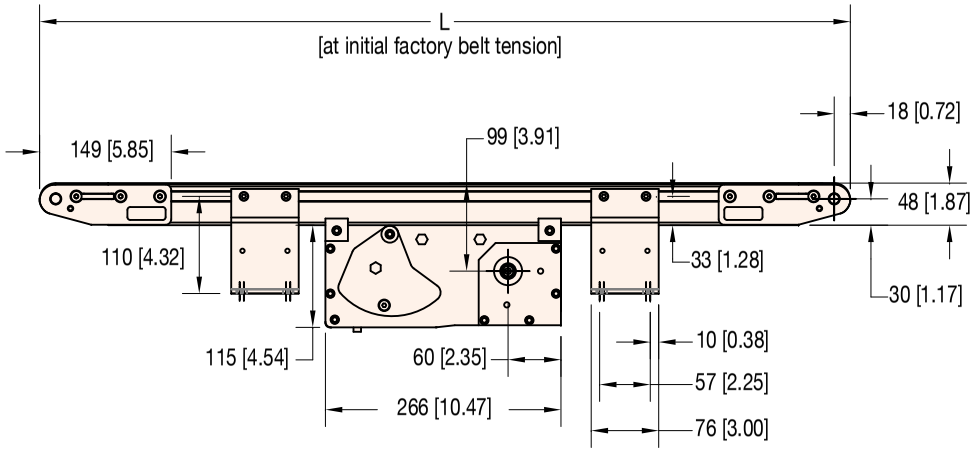
* Conveyor load capacity depends on conveyor size, incline, motor position, accumulated loads and other factors.

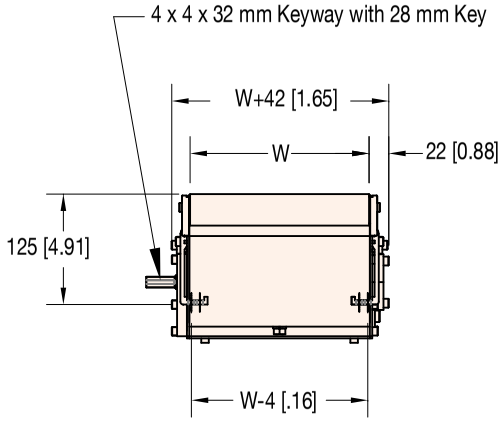
Order gearmotor mounting packages and gearmotors separately, see pages 48-62
For support stands and accessories, see page 66-67





Mid Drive





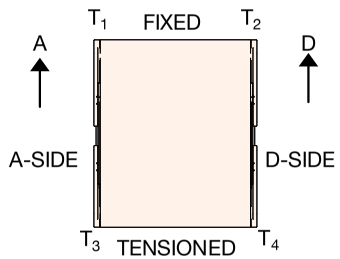
W = Conveyor Belt Width **Dim = mm** (in)

STANDARD SIZES												
Conveyor Width Reference	02	04	06	08	10	12	14	16	18	20	22	24
Conveyor Belt Width (W)	44 mm	95 mm	152 mm	203 mm	254 mm	305 mm	356 mm	406 mm	457 mm	508 mm	559 mm	610 mm
Conveyor Length Reference	0150	0001 increments **up to...**									2400	
Conveyor Length (L)	457 mm	3 mm increments **up to...**									7,315 mm*	

NOTE: Conveyors 3661 to 5486 mm in length will be constructed using two equal length frame sections.
Conveyors 5489 to 7315 mm in length will be constructed using three equal length frame sections.

***NOTE:** Max length varies based on tail section.

DRIVE SHAFT POSITION

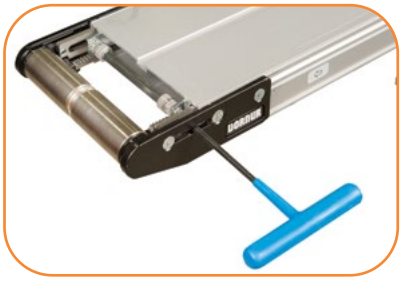


Specifications

- Loads up to 36 kg*
- Belt speeds up to 122 m/min
- Belt widths: 44 mm to 610 mm
- Conveyor lengths: 457 mm to 5,486 mm
- Standard cleats available from 20 mm to 30 mm high
- Cleats heights can be cut in 5 mm increments. 5 mm high minimum height
- 32 mm diameter drive and idler pulleys turn approximately 107 mm of belt per revolution
- V-groove bedplate with guided belt provides belt tracking, even under demanding side load applications
  - Cam tracking standard on Non V-Guided belt conveyors
- 12 mm diameter integral drive shaft with auxiliary shaft location options

OPTIONAL:
Fixed and Tension Tail Shafts and Sensor Accessories

Easily allows for common driven applications or monitoring devices to be added



STANDARD FEATURE:
Rack and Pinion

Allows the tail section to be easily slid back for quick belt adjustments and removal

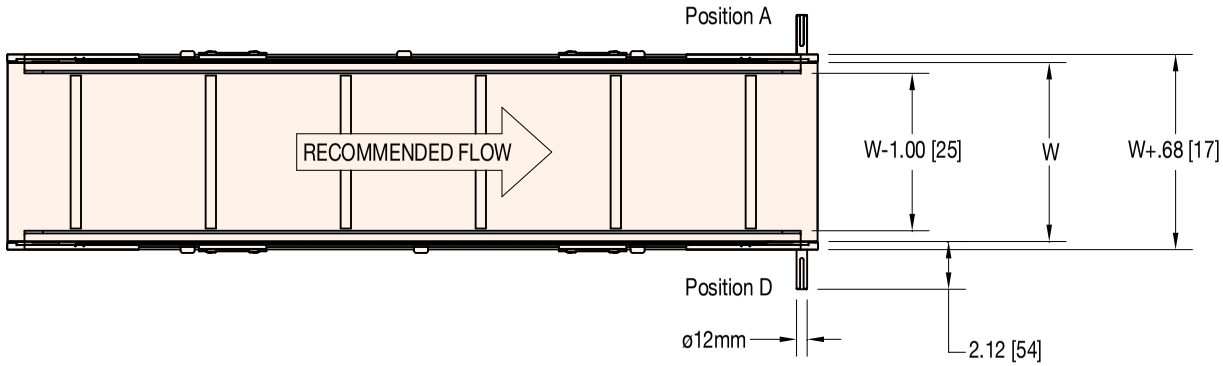
2200 Series Cleated Belt End Drive Conveyor

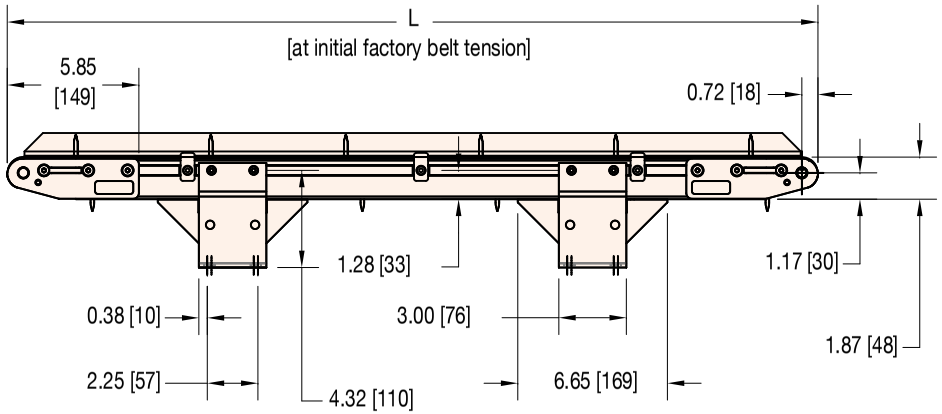
22 CT M WW - LLLL 1 A C P SSSS L - X T¹ T² T³ T⁴

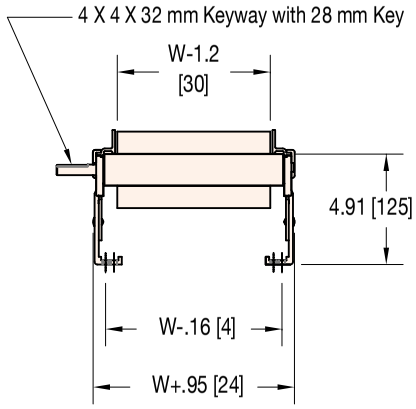
- **Conveyor Tail Options X** (if required) *See Drive Shaft Position Chart on next page
  - **A or B** = Drive Shaft (T¹ only)
  - **C or D** = Drive Shaft (T² only)
  - **O** = No Shaft
  - **K** = Keyed Auxiliary Shaft
  - **S** = Stub Shaft
  - **M** = Mag Location (T³ or T⁴ only)
- **Belt Type:** **G** = PVC, Green Belt, **W** = Urethane, White Belt
- **Cleat Spacing:** **SS.SS in inches**
- **Profile Height:** **0** = Low Side, **2** = 25 mm, **3** = 64 mm
- **Cleat Type:** **A** = 20 mm, **B** = 30 mm
- **Flow/Drive Shaft Position:** **A, B, C or D**
- **V-Guide & Mounting Bracket Options:**
  - **1** = Non V-Guided Belt, includes mounting brackets and return rollers
  - **2** = V-Guided Belt, includes mounting brackets and return rollers
  - **3** = Non V-Guided Belt, without mounting brackets and return rollers
  - **4** = V-Guided Belt, without mounting brackets and return rollers
  - **5** = Non V-Guided Belt, without mounting brackets, includes return rollers
  - **6** = V-Guided Belt, without mounting brackets, includes return rollers
- **Conveyor Length Reference:** LL.LL in feet
- **Conveyor Width Reference**
- **Documentation Language:** **U** = Europe English, **D** = German, **F** = French, **S** = Spanish
- **Cleated**

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

Order gearmotor mounting packages and gearmotors separately, see pages 48-62
For support stands and accessories, see page 66-67





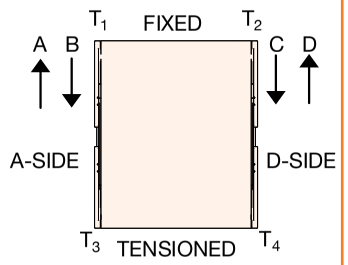


W = Conveyor Belt Width **Dim = mm** (in)

STANDARD SIZES												
Conveyor Width Reference	02	04	06	08	10	12	14	16	18	20	22	24
Conveyor Belt Width (W)	44 mm	95 mm	152 mm	203 mm	254 mm	305 mm	356 mm	406 mm	457 mm	508 mm	559 mm	610 mm
Conveyor Length Reference	0150	0001 increments **up to...**									1800	
Conveyor Length (L)	457 mm	3 mm increments **up to...**									5,486 mm	

NOTE: Lengths 3962 to 5486 mm available in widths 152 to 610 mm only.
NOTE: Conveyors longer than 3,658 mm will be constructed using two equal length frames.

DRIVE SHAFT POSITION



Since belts are being pulled, positions A & D are preferred. Pushing belts (B & C) reduce conveyor load capacity by approximately 66%.

LPZ

Specifications

- Loads up to 30 kg*
- Belt speeds up to 57 m/min
- Belt widths: 203 mm to 610 mm
- Conveyor lengths: 1097 mm to 4000 mm
- Adjustable angle: 35˚ to 60˚
- Cleats available from 20, 30, 35, 40 and 50 mm high
- 60 mm diameter drive and idler pulleys turn approximately 189 mm of belt per revolution
- V-groove bedplate with guided belt provides positive belt tracking, even under demanding side load applications

Configurations

Horizontal to Incline | Noseover | Z-Frame

STANDARD FEATURE:
Rack and Pinion

Allows the tail section to be easily slid back for quick belt adjustments and removal

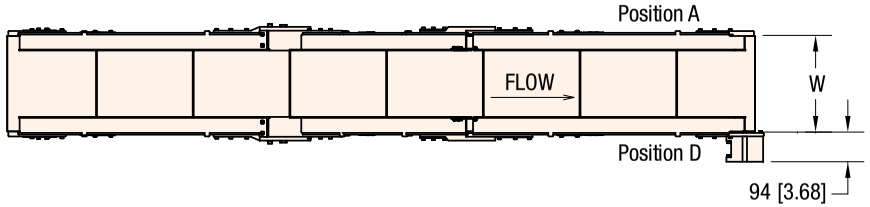
2200 Series Z-Frame Cleated Belt End Drive Conveyor

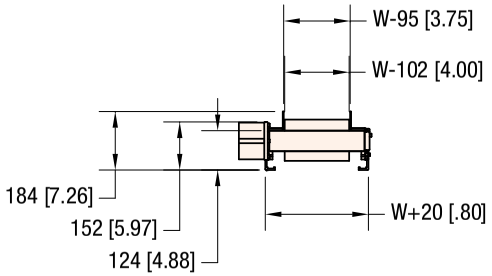
22 C6 M WW - LLLL - LLLL - LLLL AA E 1 A C P SSSS L

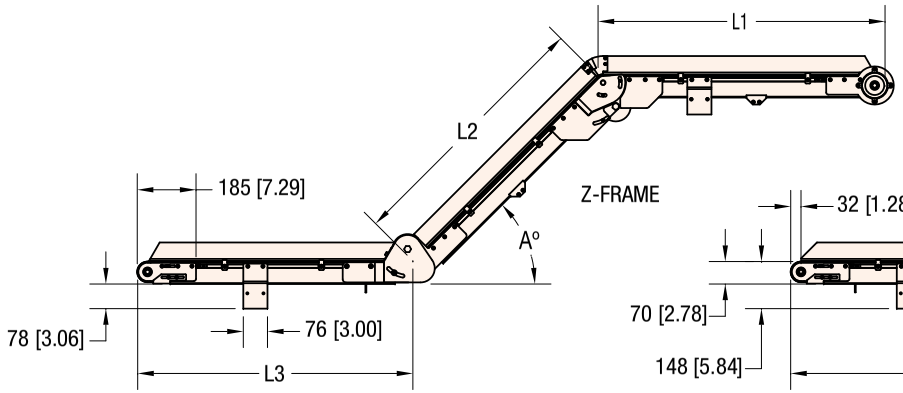
- **Belt Type:** **G** = PVC, Green Belt, **W** = Urethane, White Belt
- **Cleat Spacing:** SS.SS in inches
- **Profile Height:** **0** = Low Side, **3** = 64 mm
- **Cleat Type:** **K** = 20 mm, **L** = 30 mm, **M** = 35 mm, **B** = 40 mm, **E** = 50 mm
- **Flow/Drive Shaft Position:** **A or D only**
- **V-Guide & Mounting Bracket Options:**
  - **2** = V-Guided Belt, includes mounting brackets and return rollers
  - **6** = V-Guided Belt, without mounting brackets, includes return rollers
- **Belt Direction:** **E** = Incline **D** = Decline
- **Angle:** **60** = 60 degree Adjustable Angle
- **L3 Section Length Reference, Lower Horizontal Section:** LL.LL in feet
- **L2 Section Length Reference, Incline Section:** LL.LL in feet
- **L1 Section Length Reference, Upper Horizontal Section:** LL.LL in feet
- **Conveyor Width Reference**
- **Documentation Language:** **U** = Europe English, **D** = German, **F** = French, **S** = Spanish
- **Cleated, 60 mm Spindle**

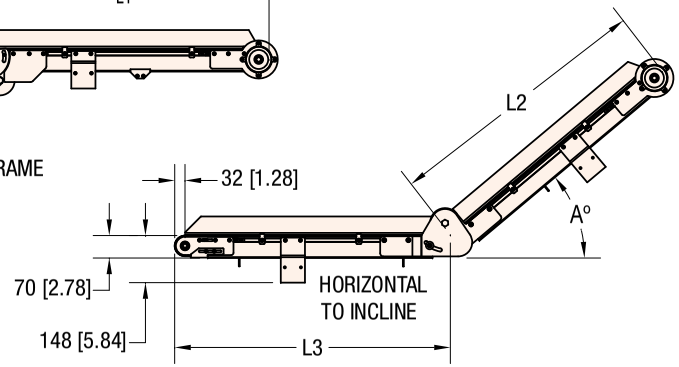
* Conveyor load capacity depends on conveyor size, incline, motor position, accumulated loads and other factors.

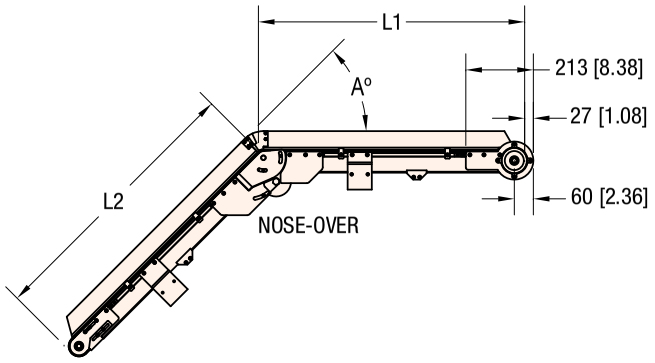
Order gearmotor mounting packages and gearmotors separately, see pages 48-62
For support stands and accessories, see page 66-67







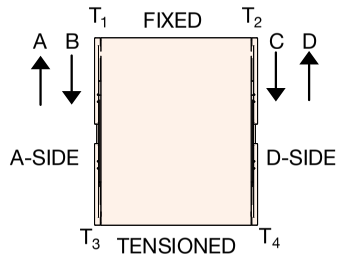




W = Conveyor Belt Width **Dim = mm** (in)
Note: Belt direction is not reversible

STANDARD SIZES									
Conveyor Width Reference	08	10	12	14	16	18	20	22	24
Conveyor Inside Frame Width (W)*	203 mm	254 mm	305 mm	356 mm	406 mm	457 mm	508 mm	559 mm	610 mm
Actual Belt Width	199 mm	250 mm	301 mm	352 mm	402 mm	453 mm	504 mm	555 mm	606 mm
Cleat Width	101 mm	152 mm	203 mm	254 mm	304 mm	355 mm	406 mm	457 mm	508 mm
Pocket Width	107 mm	158 mm	209 mm	260 mm	310 mm	361 mm	412 mm	463 mm	514 mm
Section Length Reference	0180		0001 increments **up to...**					0984	
Section Length	550 mm		3 mm increments **up to...**					3000 mm	
L1 + L2 + L3 Maximum Conveyor Length	4000 mm								

DRIVE SHAFT POSITION



Since belts are being pulled, positions A & D are preferred. Pushing belts (B & C) reduce conveyor load capacity by approximately 66%.

LPZ

Specifications

- Loads up to 30 kg*
- Belt speeds up to 57 m/min
- Belt widths: 305 mm to 610 mm
- Conveyor lengths: 1097 mm to 4000 mm
- Adjustable angle: 35˚ to 60˚
- Cleats available from 20, 30, 35 mm high
- Sidewall available from 20, 30, 35 mm high
- 60 mm diameter drive and idler pulleys turn approximately 189 mm of belt per revolution
- V-groove bedplate with guided belt provides positive belt tracking, even under demanding side load applications

Configurations

Horizontal to Incline | Noseover | Z-Frame

STANDARD FEATURE:
Rack and Pinion

Allows the tail section to be easily slid back for quick belt adjustments and removal

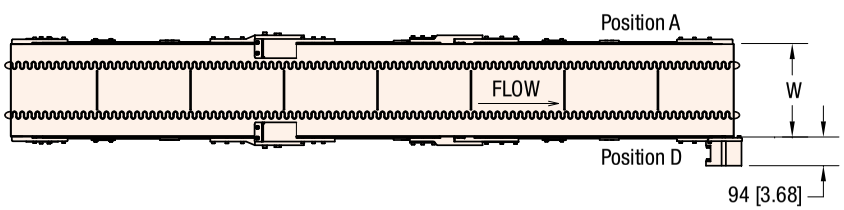
2200 Series Sidewall Cleated Belt LPZ Conveyor

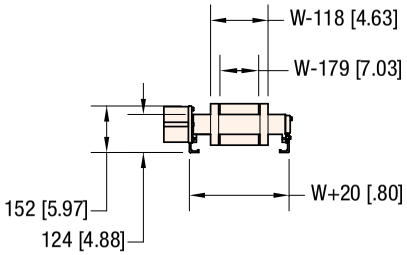
22 C6 M WW - LLLL - LLLL - LLLL AA E 1 A C P SSSS L

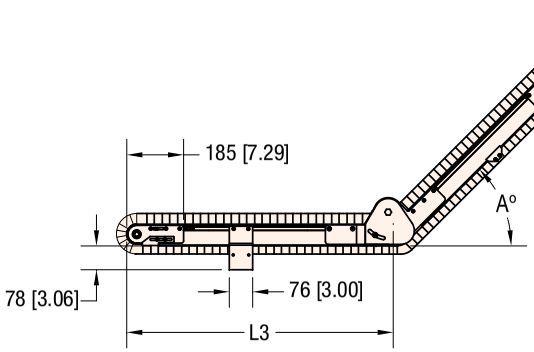
- **Belt Type:** **Z** = Urethane, White, **Y** = PVC, Green Belt
- **Cleat Spacing:** SS.SS in inches
- **Sidewall Height:** **N** = 20 mm, **P** = 30 mm, **R** = 35 mm
- **Cleat Type:** **N** = 20 mm, **P** = 30 mm, **R** = 35 mm
- **Flow/Drive Shaft Position:** **A or D only**
- **V-Guide & Mounting Bracket Options:**
  2 = V-Guided Belt, includes mounting brackets and return rollers **6** = V-Guided Belt, without mounting brackets, includes return rollers
- **Belt Direction:** **E** = Incline **D** = Decline
- **Angle:** **60** = 60 degree Adjustable Angle
- **L3 Section Length Reference, Lower Horizontal Section:** LL.LL in feet
- **L2 Section Length Reference, Incline Section:** LL.LL in feet
- **L1 Section Length Reference, Upper Horizontal Section:** LL.LL in feet
- **Conveyor Width Reference**
- **Documentation Language:** **U** = Europe English, **D** = German, **F** = French, **S** = Spanish
- **Cleated, 60 mm Spindle**

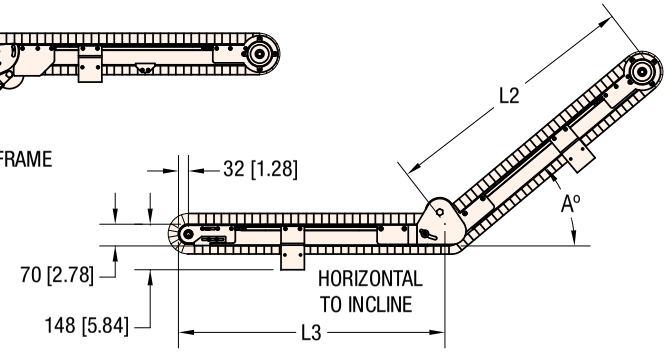
* Conveyor load capacity depends on conveyor size, incline, motor position, accumulated loads and other factors.

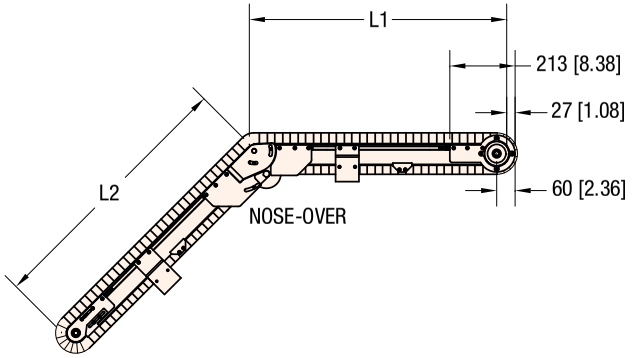
Order gearmotor mounting packages and gearmotors separately, see pages 48-62
For support stands and accessories, see page 66-67







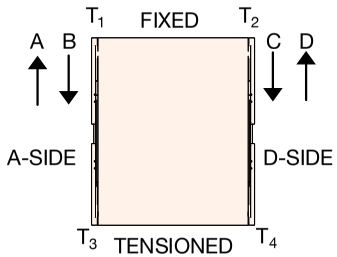




W = Conveyor Belt Width **Dim = mm** (in)
Note: Belt direction is not reversible

STANDARD SIZES							
Conveyor Width Reference	12	14	16	18	20	22	24
Conveyor Inside Frame Width (W)*	305 mm	356 mm	406 mm	457 mm	508 mm	559 mm	610 mm
Actual Belt Width	301 mm	352 mm	402 mm	453 mm	504 mm	555 mm	606 mm
Cleat Width	126 mm	177 mm	227 mm	278 mm	329 mm	380 mm	431 mm
Pocket Width	137 mm	188 mm	238 mm	289 mm	340 mm	391 mm	442 mm
Section Length Reference	0180		0001 increments **up to...**			0984	
Section Length	550 mm		3 mm increments **up to...**			3000 mm	
L1 + L2 + L3 Maximum Conveyor Length	4000 mm						

DRIVE SHAFT POSITION



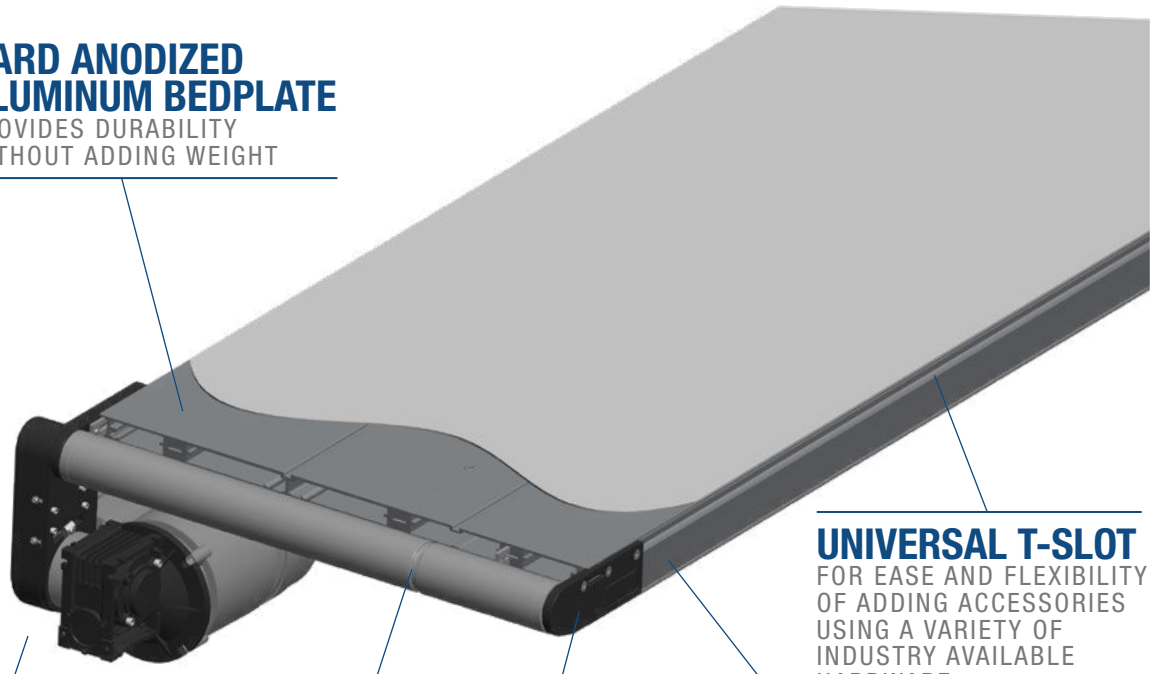
Since belts are being pulled, positions A & D are preferred. Pushing belts (B & C) reduce conveyor load capacity by approximately 66%.

IDrive2 CONTINUOUS DUTY 24VDC MOTORS

THE MOST COMPACT CONVEYOR DRIVE PACKAGE. INTERNAL GEARMOTOR ALLOWS THE CONVEYOR TO FIT IN TIGHT SPACES

HARD ANODIZED ALUMINUM BEDPLATE

PROVIDES DURABILITY WITHOUT ADDING WEIGHT



UNIVERSAL T-SLOT

FOR EASE AND FLEXIBILITY OF ADDING ACCESSORIES USING A VARIETY OF INDUSTRY AVAILABLE HARDWARE

MOTOR MOUNT PACKAGES

VARIETY OF CONFIGURATIONS PROVIDES THE FLEXIBILITY TO SELECT THE EXACT PRODUCT FOR THE APPLICATION

STANDARD PRECISE CAM TRACKING

FOR FINE ADJUSTMENTS OF NON V-GUIDED BELTS

SMALL CONVEYOR FRAME HEIGHT WITH LARGE BEARINGS

MAKING THIS CONVEYOR COMPACT WHILE ABLE TO HANDLE LARGE LOADS

V-GROOVED BEDPLATE AND V-GUIDED BELTS

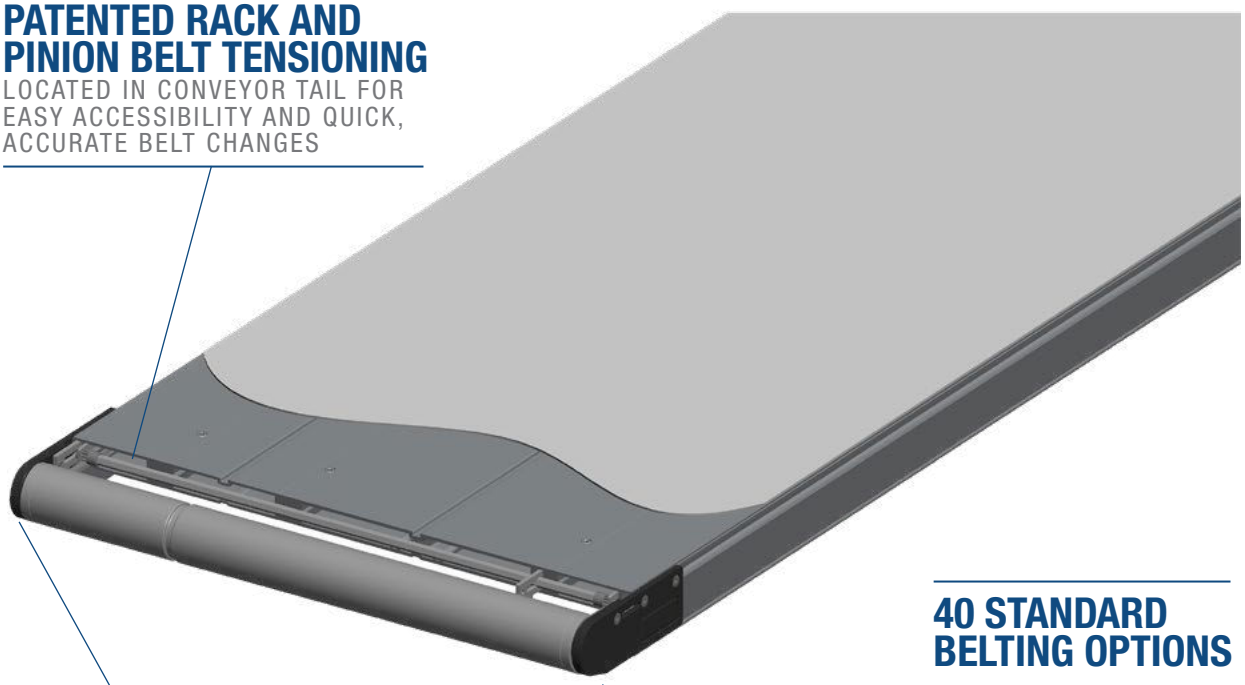
PROVIDE MAINTENANCE-FREE BELT TRACKING AND ALLOW CONVEYOR TO BE WIDER THAN LONG FOR AGV/ARM APPLICATIONS

AUXILIARY SHAFT

ADDITIONAL SHAFTS ON ANY CORNER OF THE CONVEYOR FOR EASY INTEGRATION OF SENSORS OR ATTACHMENTS

MID DRIVE OPTION
FREES UP SPACE ON BOTH ENDS OF THE CONVEYOR

PATENTED RACK AND PINION BELT TENSIONING
LOCATED IN CONVEYOR TAIL FOR EASY ACCESSIBILITY AND QUICK, ACCURATE BELT CHANGES

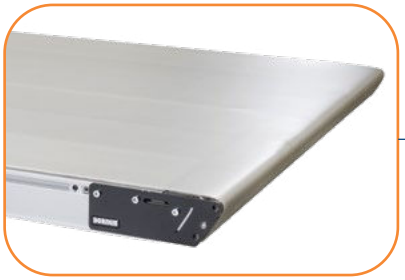


40 STANDARD BELTING OPTIONS

LARGE CAPACITY, SEALED BALL BEARINGS
FOR LONG, MAINTENANCE FREE LIFE

TAIL PLATES
MINIMAL LENGTH TAIL PLATES FOR MAXIMUM T-SLOT EXPOSURE

VARIETY OF GUIDING OPTIONS



16 mm NOSEBAR TAIL OPTIONS
FOR PRECISE SMALL PART TRANSFER

Specifications

- Loads up to 68 kg (150 lbs)*
- Belt speeds up to 122 m/min (400 ft/min)
- Belt widths: 203 to 914 mm (8 to 36 in)
- Conveyor lengths: 508 to 7315 mm (20 in to 24 ft)
- 60 mm (2.4 in) diameter drive and idler pulleys turn approximately 189 mm (7.4 in) of belt per revolution
- V-groove bedplate with guided belt provides belt tracking, even under demanding side load applications
  - Cam tracking standard on Non V-Guided belt conveyors
- 15 mm diameter integral drive shaft with auxiliary shaft location options

OPTIONAL:
16 mm (5/8 in) High Speed Nose Bar Transfer Tail

Available at non-driven end.
V-guide supported.
Speeds up to 61 m/min (200 ft/min)

OPTIONAL:
15 mm diameter integrated auxiliary shaft

Available on any corner of the conveyor

STANDARD FEATURE:
Rack and Pinion

Allows the tail section to be easily slid back for quick belt adjustments and removal

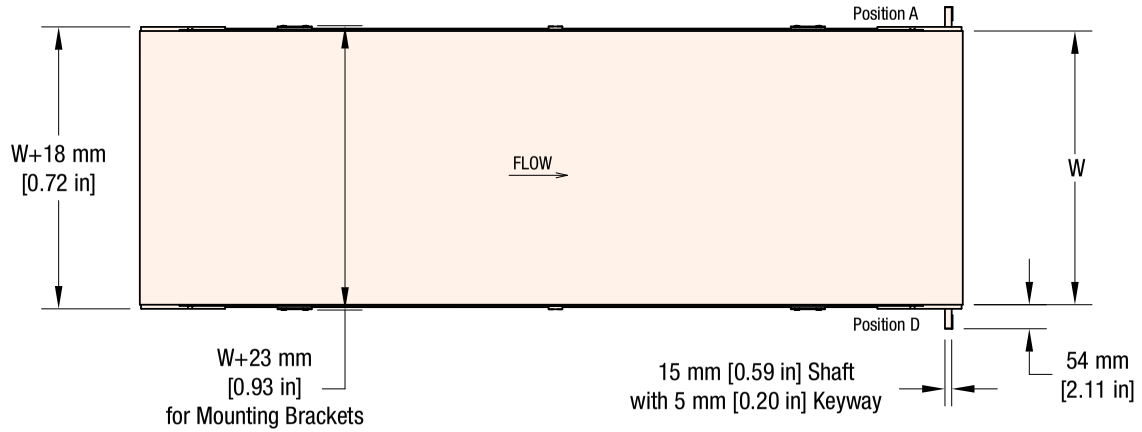
2700 Series Flat Belt End Drive Conveyor

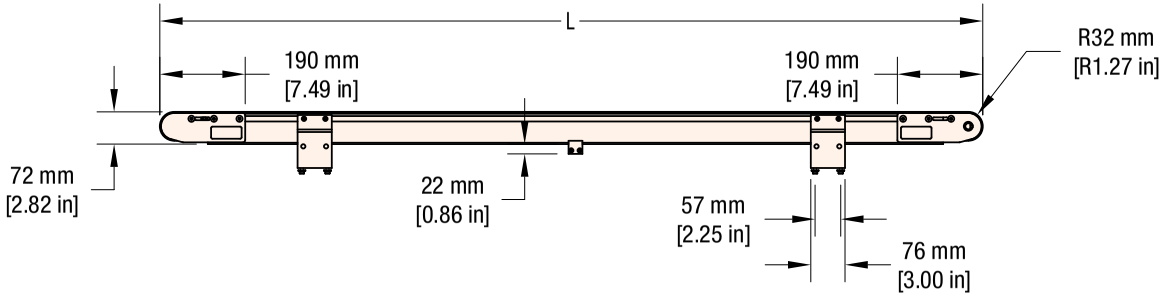
2LED M WW - LLLL 1 0 A PP PP BB - X T¹ T² T³ T⁴

- **Conveyor Tail Options X** (if required) **0** = No Shaft, **K** = Keyed Auxiliary Shaft
- **Belt Type See Note**
- **Profile (D side)**
- **Profile (A side) See Pages 34-37**
- **Drive Shaft Position: A, B, C or D**
- **Idler Tail Type: 0** = Standard 60 mm (2.4 in), **5** = Nose Bar 16 mm (5/8 in)
- **V-Guide & Mounting Bracket Options:**
  - **1** = Non V-Guide belt, conveyor to include mounting brackets & return roller
  - **2** = V-Guide belt, conveyor to include mounting brackets & return rollers
  - **3** = Non V-Guide belt, conveyor NOT to include mounting brackets & no return rollers
  - **4** = V-Guide belt, conveyor NOT to include mounting brackets & no return rollers
  - **5** = Non V-Guide belt, conveyor NOT to include mounting brackets, with return rollers
  - **6** = V-Guide belt, conveyor NOT to include mounting brackets, with return rollers
- **Conveyor Length Reference:** 0170 to 2400 in 0001 foot increments
- **Conveyor Width Reference:** 8 to 36 in inches
- **Documentation Language: M** = US English, **U** = Europe English, **D** = German, **F** = French, **S** = Spanish
- **Prefix: 2L** = 2700 Series Belted, **ED** = End Drive Flat Belt

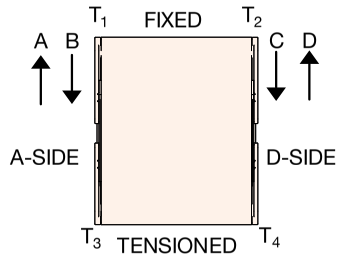
* Conveyor load capacity depends on conveyor size, incline, motor position, accumulated loads and other factors.

Order gearmotor mounting packages and gearmotors separately, see pages 48-62
For support stands and accessories, see page 66-67

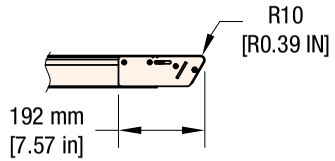




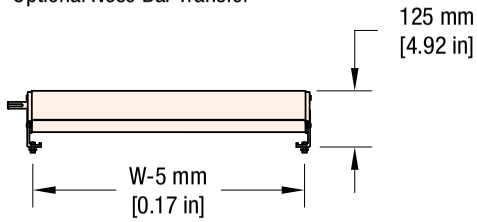
DRIVE SHAFT POSITION



Since belts are being pulled, positions A & D are preferred. Pushing belts (B & C) reduce conveyor load capacity by approximately 66%.



Optional Nose Bar Transfer



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

STANDARD SIZES															
Conveyor Width Reference	08	10	12	14	16	18	20	22	24	26	28	30	32	34	36
Conveyor Belt Width (W)	203 mm (8 in)	254 mm (10 in)	305 mm (12 in)	356 mm (14 in)	406 mm (16 in)	457 mm (18 in)	508 mm (20 in)	559 mm (22 in)	610 mm (24 in)	660 mm (26 in)	711 mm (28 in)	762 mm (30 in)	813 mm (32 in)	864 mm (34 in)	914 mm (36 in)
Conveyor Length Reference	0170		0001 increments **up to...**											2400	
Conveyor Length (L)	508 mm (1.7 ft)		3 mm (0.12 in) increments **up to...**											7,315 mm (24 ft)	

NOTE: Conveyor longer than 3,658 mm (12 ft) will be constructed using two equal length frames.
***NOTE:** Max length varies based on tail section.

Specifications

- Loads up to 68 kg (150 lbs)*
- Belt speeds up to 122 m/min (400 ft/min)
- Belt widths: 203 to 914 mm (8 to 36 in)
- Conveyor lengths: 610 to 7315 mm (24 in to 24 ft)
- 60 mm (2.4 in) diameter drive and idler pulleys turn approximately 189 mm (7.4 in) of belt per revolution
- V-groove bedplate with guided belt provides belt tracking, even under demanding side load applications
  - Cam tracking standard on Non V-Guided belt conveyors
- 15 mm diameter integral drive shaft with auxiliary shaft location options

OPTIONAL:
16 mm (5/8 in) High Speed Nose Bar Transfer Tail

Available at non-driven end.
V-guide supported.
Speeds up to 61 m/min (200 ft/min)

STANDARD FEATURE:
Rack and Pinion

Allows the tail section to be easily slid back for quick belt adjustments and removal

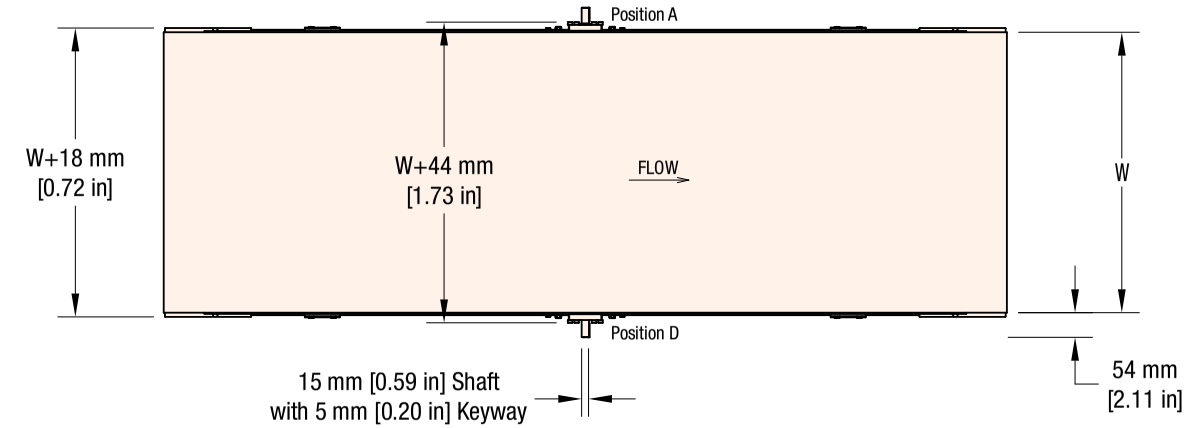
2700 Series Flat Belt Mid Drive Conveyor

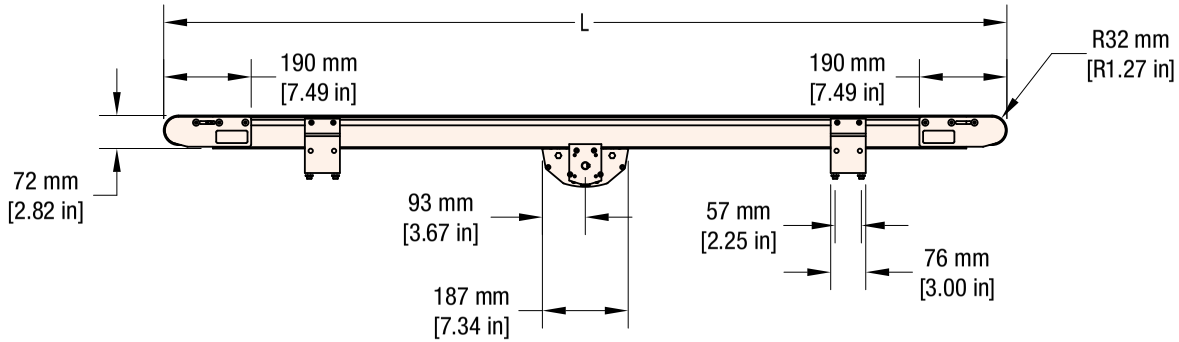
2 L M D M W W - L L L L 1 0 0 A P P P P B B - X T¹ T² T³ T⁴

- **Conveyor Tail Options X** (if required) **O** = No Shaft, **K** = Keyed Auxiliary Shaft
- **Belt Type See Note**
- **Profile (D side)**
- **Profile (A side)** **See Pages 34-37**
- **Shaft Position:** **A** = A side, **D** = D side, **E** = Both sides
- **Tension Tail Type:** **0** = Standard 60 mm (2.4 in), **5** = Nose Bar 16 mm (5/8 in)
- **Fixed Tail Type:** **0** = Standard 60 mm (2.4 in), **5** = Nose Bar 16 mm (5/8 in)
- **V-Guide & Mounting Bracket Options:**
  - **1** = Non V-Guide belt, conveyor to include mounting brackets & return roller
  - **2** = V-Guide belt, conveyor to include mounting brackets & return rollers
  - **3** = Non V-Guide belt, conveyor NOT to include mounting brackets & no return rollers
  - **4** = V-Guide belt, conveyor NOT to include mounting brackets & no return rollers
  - **5** = Non V-Guide belt, conveyor NOT to include mounting brackets, with return rollers
  - **6** = V-Guide belt, conveyor NOT to include mounting brackets, with return rollers
- **Conveyor Length Reference:** 0200 to 2400 in 0001 ft increments
- **Conveyor Width Reference:** 8 to 36 in inches
- **Documentation Language:** **M** = US English, **U** = Europe English, **D** = German, **F** = French, **S** = Spanish
- **Prefix:** **2L** = 2700 Series Belted, **MD** = Mid Drive Flat Belt

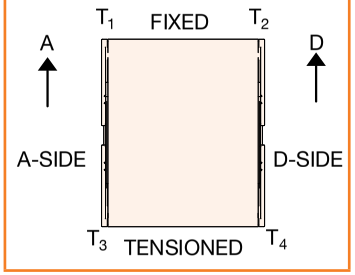
* Conveyor load capacity depends on conveyor size, incline, motor position, accumulated loads and other factors.

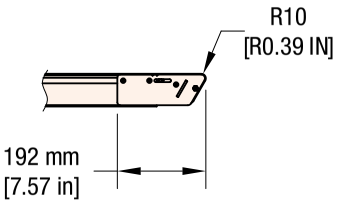
Order gearmotor mounting packages and gearmotors separately, see pages 48-62
For support stands and accessories, see page 66-67



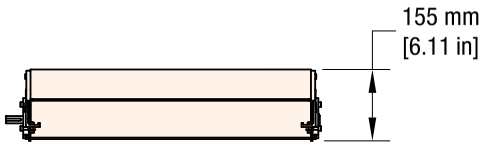


DRIVE SHAFT POSITION





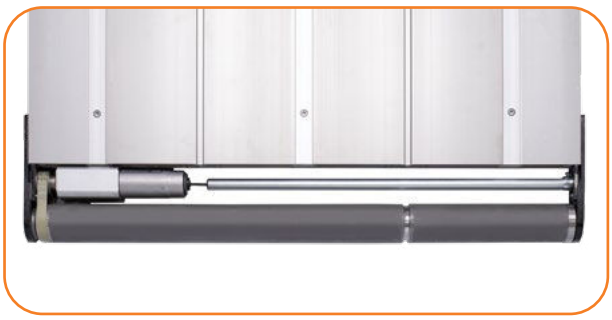
Optional Nose Bar Transfer



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

STANDARD SIZES															
Conveyor Width Reference	08	10	12	14	16	18	20	22	24	26	28	30	32	34	36
Conveyor Belt Width (W)	203 mm (8 in)	254 mm (10 in)	305 mm (12 in)	356 mm (14 in)	406 mm (16 in)	457 mm (18 in)	508 mm (20 in)	559 mm (22 in)	610 mm (24 in)	660 mm (26 in)	711 mm (28 in)	762 mm (30 in)	813 mm (32 in)	864 mm (34 in)	914 mm (36 in)
Conveyor Length Reference	0200		0001 increments **up to...**											2400	
Conveyor Length (L)	610 mm (2.0 ft)													7,315 mm (24 ft)	

***NOTE:** Max length varies based on tail section.



Specifications

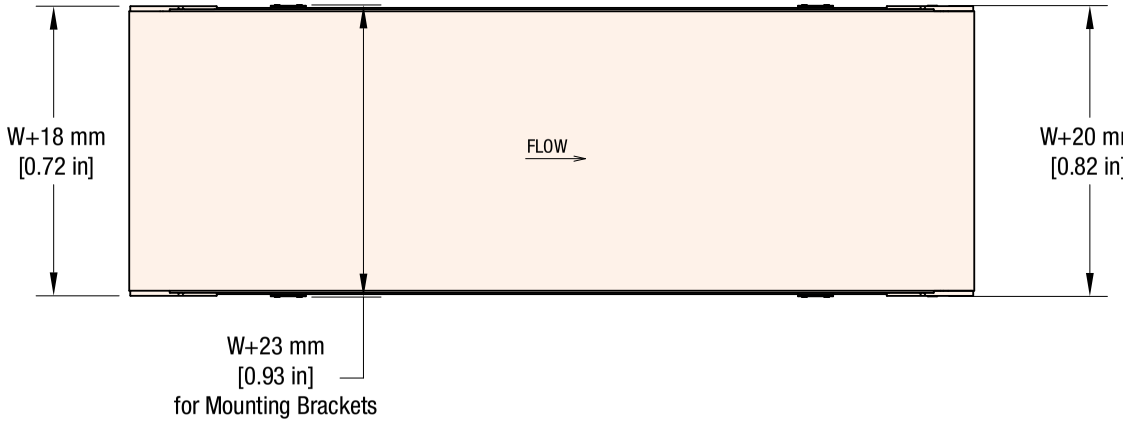
- Conveyor Load Capacity (non-accumulated, distributed load):
  - 10 m/min (33 ft/min) – Up to 75 kg (165 lbs)
  - 15 m/min (49 ft/min) – Up to 49 kg (108 lbs)
  - 20 m/min (66 ft/min) – Up to 34 kg (75 lbs)
  - 25 m/min (82 ft/min) – Up to 27 kg (59 lbs)
  - 45 m/min (148 ft/min) – Up to 12 kg (26 lbs)
  - 61 m/min (200 ft/min) – Up to 7 kg (15 lbs)
- Belt Speeds: Variable Speed, (6) Speed Options
  - 1 to 10 m/min (3.3 to 33 ft/min)
  - 1.5 to 15 m/min (4.9 to 49 ft/min)
  - 2 to 20 m/min (6.6 to 66 ft/min)
  - 2.5 to 25 m/min (8.2 to 82 ft/min)
  - 4.5 to 45 m/min (14.8 to 148 ft/min)
  - 6.1 to 61 m/min (20 to 200 ft/min)
- Belt Widths: 245 to 914 mm (10 to 36 in)
- Conveyor Lengths: 508 to 2940 mm (20 in to 10 ft)
- V-groove bedplate with guided belt provides belt tracking, even under demanding side load applications
  - Cam tracking standard on Non V-Guided belt conveyors
- Indexing Capable – Up to 30 indexes per minute
- iDrive2 Controls: 3 control options available
  - **Keypad Control:** Includes electrical box with speed and direction control switches, compact NEMA1 control box can be mounted directly on to conveyor via T-Slot, 115VAC power supply is optional.
  - **Remote Switch Control:** Includes electrical box with cable grip for control wiring, compact NEMA1 control box can be mounted directly on to conveyor via T-Slot, 115VAC power supply is optional.
  - **Drive Controller only:** Includes motor controller to be mounted by others in centralized control box, no power supply is available for this option

2700 Series Flat Belt End Drive iDrive2Conveyor

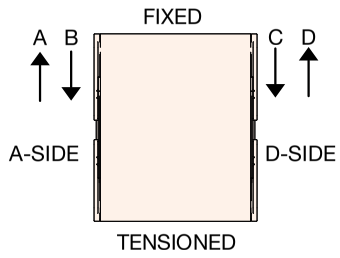
2LED M WW - LLLL 1 0 A PP PP BB - FD F P B

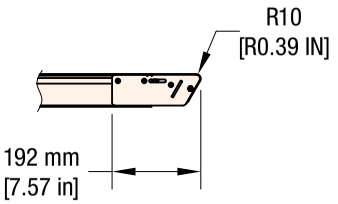
- **Speed Range:** **A** = 201 FPM, **B** = 147 FPM, **C** = 120 FPM, **D** = 82 FPM, **E** = 67 FPM, **F** = 49 FPM, **G** = 33 FPM
- **Power Supply:** **P** = Power Supply (115V) included, **N** = No power supply included
- **Control Type:** **F** = Full Control speed & on/off control on electrical box, **Q** = Remote speed & on/off control
- **Integrated Frame Drive:** **FD** = Integrated Frame Drive
- **Belt Type See Note**
- **Profile (D side)**
- **Profile (A side)** See Pages 34-37
- **Drive Shaft Position:** **A, B, C or D**
- **Idler Tail Type:** **0** = Standard 60 mm (2.4 in), **5** = Nose Bar 16 mm (5/8 in)
- **V-Guide & Mounting Bracket Options:**
  - **1** = Non V-Guide belt, conveyor to include mounting brackets & return roller
  - **2** = V-Guide belt, conveyor to include mounting brackets & return rollers
  - **3** = Non V-Guide belt, conveyor NOT to include mounting brackets & no return rollers
  - **4** = V-Guide belt, conveyor NOT to include mounting brackets & no return rollers
  - **5** = Non V-Guide belt, conveyor NOT to include mounting brackets, with return rollers
  - **6** = V-Guide belt, conveyor NOT to include mounting brackets, with return rollers
- **Conveyor Length Reference:** 0170 to 1000 in 0001 foot increments
- **Conveyor Width Reference:** 10 to 36 in inches
- **Documentation Language:** **M** = US English, **U** = Europe English, **D** = German, **F** = French, **S** = Spanish
- **Prefix:** **2L** = 2700 Series Belted, **ED** = End Drive Flat Belt

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

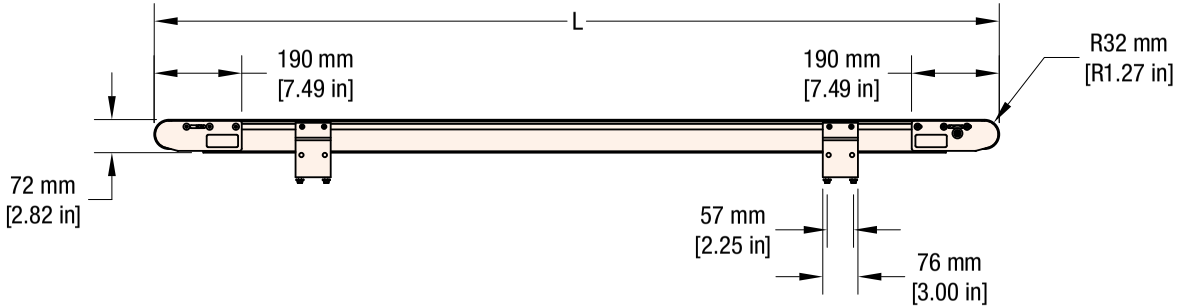


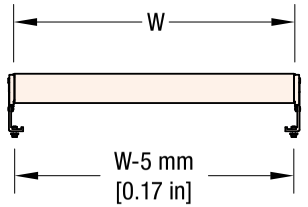
DRIVE SHAFT POSITION





Optional Nose Bar Transfer

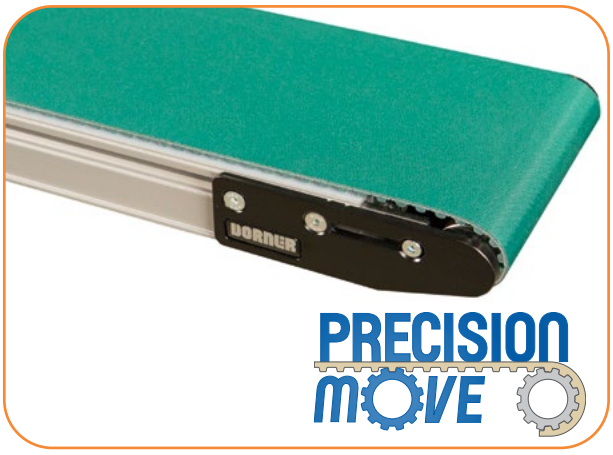




W = Conveyor Belt Width **Dim** = mm (in)

STANDARD SIZES														
Conveyor Width Reference	10	12	14	16	18	20	22	24	26	28	30	32	34	36
Conveyor Belt Width (W)	254 mm (10 in)	305 mm (12 in)	356 mm (14 in)	406 mm (16 in)	457 mm (18 in)	508 mm (20 in)	559 mm (22 in)	610 mm (24 in)	660 mm (26 in)	711 mm (28 in)	762 mm (30 in)	813 mm (32 in)	864 mm (34 in)	914 mm (36 in)
Conveyor Length Reference	0170		0001 increments **up to...**										1000	
Conveyor Length (L)	508 mm (1.7 ft)		3 mm (0.12 in) increments **up to...**										3,048 mm (10 ft)	

NOTE: Conveyor longer than 3,658 mm (12 ft) will be constructed using two equal length frames.
***NOTE:** Max length varies based on tail section.



Specifications

- Loads up to 91 kg*
- Belt speeds up to 113 m/min
- Belt widths: 25 mm to 610 mm
- Conveyor lengths: 457 mm to 9,144 mm
- 38 mm pitch diameter drive pulley turns approximately 121 mm of belt per revolution
- T10 profile cogged belt with 12 tooth drive pulley
- Conveyor mechanical accuracy ± 0.5 mm
- Conveyor package w/servo motor index accuracy ± 1 mm
- 12 mm diameter integral drive shaft
- Reverse V-Guide provides positive belt tracking, even under demanding side load applications

STANDARD FEATURE:
Reverse V-Guide

Provides positive tracking along the entire length of the conveyor

Positive Drive Belting

Positivity driven belt ensures belt does not slip and allows for higher load capacity

OPTIONAL:
3 Cleat Heights Available

(20 mm, 36 mm, or 52 mm)

2200 Series Precision Move Flat Belt End Drive Conveyor

22 PM M WW - LLLL 1 A PP PP BB - X T¹ T² T³ T⁴

- **Conveyor Tail Options X** (if required)
  - **A or B** = Drive Shaft (T¹ only) **C or D** = Drive Shaft (T² only) **S** = Stub Shaft
  - **O** = No Shaft **K** = Keyed Auxiliary Shaft
- **Belt Type**
- **Profile (D side)**
- **Profile (A side)**
- **Flow/Drive Shaft Position:** **A, B, C or D**
- **Return Roller & Mounting Bracket Options:** **2** = V-Guided Belt, includes mounting brackets and return rollers **4** = V-Guided Belt, without mounting brackets and return rollers
  - **6** = V-Guided Belt, without mounting brackets, includes return rollers
- **Conveyor Length Reference:** LL.LL in feet
- **Conveyor Width Reference**
- **Documentation Language:** **U** = Europe English, **D** = German, **F** = French, **S** = Spanish

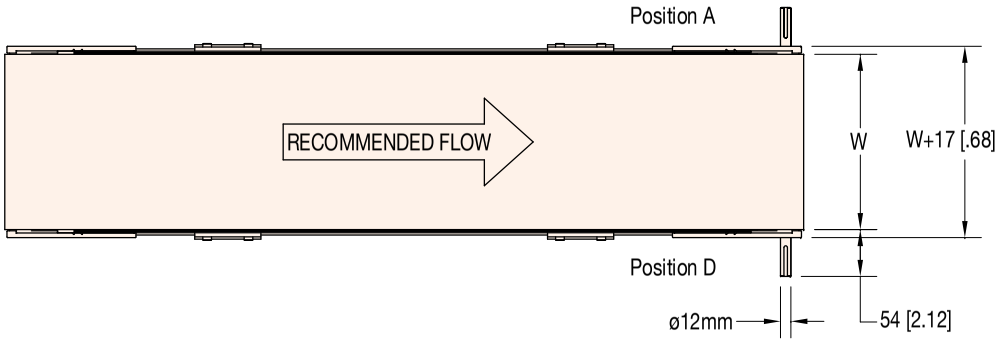
2200 Series Precision Move Cleated Belt End Drive Conveyor

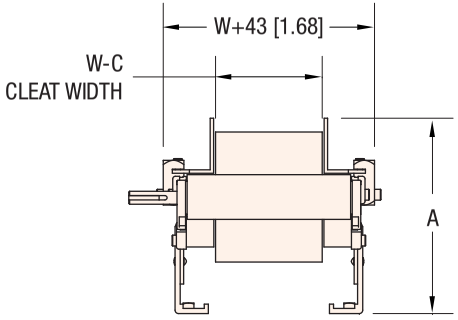
22 PM M WW - LLLL 1 A PP A 3 SSSS - X T¹ T² T³ T⁴

- **Conveyor Tail Options X** (if required) *See Drive Shaft Position Chart on next page
  - **A or B** = Drive Shaft (T¹ only) **C or D** = Drive Shaft (T² only) **S** = Stub Shaft
  - **O** = No Shaft **K** = Keyed Auxiliary Shaft
- **Cleat Spacing:** SS.SS in inches
- **Base Belt:** **3** = High Friction, **1** = Low Friction
- **Cleat Height:** **A** = 20 mm, **B** = 36 mm, **C** = 52 mm
- **Profile:** **01** = Low Side, **02** = 25 mm Cleated, **03** = 52 mm Cleated
- **Flow/Drive Shaft Position:** **A, B, C or D**
- **Return Roller & Mounting Bracket Options:** **2** = V-Guided Belt, includes mounting brackets and return rollers **4** = V-Guided Belt, without mounting brackets and return rollers
  - **6** = V-Guided Belt, without mounting brackets, includes return rollers
- **Conveyor Length Reference:** LL.LL in feet
- **Conveyor Width Reference**
- **Documentation Language:** **U** = Europe English, **D** = German, **F** = French, **S** = Spanish

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

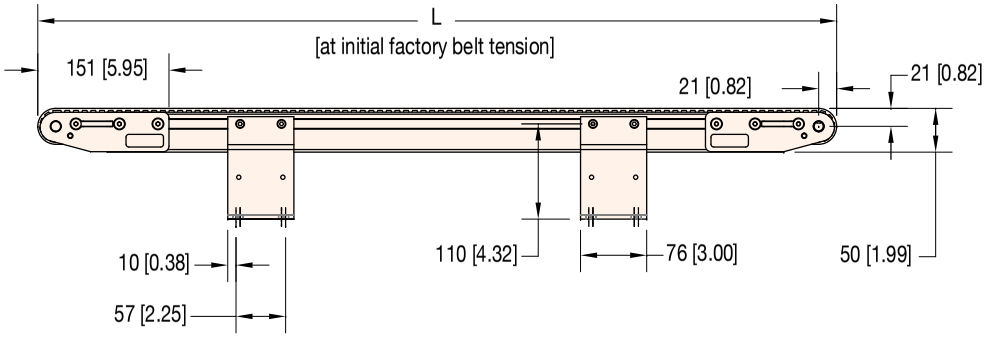
Order gearmotor mounting packages and gearmotors separately, see pages 48-62
For support stands and accessories, see page 66-67

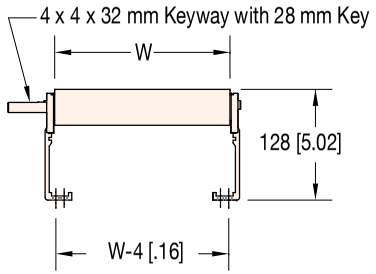




CLEATED BELT

A = 155 [6.10] for 25 [1"] HIGH SIDES
180 [7.10] for 50 [2"] HIGH SIDES
C = 29 [1.12] for conveyors up to 203 [8"] widths
54 [2.12] for conveyors in 305 - 607 [12 - 24"] widths



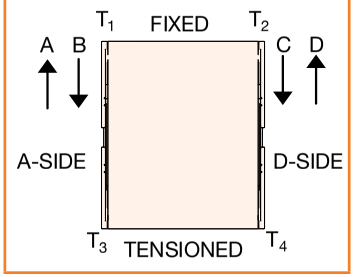


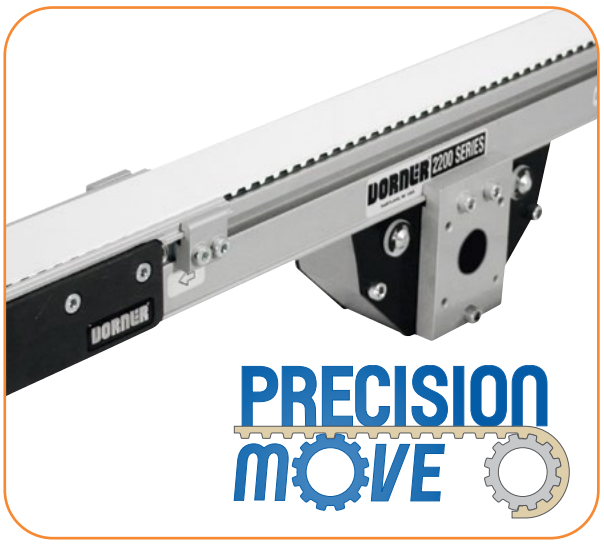
W = Conveyor Belt Width **Dim = mm** (in)

STANDARD SIZES								
Conveyor Width Reference	01	02	04	06	08	12	18	24
Conveyor Belt Width (W)	25 mm*	45 mm	95 mm	152 mm	203 mm	305 mm	457 mm	607 mm
Conveyor Length Reference	0150		0002 increments **up to...**				3000	
Conveyor Length	457 mm		5 mm increments **up to...**				9,144 mm	

NOTE: Actual conveyor length may need to be adjusted to match belt pitch.
Conveyors from 3658 to 5486 mm will be constructed using two equal length frame sections.
Conveyors from 5487 to 8229 mm in length will be constructed using three equal length frame sections.
Conveyors from 8230 to 9144 mm in length will be constructed using four equal length frame sections.
*Cleats not available for 25 mm wide Precision Move Conveyors.

DRIVE SHAFT POSITION





Specifications

- Loads up to 91 kg*
- Belt speeds up to 113 m/min
- Belt widths: 25 mm to 610 mm
- Conveyor lengths: 457 mm to 9,144 mm
- 51 mm pitch diameter drive pulley turns approximately 160 mm of belt per revolution
- T10 profile cogged belt with 16 tooth drive pulley
- Conveyor mechanical accuracy ± 0.5 mm
- Drive shaft options:
  - 12 mm diameter integral drive shaft
  - 16 tooth 0.50 inch diameter hollow spline drive
- Reverse V-Guide provides positive belt tracking, even under demanding side load applications

STANDARD FEATURE:
Reverse V-Guide

Provides positive tracking along the entire length of the conveyor

Positive Drive Belting

Positively driven belt ensures belt does not slip and allows for higher load capacity

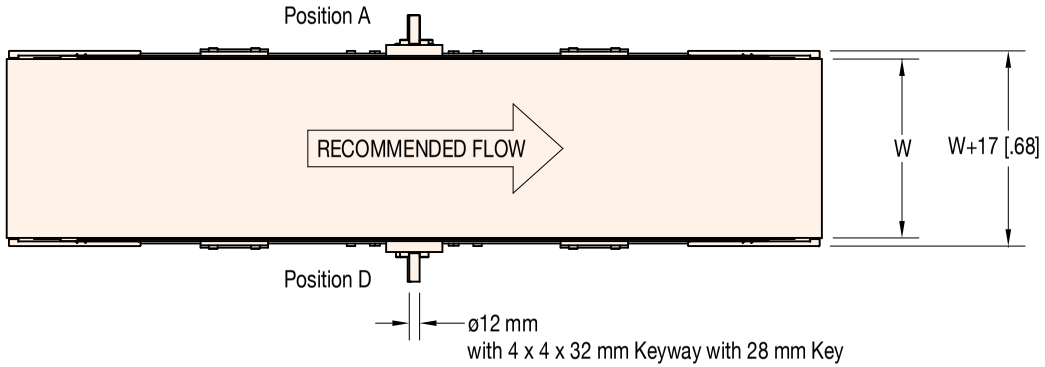
2200 Series Precision Move Flat Belt Mid Drive Conveyor

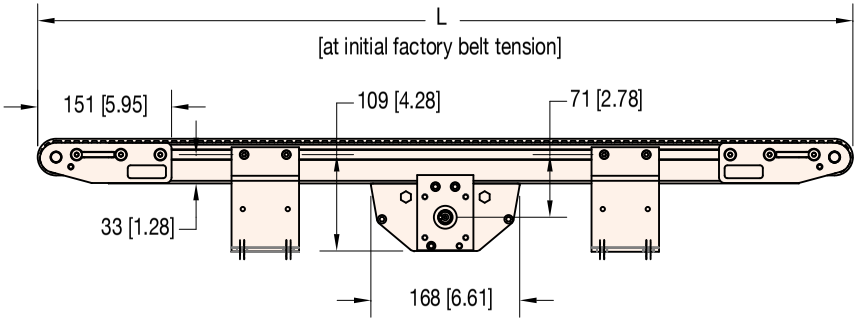
22 PD M WW - LLLL 1 A PP PP BB - X T¹ T² T³ T⁴

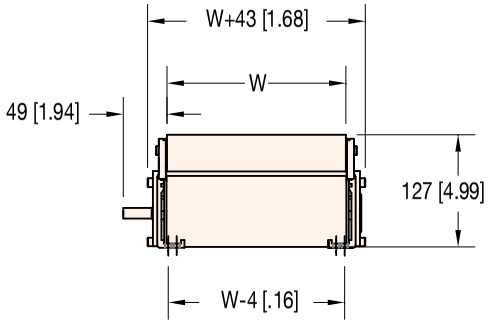
- **Conveyor Tail Options X** (if required) *See Drive Shaft Position Chart on next page
  - **0** = No Shaft
  - **K** = Keyed Auxiliary Shaft
  - **S** = Stub Shaft
- **Belt Type**
- **Profile (D side)**
- **Profile (A side)**
- **Mid Drive Shaft Position:** **A** = A side, **D** = D side, **E** = Both side, **G** = Gang
- **V-guide & Mounting Bracket Options:**
  - **2** = V-Guided Belt, includes mounting brackets and return rollers
  - **4** = V-Guided Belt, without mounting brackets and return rollers
  - **6** = V-Guided Belt, without mounting brackets, includes return rollers
- **Conveyor Length Reference:** LL.LL in feet
- **Conveyor Width Reference**
- **Documentation Language:** **U** = Europe English, **D** = German, **F** = French, **S** = Spanish

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

Order gearmotor mounting packages and gearmotors separately, see pages 48-62
For support stands and accessories, see page 66-67





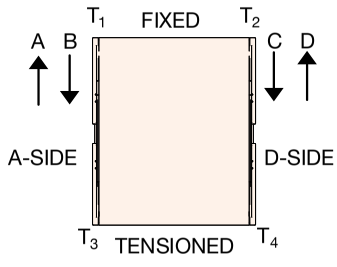


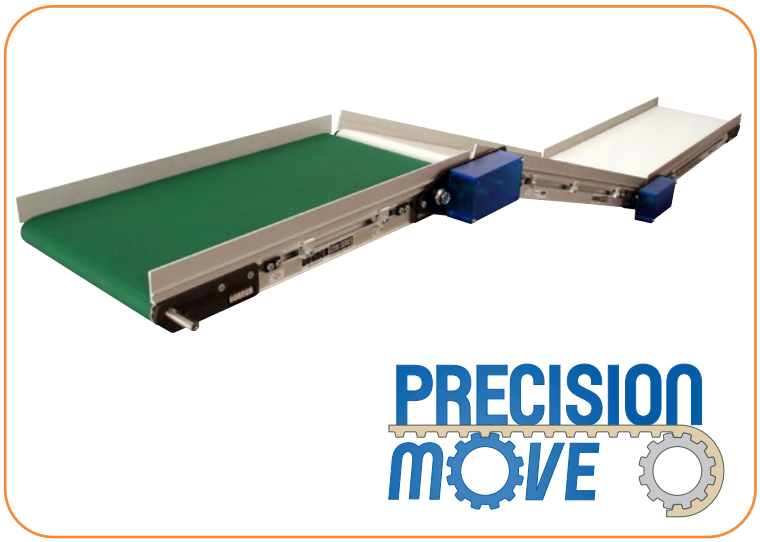
W = Conveyor Belt Width **Dim = mm** (in)

STANDARD SIZES								
Conveyor Width Reference	01	02	04	06	08	12	18	24
Conveyor Belt Width (W)	25 mm	45 mm	95 mm	152 mm	203 mm	305 mm	457 mm	607 mm
Conveyor Length Reference	0150		0002 increments **up to...**				3000	
Conveyor Length	457 mm		5 mm increments **up to...**				9,144 mm	

NOTE: Actual conveyor length may need to be adjusted to match belt pitch.
Conveyors from 3658 to 5486 mm will be constructed using two equal length frame sections.
Conveyors from 5487 to 8229 mm in length will be constructed using three equal length frame sections.
Conveyors from 8230 to 9144 mm in length will be constructed using four equal length frame sections.

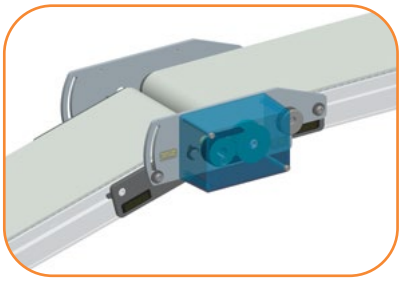
DRIVE SHAFT POSITION





Specifications

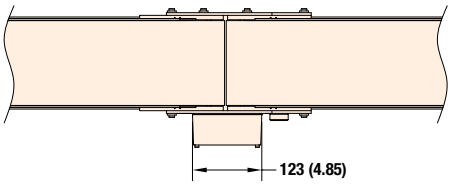
- Link multiple conveyors with 1 drive
- Adjustable angle from 0° to 25°
- Variety of timing belt ratios available
  - 1:1, 1.27:1, 1.75:1, 2:1 can be used to speed or slow down the conveyor
- Maximum number of conveyors = 3
- Pull or close gaps between product
- Change belt types on each conveyor
- Includes tie plates, pulley kit, tension adjustment and guard
- Utilize low, high friction belts, and/or multiple speeds in a single configuration
- Can not be used with cleated belt applications

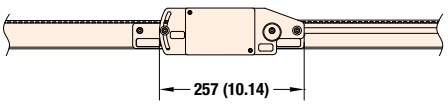


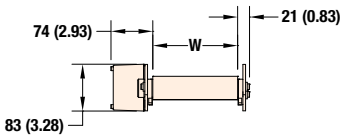
STANDARD FEATURE:
Slave Drive Kit

Includes tie plates for both sides of conveyor and timing belt / pulleys and guard

Part Number	Drive Teeth	Driven Teeth	Infeed Conveyor Speed Condition
202363-1632	16	32	2X Speed Up
202363-1628	16	28	1.75X Speed Up
202363-2228	22	28	1.27X Speed Up
202363-2222	22	22	Same Speed
202363-2822	28	22	0.78X Slow Down
202363-2816	28	16	0.57X Slow Down
202363-3216	32	16	2X Slow Down







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.

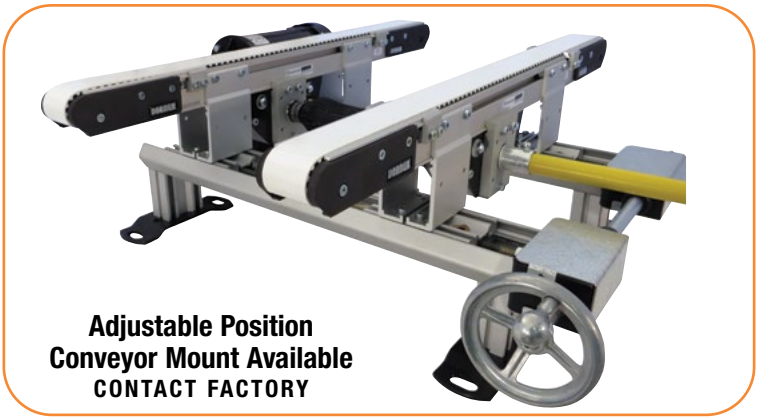
PRECISION MOVE

Gang Drive (Adjustable Width)

Mid Drive Gang Driven Conveyors

Specifications

- Adjustable for various product widths
- Drive moveable between tails
- Frees up ends of conveyor
- Conveyor center distances can be moved while conveyor is running
- Minimum width (x) = 101 mm belt to belt (with std. guarding)
- Minimum width (x) = 45 mm belt to belt without guarding (end user responsible for point of installation guarding)
- Maximum width (y) = 1,219 mm belt to belt
- Maximum total torque = 9 Nm
- Compatible with side mount gearmotor package
- Requires 13 mm (0.50 in) diameter 16 tooth spline drive shaft

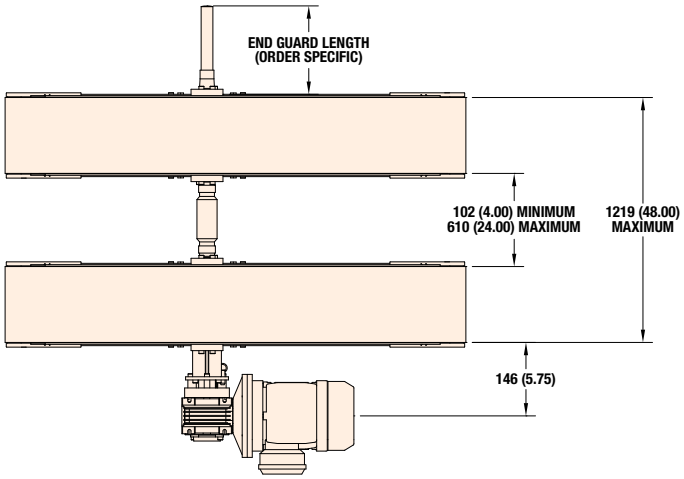


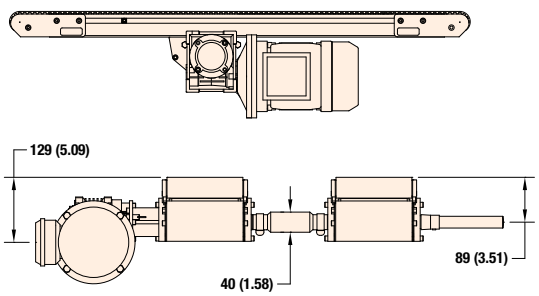
Adjustable Position Conveyor Mount Available
CONTACT FACTORY

Gang Driven Side Mount Package

Specifications

- Compatible with all standard load and heavy load 90° gearmotors
- Conveyor position is adjustable along length of spline drive shaft
- Includes shafts, couplings, and expandable shaft guarding
- Mount package is attached to the first conveyor
- Maximum number of conveyors = 3
- Maximum total torque = 9 Nm





Refer to page 45 for belt speed options.

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

Dim = mm (in)

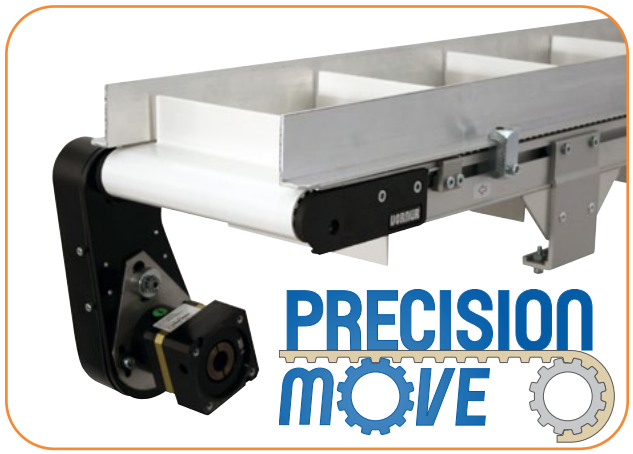
Precision Move Servo Bottom and Flush Mount Package

Specifications

- Capable of standard bottom mount position and flush mount for wide product handling
- Includes rack and pinion timing belt tension system allowing reversing capability
- Includes high strength timing belt drive pulleys

Servo Gearmotor or Reducer Only			
Description	Part Number	Gearmotor Pulley	Conveyor Pulley
Bottom Mount Flush Mount	202436-A* 202437-A*	36 tooth 36 tooth	32 tooth 21 tooth

*A = Mount position (A, B, C, D)



Precision Move Servo Gearhead Only

Specifications

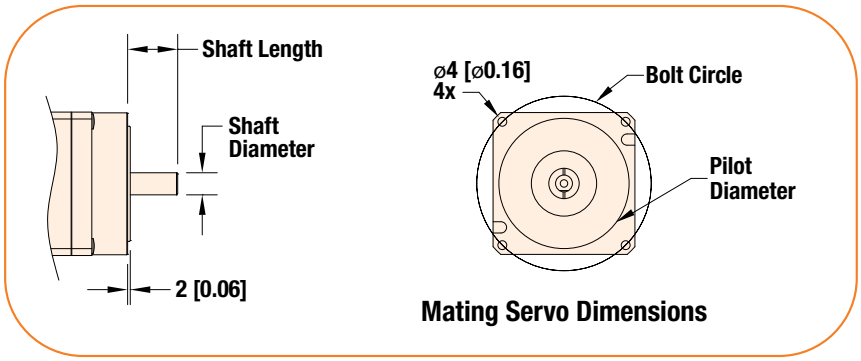
- Offered as mount package and gearhead only
- Inline planetary reducer
- 3:1, 4:1, 5:1, 7:1, and 10:1 ratios available
- 93% efficient
- 13 arc-minute backlash
- 20,000 hr rated
- RoHS compliant

Gear Reducer for Customer Specified Motor

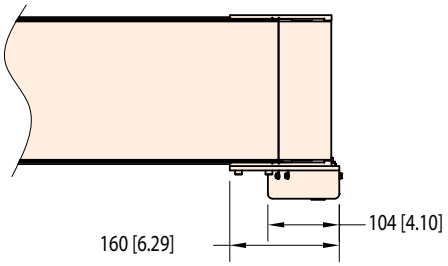
Generalized Sizes						
Shaft Diameter		Shaft Length		Bolt Circle		Pilot Diameter
Min	Max	Min	Max	Min	Max	Max
0.24 (6)	0.55 (14)	0.67 (17)	1.54 (39)	2.36 (60)	4.13 (105)	3.15 (80)

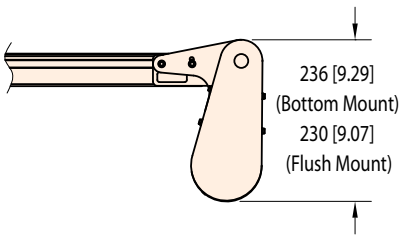
Dim = mm (in)

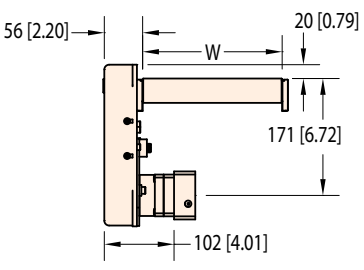
NOTE: These are generalized guidelines for mating adapters. Consult DTools or customer service to identify proper adapter for given motor.



Mating Servo Dimensions

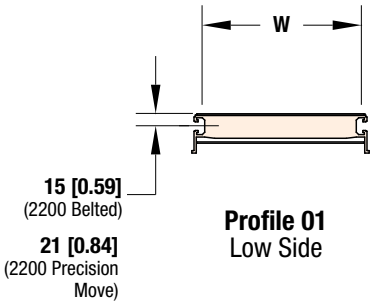




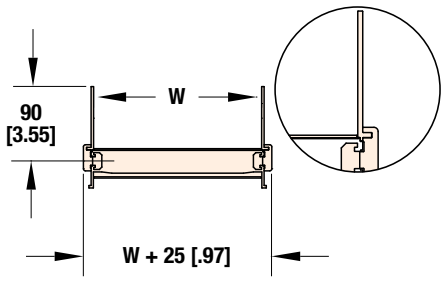


Dim = mm (in)

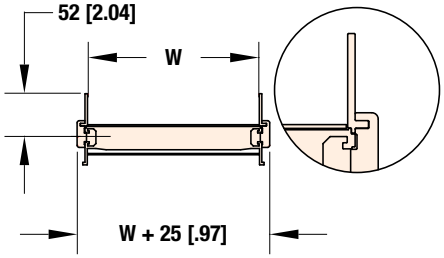
Due to the wide variety of drive set-ups and applications, point of installation guarding is the responsibility of the end user.



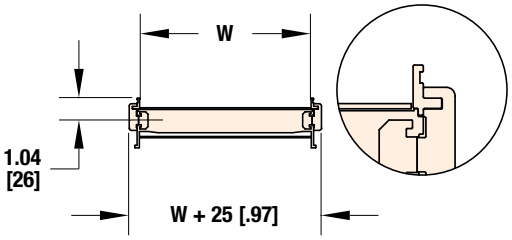
Profile 01
Low Side



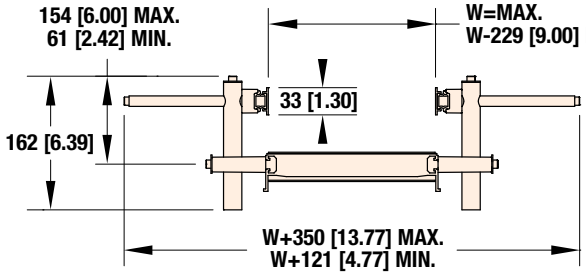
Profile 04
76 mm (3 in) Aluminum Side



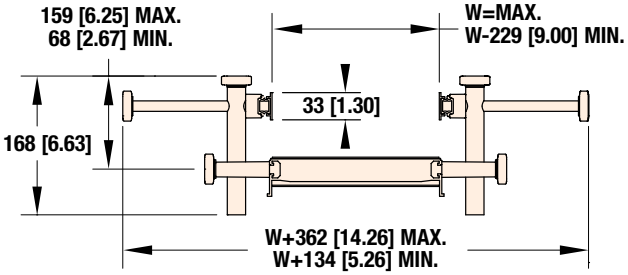
Profile 05
38 mm (1.5 in) Aluminum Side



Profile 09
13 mm (0.5 in) Aluminum Side



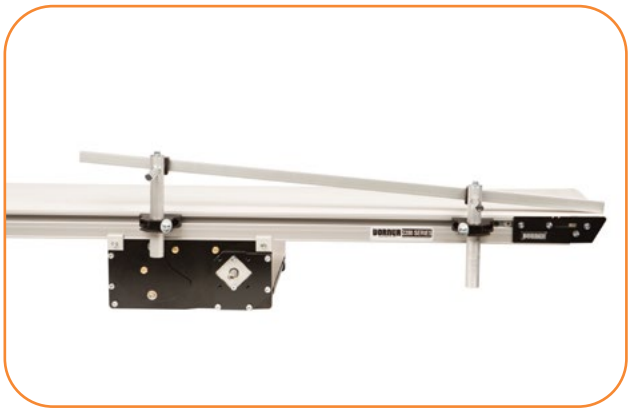
Profile 13
Adjustable Guiding
33 mm (1.3 in) HDPE Face



Profile 14
Tool-less Adjustable Guiding
33 mm (1.3 in) HDPE Face

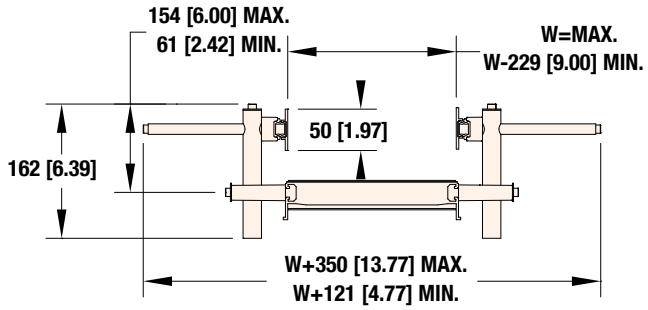
** = Not available on Gravity Roller Conveyors and do not use with high friction belts*

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

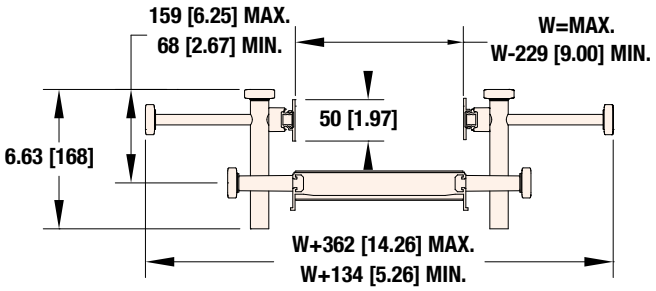


Profile 13 Flat Belt - Adjustable Guiding

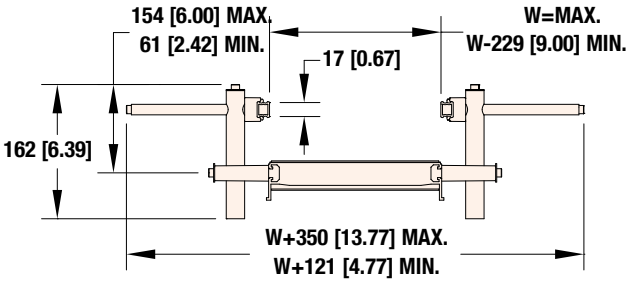
Due to the wide variety of drive set-ups and applications, point of installation guarding is the responsibility of the end user.



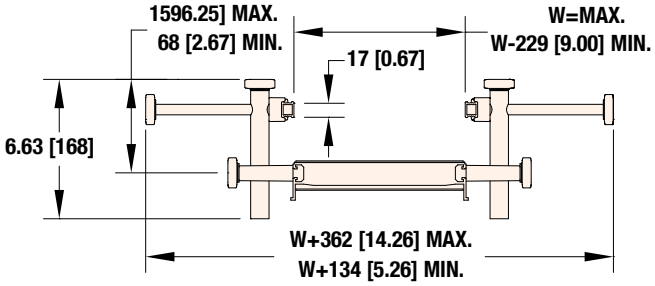
Profile 33
Adjustable Guiding
50 mm (2 in) HDPE Face



Profile 34
Tool-less Adjustable Guiding
50 mm (2 in) HDPE Face



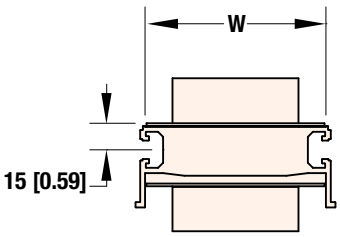
Profile 43
Adjustable Guiding
Aluminum Face



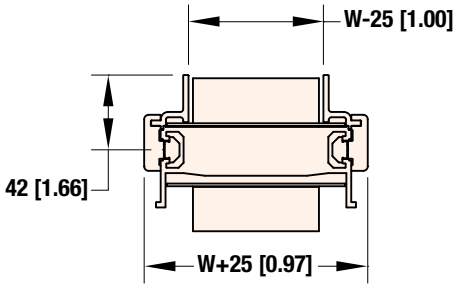
Profile 44
Tool-less Adjustable Guiding
Aluminum Face

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

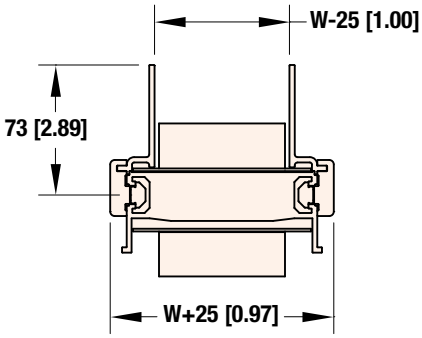
Due to the wide variety of drive set-ups and applications, point of installation guarding is the responsibility of the end user.



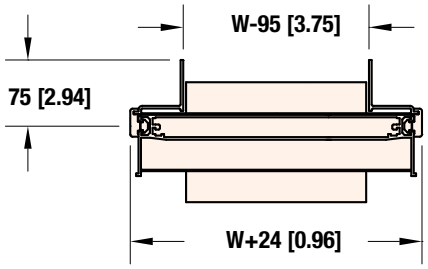
Cleated Profile 0
Low Side Cleated



Cleated Profile 2/4
25 mm (1 in) Aluminum Side
Note: Profile 2 is cut 45 degree on both end - for reversing applications
Profile 4 is cut 45 degree on infeed end, 90 degree on discharge



Cleated Profile 3/5
64 mm (2.5 in) Aluminum Side
Note: Profile 3 is cut 45 degree on both end - for reversing applications
Profile 5 is cut 45 degree on infeed end, 90 degree on discharge



Cleated LPZ Profile 3
64 mm (2.5 in) Aluminum Side

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

Profile 04 Flat Belt - Aluminum Side

Profile 3 Cleated LPZ - Aluminum Side

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

Standard Belt Selection Guide

Standard belt material is stocked at Dorner, then cut & spliced at the factory for fast conveyor shipment.

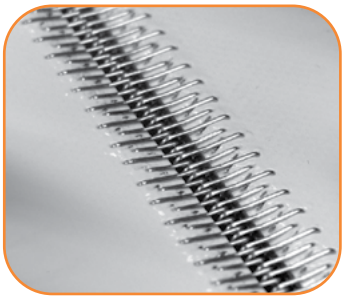
Belt Type - Finger Splice	Belt Type - Plastic Clipper	Belt Type - Metal Clipper	Belt Specifications	V-Guidable	16 mm Nose Bar	Belt Thickness	Surface Material	Maximum Part Temperature	Coefficient of Friction	FDA Approved	Anti-Static	ESD	Chemical Resistance	Special Characteristics or Applications
01	A1	1A	FDA Accumulation	x		1.7 mm	Urethane	100˚C	Low	x	x		Good	Packaging, clean room and inspection
02	A2	2A	General Purpose	x		1.8 mm	Urethane	100˚C	Med	x	x		Good	Most versatile belt offering
03	A3	3A	FDA High Friction	x		1.7 mm	Urethane	100˚C	High	x	x		Good	Packaging, clean room and inspection
05	A5	5A	Accumulation	x	x	1.2 mm	Urethane	100˚C	V-Low	x	x		Good	Accumulation of products
06	A6	6A	Static Dissipative	x		1.6 mm	Urethane	80˚C	V-Low		x	x	Good	Electronics Handling
08	A8	8A	High Friction	x		2.1 mm	PVC	70˚C	V-High		x		Poor	Conveys up to 35˚ inclines*
09			iDrive General Purpose	x	x	1.5 mm	Urethane	100˚C	High	x			Good	Lower No Load Torque

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.

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.

*** See belt charts for compatibility. Not for use with 2200 Series Nose Bar Transfers. Plastic and Metal Clippers are slightly thicker than base belt. Contact factory for details.*

Specialty Belt Selection Guide

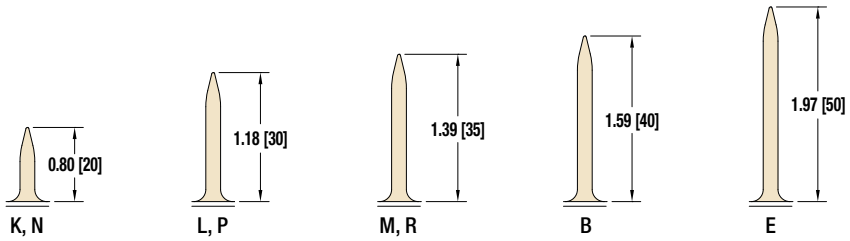
Specialty belt material is not stocked at Dorner and needs to be custom ordered for your special conveyor needs.

Belt Type - Finger Splice	Belt Type - Plastic Clipper	Belt Type - Metal Clipper	Belt Specifications	V-Guideable	16 mm Nose Bar	Belt Thickness	Surface Material	Maximum Part Temperature	Coefficient of Friction	FDA Approved	Anti-Static	Static Conductive	Chemical Resistance	Special Characteristics or Applications
19			Nose bar High friction		x	0.7 mm	Urethane	100˚C	High	x	x		Good	Nose bar, high friction
50			Heat Resistant			1.3 mm	Silicone	180˚C	Low		x		V-Good	High temperature
53			Translucent		x	0.5 mm	Urethane	100˚C	V-Low	x			Good	Back lit inspection
54	F4	4F	FDA Sealed Edge**	x		1.6 mm	Urethane	80˚C	Low	x	x		Good	Packaging, clean room and inspection
55	F5	5F	FDA Sealed Edge**	x		1.6 mm	Urethane	80˚C	High	x	x		Good	Packaging, clean room and inspection
56		6F	Cut Resistant	x		2.1 mm	Urethane	100˚C	Med.		x		Good	Oily product release, metal stamping
57		7F	Cut Resistant	x		2.5 mm	Nitrile	80˚C	Med.		x		Poor	Felt-like, dry metal stamping, glass and ceramic
58		8F	Cut Resistant	x		1.6 mm	Urethane	90˚C	Low		x		Good	Surface gold colored
59	F9	9F	Color Contrasting	x		1.6 mm	PVC	70˚C	Med.		x		Poor	Black colored, hides overspray from ink jet
60	G0	0G	Color Contrasting	x	x	1.3 mm	Urethane	100˚C	Low	x	x		Good	Green colored
61	G1	1G	Color Contrasting	x	x	1.3 mm	Urethane	100˚C	Low	x			Good	Blue colored
63		3G	Electrically Conductive	x		1.2 mm	Urethane	80˚C	Low		x	x	Good	Static conductive, electronics handling
64		4G	High Friction	x		4.4 mm	PVC	80˚C	V-High		x		Poor	Dark Green colored, rough top surface, product cushioning, incline/decline apps
66		6G	Chemical Resistant	x		1.7 mm	Polyester	100˚C	Med.	x	x		V-Good	Good cut resistance, metal stamping apps
67			Low Friction Cleated (Do not use with Z-Frame)	x		1.6 mm	Polyester	100˚C	n/a	x			Good	Excellent product release, consult factory for part number and how to specify low friction
68	G8		FDA Encased**	x		1.5 mm	Urethane	80˚C	Low	x	x		Good	Urethane enclosed for added sanitary protection
69	G9		FDA Encased**	x		2.2 mm	Urethane	80˚C	Med.	x	x		Good	Urethane enclosed for added sanitary protection
71			FDA High Release	x		1.8 mm	Urethane	100˚C	Low	x			Good	High release cover
72			Nose bar	x	x	1.2 mm	Urethane	100˚C	Med.	x	x		Good	16 mm Nose bar, medium friction
73			Nose bar Low friction		x	0.9 mm	Urethane	100˚C	Low	x	x		Good	Nose bar, low friction
75			Black Urethane	x		1.5 mm	Urethane	80˚C	Low		x		Good	
76			Black Nose bar	x	x	1.2 mm	Urethane	80˚C	Med.		x		Good	Black Color, 5/16" nose bar
77			High Friction, green	x		2.2 mm	Urethane	100˚C	High		x		Good	Green color, high friction, urethane, grooved
78			Chemical, Polyolefin, HF			1.4 mm	Polyolefin	60˚C	High	x			V-Good	Chemical resistant, food grade
79			Chemical, Polyolefin, LF			1.3 mm	Polyolefin	60˚C	Med.	x	x		V-Good	Chemical resistant, food grade
80			High Friction, silicone	x	x	1 mm	Silicone	80˚C	High	x			Good	Silicone material, high friction
81			Low Friction, silicone	x	x	1 mm	Silicone	100˚C	Med.	x			Good	Silicone material, low to medium friction

Note: Clipper Splices not available on Z-Frame Series Conveyors.
Note: Conveyors wider than 1,016 mm require V-Guide belt tracking

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.
** Not available in 51 mm widths

Cleated Belt Profiles



Cleated Belt Selection Guide

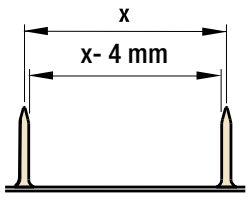
Cleat Type	Base Belt	Belt Thickness	Surface Material	Color	Coefficient of Friction	V-Guidable	Maximum Part Temperature	FDA Approved	Chemical Resistance
K, L, B, E	G-3-ST	2 mm	PVC	Green	Medium	No	80° C	No	Poor
K, L, M, B, E, N, P, R	G-3-ST-W	1.3 mm	Urethane	White	Medium	Yes	90° C	Yes	Good

Note: For Straight Cleated Conveyors = 20, 30, 35 mm
For LPZ Cleated Conveyors = 20, 30, 35, 40, 50 mm
For LPZ Sidewall Cleated Conveyors = 20, 30, 35 mm

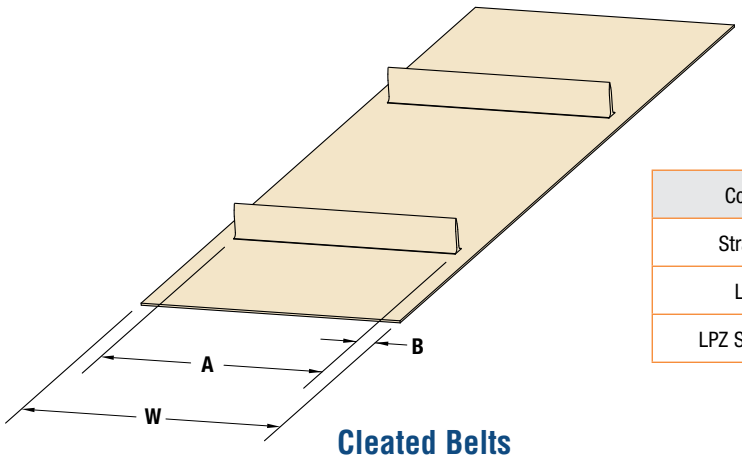
Cleated Belt Spacing

- Minimum cleat spacing = 50 mm
  Cleat Selection could impact the minimum spacing.
  Contact the factory for details.

*Maximum cleat spacing for 457 mm and wider conveyors = 500 mm
**Maximum cleat spacing for 2134 mm and longer conveyors = 500 mm
457 mm and wider conveyors are limited to 2100 mm long



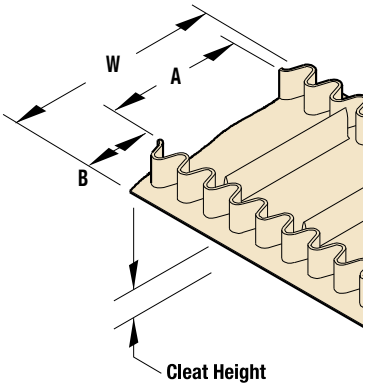
Tolerance ± 2 mm



Cleated Belts

Conveyor Type	Cleat/Pocket Width (A)	Offset (B)
Straight Cleated	W-40 mm	20 mm
LPZ Cleated	W-102 mm	51 mm
LPZ Sidewall Cleated	W-190 mm	80 mm

W = Width
A = Cleat Width
B = Offset



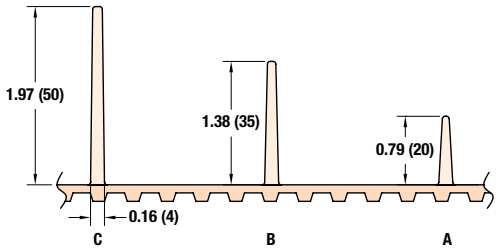
Sidewall Cleated Belts

Precision Move Belting

Precision Move Belt Selection Guide

Part Number Reference	Belt Specifications	Tooth Pitch	Thickness	Material	Top Surface	Color	Maximum Part Temperature	Coefficient of Friction	Durometer	FDA Approved	Chemical Resistance	Max Width
1P	Low Friction	10 mm	4.5 mm	Urethane with nylon top	Carcass	Green	91˚ C	V-Low	N/A		Good	610 mm
3P	High Friction	10 mm	4.5 mm	Urethane	Smooth	White	91˚ C	High	85A	x	Good	610 mm
2T	High Strength	10 mm	4.6 mm	Urethane with Kevlar cords	Smooth	Natural	71˚ C	Med	88A		Good	152 mm

Precision Move Cleat Profiles



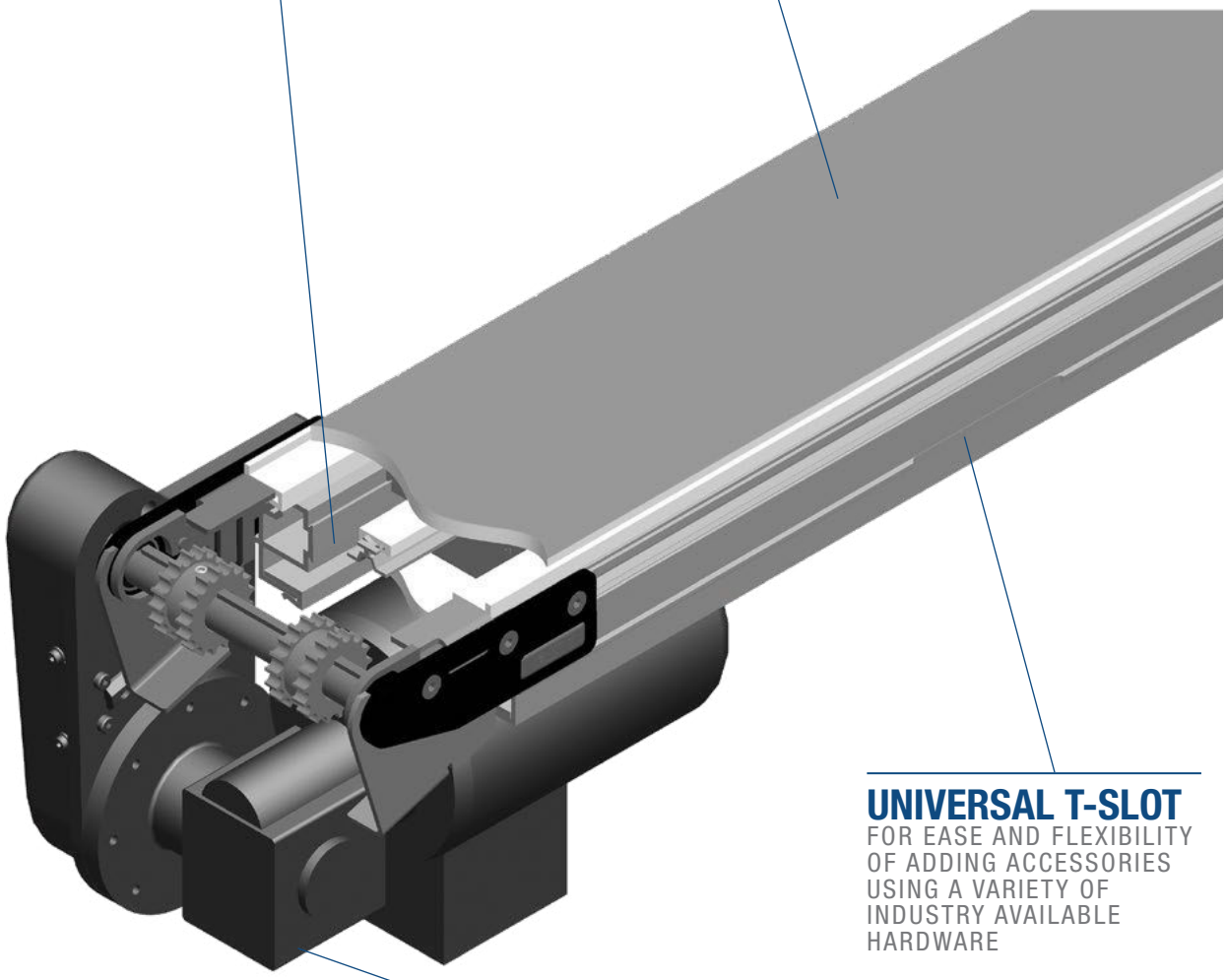
Specifications

- Base Belt Material: Belt 3P, 4.5 mm thick, high friction FDA approved urethane, 91° C maximum part temperature
- Cleat spacing in 10 mm increments
- Cleats are centered over tooth
- Minimum cleat spacing is approximately 50 mm

NOTE: 2200 Precision Move cleated widths 457 mm and over will have a 20.5 mm gap in the cleats and use a return assembly that has a center support bearing.

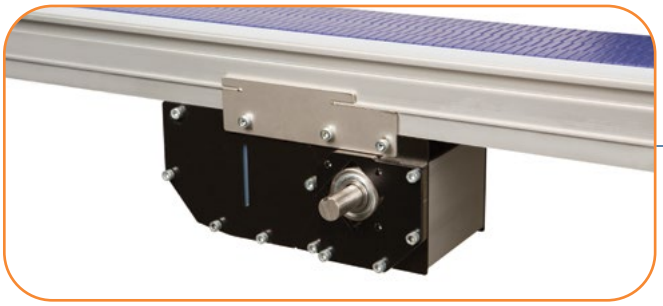
OPEN FRAME CONSTRUCTION
FOR WATER AND CHEMICAL DRAINAGE AND AIR COOLING

ALL BELTS FULLY CONTAINED IN UHMW GUIDING
FOR MAINTENANCE FREE TRACKING



UNIVERSAL T-SLOT
FOR EASE AND FLEXIBILITY OF ADDING ACCESSORIES USING A VARIETY OF INDUSTRY AVAILABLE HARDWARE

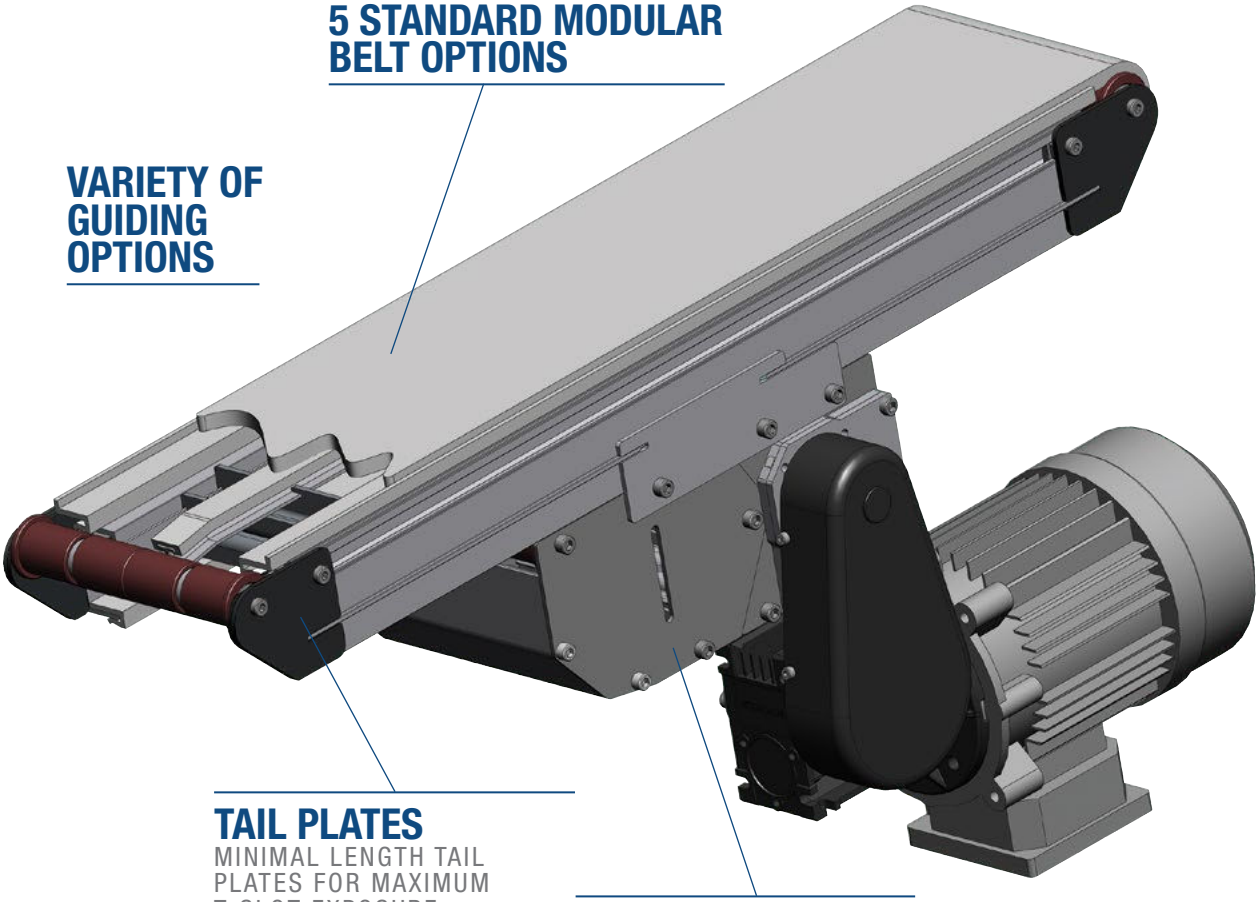
GEARMOTOR
SEALED GEARMOTORS IN SIZES FROM LIGHT LOAD, STANDARD LOAD AND HEAVY LOAD TO MEET YOUR APPLICATION NEEDS.



CENTER DRIVE OPTION
FREES UP SPACE ON BOTH ENDS OF THE CONVEYOR

5 STANDARD MODULAR BELT OPTIONS

VARIETY OF GUIDING OPTIONS

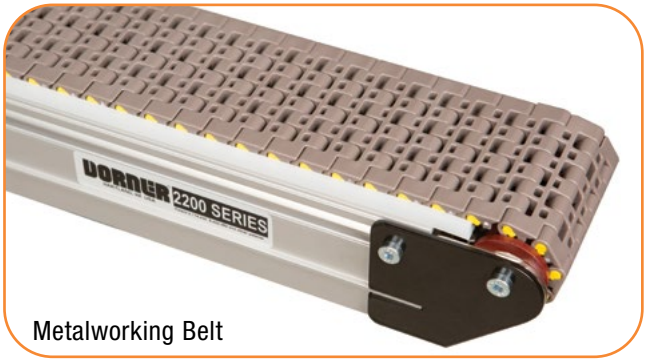


TAIL PLATES
MINIMAL LENGTH TAIL PLATES FOR MAXIMUM T-SLOT EXPOSURE

SPLIT BOX DESIGN
ALLOWS BELT REPLACEMENT WITHOUT REMOVING MOTOR FROM CONVEYOR

8 MM NOSEBAR TAIL OPTION
FOR SMALL PART TRANSFERS

Micropitch Belt



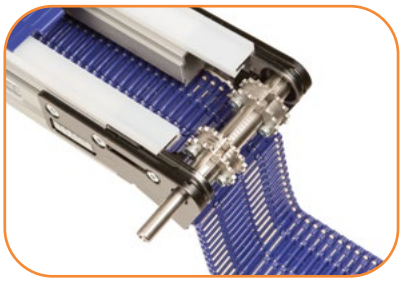
Metalworking Belt

Specifications

- Loads up to 68 kg*
- Belt speeds up to 76 m/min
- Belt widths: 76 mm to 610 mm**
- Conveyor lengths: 457 mm to 9,144 mm
- Belt options:

  Micropitch (General Purpose) Belts
  - 8 mm micropitch modular belt
  - 43.2 mm pitch diameter 17 tooth drive pulley turns approximately 136 mm of belt per revolution

  Metalworking Belts
  - 15 mm pitch modular belt
  - 47.8 mm pitch diameter 10 tooth drive pulley turns approximately 150 mm of belt per revolution
- 12 mm diameter integral drive shaft
- Fully encapsulated in frame belt return



STANDARD FEATURE:
OPEN FRAME DESIGN

for water and chemical drainage and air cooling

OPTIONAL: 8 mm Nose Bar Transfer

Belt Speed up to 53.3 m/min
(Micropitch Modular Belt only)

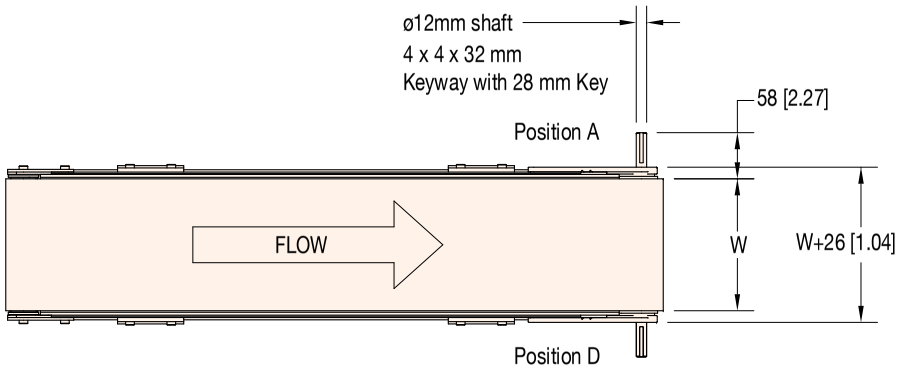
2200 Series Modular Belt End Drive Conveyor

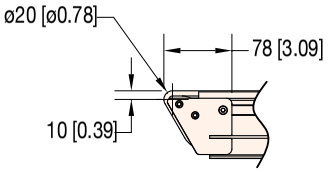
22 MT E M WW - LLLL 1 1 A PP PP BB - X T^1 T^2 T^3 T^4

- **Conveyor Tail Options X** (if required) *See Drive Shaft Position Chart on next page
  - **A** = Drive Shaft (T^1 only)
  - **D** = Drive Shaft (T^2 only)
  - **0** = No Shaft
  - **K** = Keyed Auxiliary Shaft (T^1 and T^2 only)
  - **S** = Stub Shaft (T^1 and T^2 only)
- **Belt Type**
- **Profile (D side)**
- **Profile (A side)**
- **Flow/Drive Shaft Position:** **A or D**
- **Infeed Tail Code:** **0** = Standard idler, **1** = Nose Bar
- **Mounting Bracket Options:** **1** = Conveyor to include mounting brackets, **3** = Conveyor not to include mounting brackets
- **Conveyor Length Reference:** LL.LL in feet
- **Conveyor Width Reference**
- **Documentation Language:** **U** = Europe English, **D** = German, **F** = French, **S** = Spanish

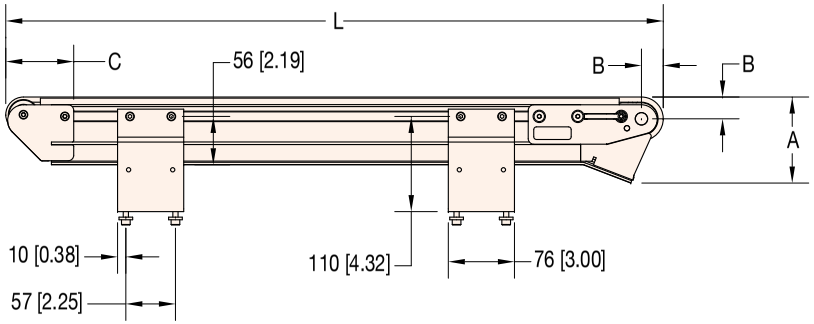
* Conveyor load capacity depends on conveyor size, incline, motor position, accumulated loads and other factors.
** Belt selection limits width options

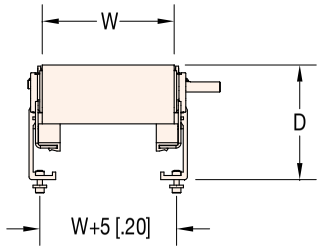
Order gearmotor mounting packages and gearmotors separately, see pages 48-62
For support stands and accessories, see page 66-67





OPTIONAL NOSE BAR TRANSFER





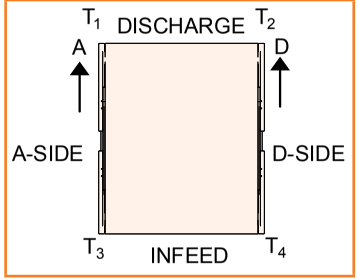
A=99 [3.90] FOR MICROPITCH BELT
102 [4.00] FOR METALWORKING BELT
B=25 [.99] FOR MICROPITCH BELT
28 [1.09] FOR METALWORKING BELT
C=78 [3.08] FOR MICROPITCH BELT
81 [3.18] FOR METALWORKING BELT
D=132 [5.20] FOR MICROPITCH BELT
135 [5.32] FOR METALWORKING BELT

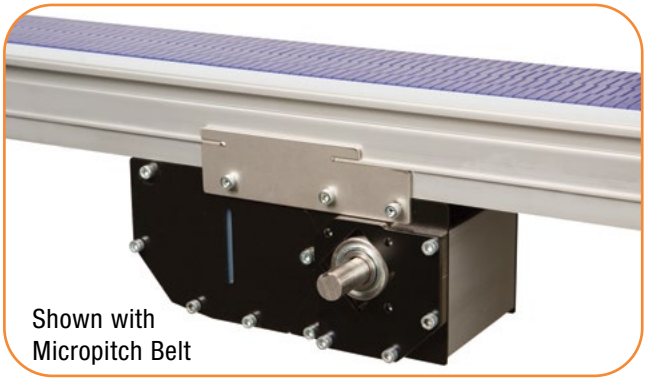
W = Conveyor Belt Width **Dim = mm** (in)

Standard Micropitch Sizes						
Conveyor Width Reference	04	06	08	12	18	24
Conveyor Belt Width (W)	102 mm	152 mm	203 mm	305 mm	457 mm	610 mm
Conveyor Length Reference	0150	0001 increments **up to...**				3000
Conveyor Length (L)	457 mm	0.1" (3mm) increments **up to...**				9144 mm

Standard Metalworking Sizes						
Conveyor Width Reference	03	06	09	12	18	24
Conveyor Belt Width (W)	76 mm	152 mm	229 mm	305 mm	457 mm	610 mm
Conveyor Length Reference	0150		0001 increments **up to...**		3000	
Conveyor Length (L)	457 mm		3 mm increments **up to...**		9144 mm	

DRIVE SHAFT POSITION





Shown with Micropitch Belt

Specifications

- Loads up to 68 kg*
- Belt speeds up to 76 m/min
- Belt widths: 76 mm to 610 mm**
- Conveyor lengths: 813 mm to 9,144 mm
- Belt options:

  Micropitch (General Purpose) Belts
  - 8 mm micropitch modular belt
  - 43.2 mm pitch diameter 17 tooth drive pulley turns approximately 136 mm of belt per revolution

  Metalworking Belts
  - 15 mm pitch modular belt
  - 47.8 mm pitch diameter 10 tooth drive pulley turns approximately 150 mm of belt per revolution
- 0.75 inch diameter integral drive shaft
- Fully encapsulated in frame belt return

STANDARD FEATURE: OPEN FRAME DESIGN

for water and chemical drainage and air cooling

OPTIONAL: 8 mm Nose Bar Transfer

Belt Speed up to 53.3 m/min
(Micropitch Modular Belt only)

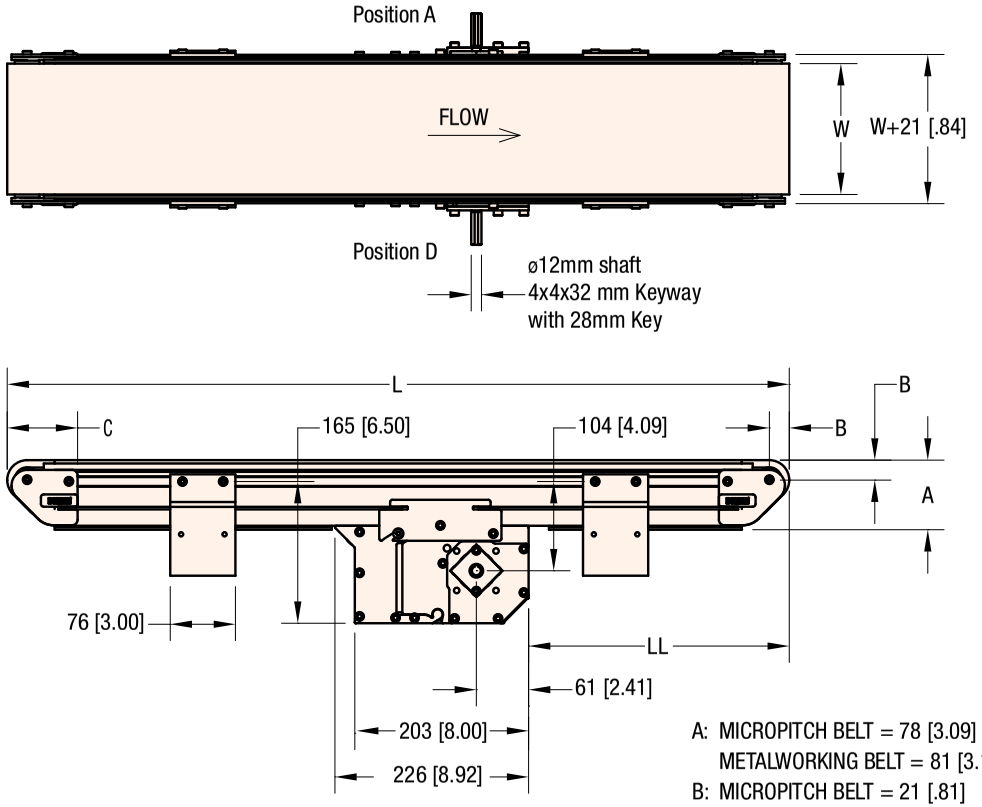
2200 Series Modular Belt Center Drive Conveyor

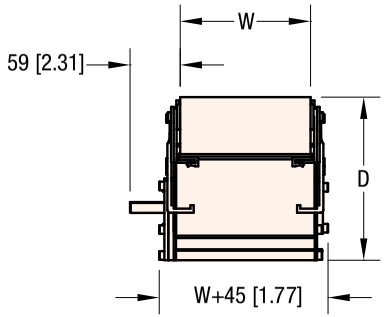
22 MT D M WW - LLLL 1 1 1 A PP PP BB - LL

- **Length from Discharge End to Drive Module** (LL in inches)
- **Belt Type**
- **Profile (D side)**
- **Profile (A side)**
- **Drive Shaft Position: A or D**
- **Infeed Tail Code: 0** = Standard idler, **1** = Nose Bar
- **Discharge Tail Code: 0** = Standard idler, **1** = Nose Bar
- **Mounting Bracket Options: 1** = Conveyor to include mounting brackets, **3** = Conveyor not to include mounting brackets
- **Conveyor Length Reference:** LL.LL in feet
- **Conveyor Width Reference**
- **Documentation Language: U** = Europe English, **D** = German, **F** = French, **S** = Spanish

* Conveyor load capacity depends on conveyor size, incline, motor position, accumulated loads and other factors.
** Belt selection limits width options

Order gearmotor mounting packages and gearmotors separately, see pages 48-62
For support stands and accessories, see page 66-67





A: MICROPITCH BELT = 78 [3.09]
METALWORKING BELT = 81 [3.19]
B: MICROPITCH BELT = 21 [.81]
METALWORKING BELT = 23 [.92]

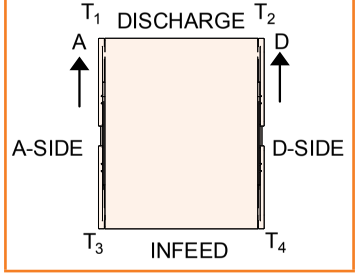
C: MICROPITCH BELT = 80 [3.14]
METALWORKING BELT = 82 [3.24]
D: MICROPITCH BELT = 187 [7.37]
METALWORKING BELT = 190 [7.48]

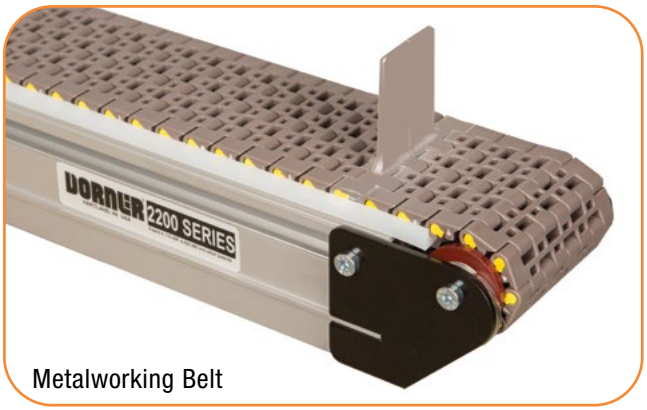
LL (Min = 10, MAX = 60) **W** = Conveyor Belt Width **Dim = mm** (in)

Standard Micropitch Sizes						
Conveyor Width Reference	04	06	08	12	18	24
Conveyor Belt Width (W)	102 mm	152 mm	203 mm	305 mm	457 mm	610 mm
Conveyor Length Reference	0150	0001 increments **up to...**				3000
Conveyor Length (L)	457 mm	3 mm increments **up to...**				9144 mm

Standard Metalworking Sizes						
Conveyor Width Reference	03	06	09	12	18	24
Conveyor Belt Width (W)	76 mm	152 mm	229 mm	305 mm	457 mm	610 mm
Conveyor Length Reference	0267		0001 increments **up to...**		3000	
Conveyor Length (L)	813 mm		3 mm increments **up to...**		9144 mm	

DRIVE SHAFT POSITION





Metalworking Belt

Specifications

- Loads up to 68 kg*
- Belt speeds up to 76 m/min
- Belt widths: 76 mm to 610 mm**
- Conveyor lengths: 457 mm to 9,144 mm
- Belt options:

  Metalworking Belt
  - 47.8 mm pitch diameter 10 tooth drive pulley turns approximately 150 mm of belt per revolution
- 12 mm diameter integral drive shaft
- Fully encapsulate in frame belt return

STANDARD FEATURE:
OPEN FRAME DESIGN

for water and chemical drainage
and air cooling

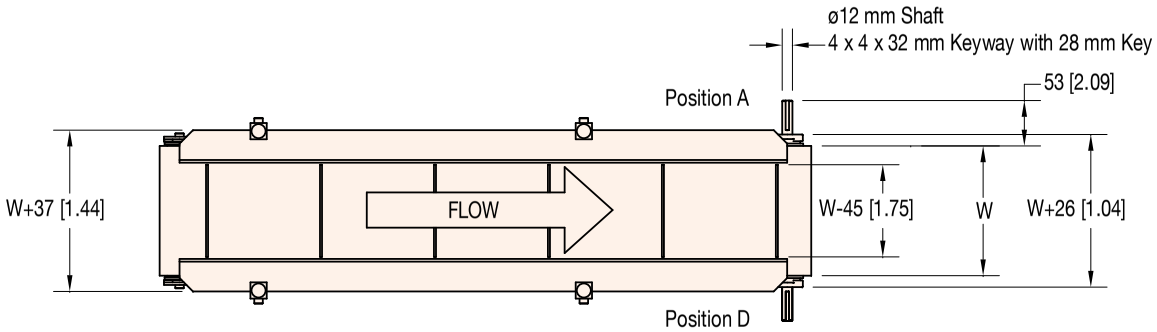
2200 Series Modular Cleated Belt Conveyor

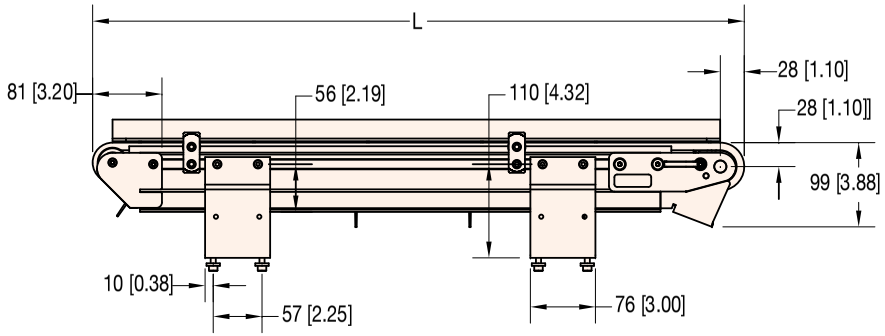
22 MT C M WW - LLLL 1 A P A BB SSSS - X T^1 T^2 T^3 T^4

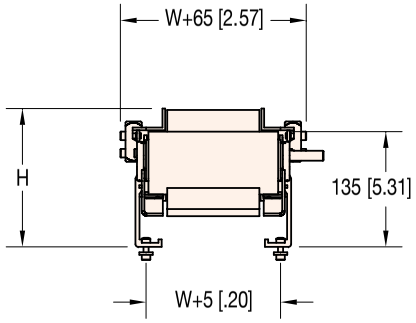
- **Conveyor Tail Options X** (if required) *See Drive Shaft Position Chart on next page
  - **A** = Drive Shaft (T^1 only)
  - **C** = Drive Shaft (T^2 only)
  - **O** = No Shaft
  - **K** = Keyed Auxiliary Shaft
  - **S** = Stub Shaft
  - **M** = Mag Location (T^3 or T^4 only)
- **Cleat Spacing: SS.SS in inches**
- **Belt Type**
- **Cleat Height**
- **Profile: 0** = Low Side, **2** = 1" Cleated, **3** = 2" Cleated
- **Flow/Drive Shaft Position: A or D**
- **Mounting Bracket Options: 1** = Conveyor to include mounting brackets, **3** = Conveyor not to include mounting brackets
- **Conveyor Length Reference:** LL.LL in feet
- **Conveyor Width Reference**
- **Documentation Language: U** = Europe English, **D** = German, **F** = French, **S** = Spanish

* Conveyor load capacity depends on conveyor size, incline, motor position, accumulated loads and other factors.
** Belt selection limits width options

Order gearmotor mounting packages and gearmotors separately, see pages 48-62
For support stands and accessories, see page 66-67





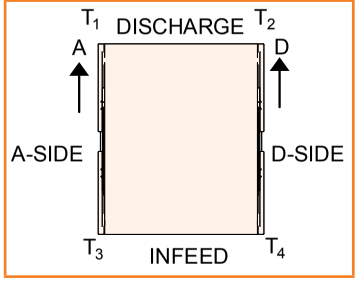


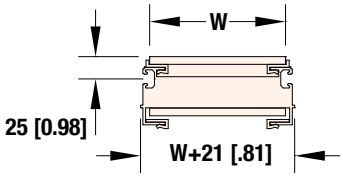
H=162 [6.38] FOR 25 mm [1 in] TALL CLEATED PROFILE
H=188 [7.38] FOR 50 mm [2 in] TALL CLEATED PROFILE

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

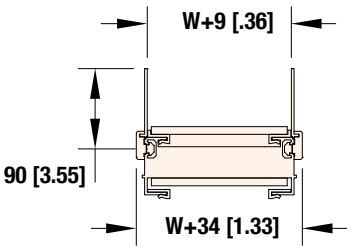
Standard Metalworking Sizes						
Conveyor Width Reference	03	06	09	12	18	24
Conveyor Belt Width (W)	76 mm	152 mm	229 mm	305 mm	457 mm	610 mm
Conveyor Length Reference	0150		0001 increments **up to...**		3000	
Conveyor Length (L)	457 mm		3 mm increments **up to...**		9144mm	

DRIVE SHAFT POSITION

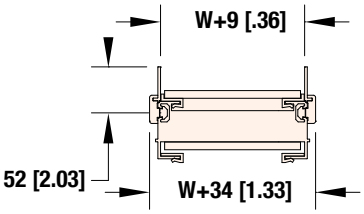




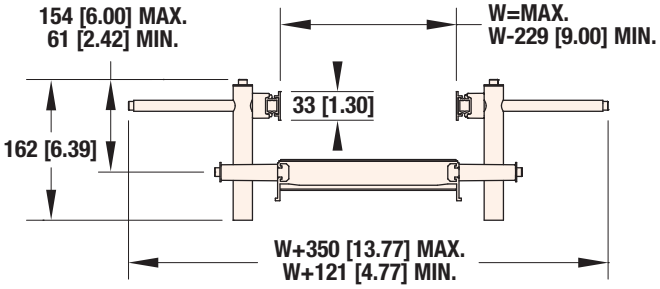
Profile 01
Low Side



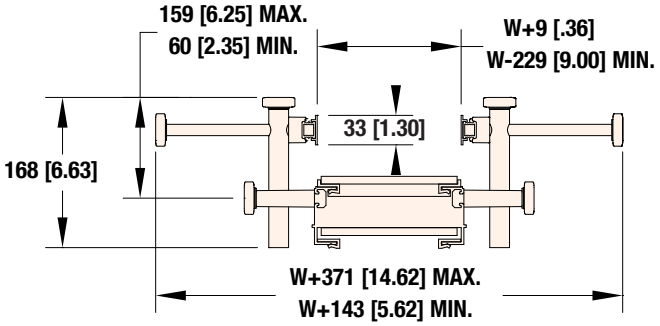
Profile 04
76 mm (3 in) Aluminum Side



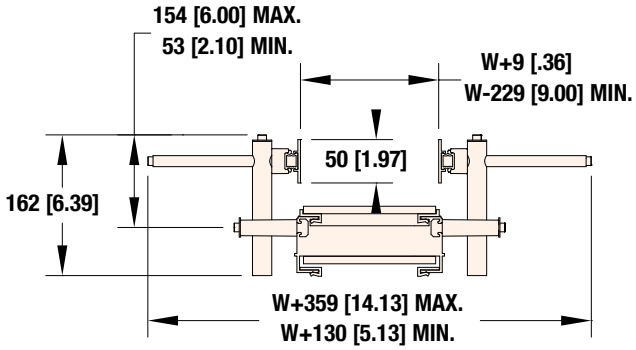
Profile 05
38 mm (1.5 in) Aluminum Side



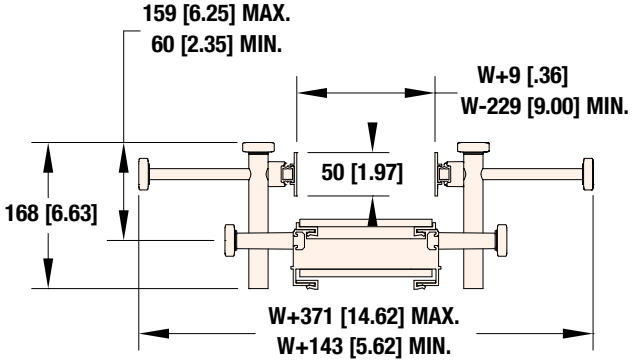
Profile 13
Adjustable Guiding
33 mm (1.3 in) HDPE Face



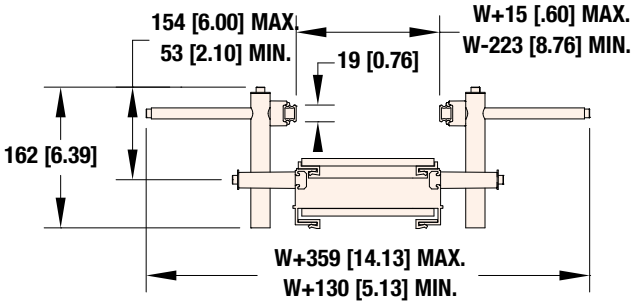
Profile 14
Tool-less Adjustable Guiding
33 mm (1.3 in) HDPE Face



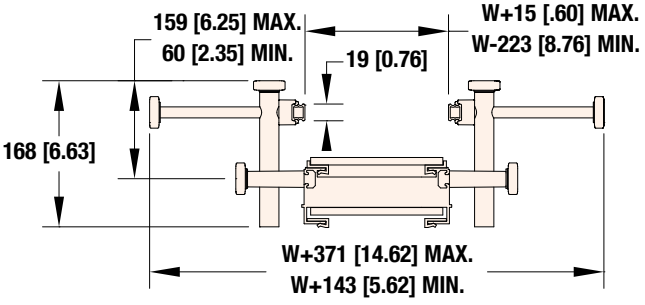
Profile 33
Adjustable Guiding
50 mm (2 in) HDPE Face



Profile 34
Tool-less Adjustable Guiding
50 mm (2 in) HDPE Face



Profile 43
Adjustable Guiding
Aluminum Face



Profile 44
Tool-less Adjustable Guiding
Aluminum Face

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 Modular Belt Selection Guide

Belt Type	Description	Percent Open	Tooth Pitch	Thickness	Material	Color	Maximum Part Temperature	Coefficient of Friction	FDA Approved	Nose Bar	Cleated	Chemical Resistance
01	Micropitch, Closed Mesh	N/A	8.1 mm	6 mm	Acetal	Blue	93 deg C	0.25	X	X		Good
30	Metalworking Accumulation, Open Mesh	26%	15 mm	8.7 mm	Acetal	Brown	82 deg C	0.22	X		X	Good
31	Metalworking Chemical Resistant, Open Mesh	26%	15 mm	8.7 mm	Polypropylene	White	104 deg C	0.33	X		X	Excellent
40	Metalworking Accumulation, Closed Mesh	N/A	15 mm	8.7 mm	Acetal	Brown	82 deg C	0.22	X		X	Good
41	Metalworking Chemical Resistant, Closed Mesh	N/A	15 mm	8.7 mm	Polypropylene	White	104 deg C	0.33	X		X	Excellent

Note: White belt is available, contact factory for details.

Specialty Modular Belt Selection Guide

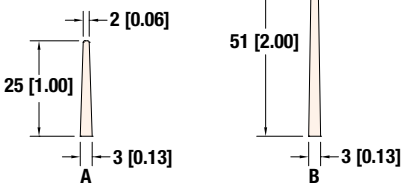
Belt Type	Description	Percent Open	Tooth Pitch	Thickness	Material	Color	Maximum Part Temperature	Coefficient of Friction	FDA Approved	Nose Bar	Cleated	Chemical Resistance
02	Micropitch, Open Mesh	34%	8.1 mm	6 mm	Acetal	Blue	93 deg C	0.3	X	X		Good
32	Metalworking Heat Resistant, Open Mesh*	26%	15 mm	8.7 mm	Nylon	Black	190 deg C	0.3				Good
42	Metalworking Heat Resistant, Closed Mesh*	N/A	15 mm	8.7 mm	Nylon	Black	190 deg C	0.3				Good

Note: White belt is available, contact factory for details.

* Although the belt material can handle temperatures up to 190 deg C, the core temperature of belt must not exceed 104 deg C. Please consult the factory for details. Also note: the conveyor wearstrip material located under the belt is designed for temperatures up to 79 deg C For applications exceeding these temperatures contact the factory.

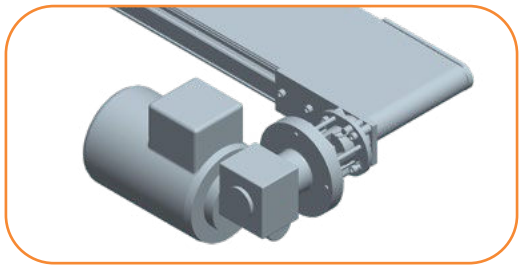
Cleated Belt Profiles

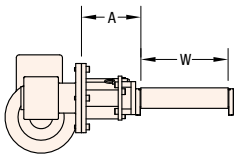
- Metalworking belt conveyors only.
See page 36 & 37 for more details.



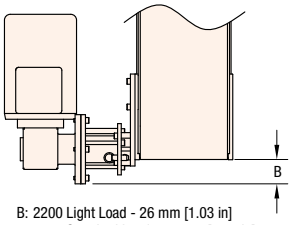
Dim = mm (in)

Side Mount Package, 90° Gearmotor





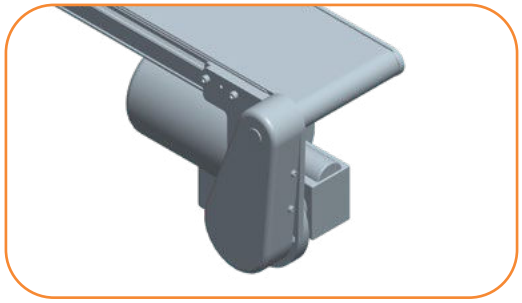
A: 2200 Light Load - 97 mm [3.83 in]
2200 Standard Load - 102 mm [4.02 in]
2200 Heavy Load - 102 mm [4.02 in]
2700 Series - 108 mm [4.26 in]

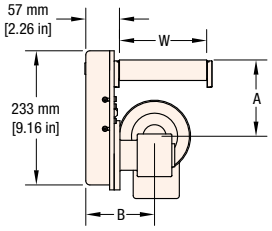


B: 2200 Light Load - 26 mm [1.03 in]
2200 Standard Load - 42 mm [1.65 in]
2200 Heavy Load - 42 mm [1.65 in]
2700 Series - 18 mm [0.72 in]

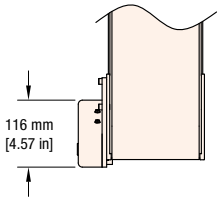
• Includes gearmotor mounting bracket, coupling, coupling guard and mounting hardware

Bottom Mount Package, 90° Gearmotor (2200 only*)





A: 2200 Light Load - 143 mm [5.63 in]
2200 Standard Load - 141 mm [5.55 in]
2200 Heavy Load - 213 mm [8.42 in]

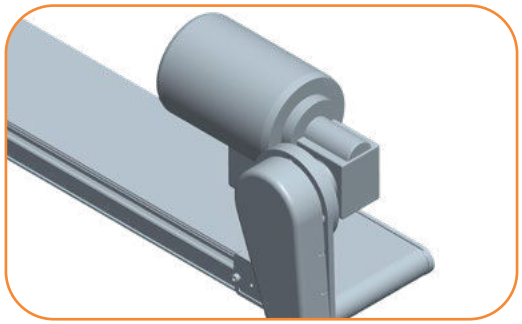


B: 2200 Light Load - 101 mm [4.00 in]
2200 Standard Load - 119 mm [4.69 in]
2200 Heavy Load - 111 mm [4.38 in]

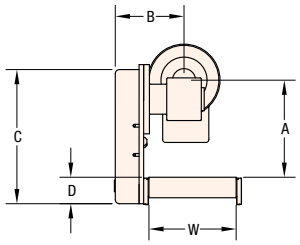
• Includes gearmotor mounting bracket, timing belt and pulleys, guard cover and mounting hardware

*for 2700 see flush bottom mount

Top Mount Package, 90° Gearmotor

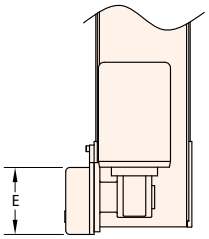


• Includes gearmotor mounting bracket, timing belt and pulleys, guard cover and mounting hardware



A: 2200 Light Load - 158 mm [6.21 in]
2200 Standard Load - 159 mm [6.29 in]
2200 Heavy Load - 167 mm [6.56 in]
2700 Series - 161 mm [6.33 in]

B: 2200 Light Load - 102 mm [4.00 in]
2200 Standard Load - 119 mm [4.69 in]
2200 Heavy Load - 111 mm [4.38 in]
2700 Series - 108 mm [4.26 in]



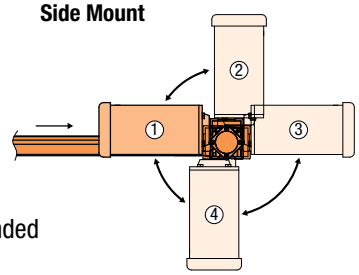
C: 2200 Series - 233 mm [9.16 in]
2700 Series - 235 mm [9.25 in]

D: 2200 Series - 54 mm [2.15 in]
2700 Series - 63 mm [2.46 in]

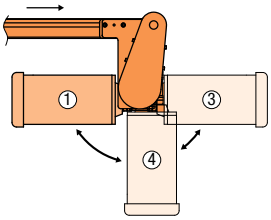
E: 2200 Series - 116 mm [4.57 in]
2700 Series - 103 mm [4.06 in]

90° Gearmotor Location Options

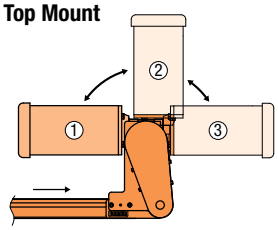
Side Mount



Bottom Mount



Top Mount



Note: Position 1 recommended

Consult factory for details

Note: Conveyor and gearmotor are not included in the mounting package and must be ordered separately.

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

For ordering information, see page 52

2200 End Drive Belt Speed

Fixed Speed

2200 Belt	2200 Precision Move	2200 LPZ	2200 Modular Belt		RPM From Gearmotor	Mount Package		Pulley Kit		Gearmotor Chart		
			Micropitch Belts 01 and 02	Metalworking Belts 30 thru 42		Top & Bottom	Side	Drive Pulley	Driven Pulley	Light Load	Standard Load	Heavy Load
Meter/min	Meter/min	Meter/min	Meter/min	Meter/min								
2.3	2.8	4.5	3.1	3.5	23	X	X	28	28			**5**
2.6	3.0	4.9	3.4	3.8	25	X	X	28	28	**1**	**3**	
3.7	4.3		4.9	5.4	23	X		44	28			**5**
4.0	4.7		5.3	5.9	25	X		44	28	**1**	**3**	
4.7	5.5		6.3	6.9	23	X		44	22			**5**
4.8	5.6	9.2	6.4	7.1	47	X	X	28	28	**1**	**3**	**5**
5.1	6.0		6.8	7.5	25	X		44	22	**1**	**3**	
5.1	6.0		6.8	7.5	23	X		48	22			**5**
5.6	6.5		7.4	8.2	25	X		48	22	**1**	**3**	
6.8	8.0	13.1	9.1	10.1	67	X	X	28	28			**5**
7.1	8.4	13.6	9.5	10.5	70	X	X	28	28	**1**	**3**	
7.5	8.9		10.0	11.1	47	X		44	28	**1**	**3**	**5**
9.5	11.2	18.1	12.6	14.0	93	X	X	28	28	**1**	**3**	**5**
9.6	11.3		12.8	14.1	47	X		44	22	**1**	**3**	**5**
10.5	12.3		13.9	15.4	47	X		48	22	**1**	**3**	**5**
10.8	12.6		14.3	15.8	67	X		44	28			**5**
11.2	13.2		15.0	16.5	70	X		44	28	**1**	**3**	
12.7	14.9	24.2	16.9	18.6	124	X	X	28	28		**3**	
13.7	16.1		18.2	20.1	67	X		44	22			**5**
14.3	16.8	27.3	19.0	21.0	140	X	X	28	28	**1**		
14.3	16.8		19.0	21.0	70	X		44	22	**1**	**3**	
14.8	17.4	28.2	19.7	21.8	145	X	X	28	28			**5**
14.9	17.5		19.9	21.9	93	X		44	28	**1**	**3**	**5**
14.9	17.5		19.9	21.9	67	X		48	22			**5**
15.6	18.3		20.8	22.9	70	X		48	22	**1**	**3**	
19.0	22.3		25.3	27.9	93	X		44	22	**1**	**3**	**5**
19.9	23.4		26.5	29.2	124	X		44	28		**3**	
20.4	24.0	39.0	27.2	30.0	200	X	X	28	28	**1**	**3**	
20.7	24.3		27.6	30.4	93	X		48	22	**1**	**3**	**5**
21.4	25.2	40.9	28.6	31.5	210	X	X	28	28			**5**
22.5	26.4		29.9	33.0	140	X		44	28	**1**		
23.3	27.3		31.0	34.2	145	X		44	28			**5**
25.3	29.8		33.7	37.2	124	X		44	22		**3**	
27.6	32.5		36.8	40.6	124	X		48	22		**3**	
28.6	33.6		38.1	42.0	140	X		44	22	**1**		
29.6	34.8		39.4	43.5	145	X		44	22			**5**
31.2	36.7		41.5	45.8	140	X		48	22	**1**		
32.1	37.7		42.7	47.1	200	X		44	28	**1**	**3**	
32.3	38.0		43.0	47.5	145	X		48	22			**5**
33.7	39.6		44.9	49.5	210	X		44	28			**5**
40.9	48.0		54.4	60.0	200	X		44	22	**1**	**3**	
42.9	50.4		57.1	63.0	210	X		44	22			**5**
44.6	52.4		59.3	65.5	200	X		48	22	**1**	**3**	
46.8	55.0		62.3	68.7	210	X		48	22			**5**

2200 End Drive Belt Speed

Variable Speed

2200 Belt	2200 Precision Move	2200 LPZ	2200 Modular Belt		RPM From Gearmotor at 50 Hz	Mount Package		Pulley Kit		Gearmotor Chart		
			Micropitch Belts 01 and 02	Metalworking Belts 30 thru 42								
Meter/min	Meter/min	Meter/min	Meter/min	Meter/min		Top & Bottom	Side	Drive Pulley	Driven Pulley	Light Load	Standard Load	Heavy Load
0.9 - 3.2	1.1 - 3.9	1.8 - 6.3	1.2 - 4.3	1.4 - 4.9	23	X	X	28	28			**5**
1.0 - 3.6	1.2 - 4.2	2.0 - 6.9	1.4 - 4.8	1.5 - 5.3	25	X	X	28	28	**1**	**3**	
1.5 - 5.2	1.7 - 6.0		2.0 - 6.9	2.2 - 7.6	23	X		44	28			**5**
1.6 - 5.6	1.9 - 6.6		2.1 - 7.4	2.4 - 8.3	25	X		44	28	**1**	**3**	
1.9 - 6.6	2.2 - 7.7		2.5 - 8.8	2.8 - 9.7	23	X		44	22			**5**
1.9 - 6.7	2.2 - 7.8	3.7 - 12.9	2.6 - 9.0	2.8 - 9.9	47	X	X	28	28	**1**	**3**	**5**
2.0 - 7.1	2.4 - 8.4		2.7 - 9.5	3.0 - 10.5	25	X		44	22	**1**	**3**	
2.0 - 7.1	2.4 - 8.4		2.7 - 9.5	3.0 - 10.5	23	X		48	22			**5**
2.2 - 7.8	2.6 - 9.1		3.0 - 10.4	3.3 - 11.5	25	X		48	22	**1**	**3**	
2.7 - 9.5	3.2 - 11.2	5.2 - 18.3	3.6 - 12.7	4.0 - 14.1	67	X	X	28	28			**5**
2.8 - 9.9	3.4 - 11.8	5.4 - 19.0	3.8 - 13.3	4.2 - 14.7	70	X	X	28	28	**1**	**3**	
3.0 - 10.5	3.6 - 12.5		4.0 - 14.0	4.4 - 15.5	47	X		44	28	**1**	**3**	**5**
3.8 - 13.3	4.5 - 15.7	7.2 - 25.3	5.0 - 17.6	5.6 - 19.6	93	X	X	28	28	**1**	**3**	**5**
3.8 - 13.4	4.5 - 15.8		5.1 - 17.9	5.6 - 19.7	47	X		44	22	**1**	**3**	**5**
4.2 - 14.7	4.9 - 17.2		5.6 - 19.5	6.2 - 21.6	47	X		48	22	**1**	**3**	**5**
4.3 - 15.1	5.0 - 17.6		5.7 - 20.0	6.3 - 22.1	67	X		44	28			**5**
4.5 - 15.7	5.3 - 18.5		6.0 - 21.0	6.6 - 23.1	70	X		44	28	**1**	**3**	
5.1 - 17.8	6.0 - 20.9	9.7 - 33.9	6.8 - 23.7	7.4 - 26.0	124	X	X	28	28		**3**	
5.5 - 19.2	6.4 - 22.5		7.3 - 25.5	8.0 - 28.1	67	X		44	22			**5**
5.7 - 20.0	6.7 - 23.5	10.9 - 38.2	7.6 - 26.6	8.4 - 29.4	140	X	X	28	28	**1**		
5.7 - 20.0	6.7 - 23.5		7.6 - 26.6	8.4 - 29.4	70	X		44	22	**1**	**3**	
5.9 - 20.7	7.0 - 24.4	11.3 - 39.5	7.9 - 27.6	8.7 - 30.5	145	X	X	28	28			**5**
6.0 - 20.9	7.0 - 24.5		8.0 - 27.9	8.8 - 30.7	93	X		44	28	**1**	**3**	**5**
6.0 - 20.9	7.0 - 24.5		8.0 - 27.9	8.8 - 30.7	67	X		48	22			**5**
6.2 - 21.8	7.3 - 25.6		8.3 - 29.1	9.2 - 32.1	70	X		48	22	**1**	**3**	
7.6 - 26.6	8.9 - 31.2		10.1 - 35.4	11.2 - 39.1	93	X		44	22	**1**	**3**	**5**
8.0 - 27.9	9.4 - 32.8		10.6 - 37.1	11.7 - 40.9	124	X		44	28		**3**	
8.2 - 28.6	9.6 - 33.6	15.6 - 54.6	10.9 - 38.1	12.0 - 42.0	200	X	X	28	28	**1**	**3**	
8.3 - 29.0	9.7 - 34.0		11.0 - 38.6	12.2 - 42.6	93	X		48	22	**1**	**3**	**5**
8.6 - 30.0	10.1 - 35.3	16.4 - 57.3	11.4 - 40.0	12.6 - 44.1	210	X	X	28	28			**5**
9.0 - 31.5	10.6 - 37.0		12.0 - 41.9	13.2 - 46.2	140	X		44	28	**1**		
9.3 - 32.6	10.9 - 38.2		12.4 - 43.4	13.7 - 47.9	145	X		44	28			**5**
10.1 - 35.4	11.9 - 41.7		13.5 - 47.2	14.9 - 52.1	124	X		44	22		**3**	
11.0 - 38.6	13.0 - 45.5		14.7 - 51.5	16.2 - 56.8	124	X		48	22		**3**	
11.4 - 40.0	13.4 - 47.0		15.2 - 53.3	16.8 - 58.8	140	X		44	22	**1**		
11.8 - 41.4	13.9 - 48.7		15.8 - 55.2	17.4 - 60.9	145	X		44	22			**5**
12.5 - 43.7	14.7 - 51.4		16.6 - 58.1	18.3 - 64.1	140	X		48	22	**1**		
12.8 - 44.9	15.1 - 52.8		17.1 - 59.8	18.8 - 65.9	200	X		44	28	**1**	**3**	
12.9 - 45.2	15.2 - 53.2		17.2 - 60.2	19.0 - 66.5	145	X		48	22			**5**
13.5 - 47.2	15.8 - 55.4		18.0 - 62.9	19.8 - 69.3	210	X		44	28			**5**
16.4 - 57.3	19.2 - 67.2		21.8 - 76.2	24.0 - 84.0	200	X		44	22	**1**	**3**	
17.2 - 60.1	20.2 - 70.6		22.8 - 79.9	25.2 - 88.2	210	X		44	22			**5**
17.8 - 62.4	21.0 - 73.4		23.7 - 83.0	26.2 - 91.7	200	X		48	22	**1**	**3**	
18.7 - 65.5	22.0 - 77.0		24.9 - 87.2	27.5 - 96.2	210	X		48	22			**5**

2700 End Drive Belt Speed

Fixed Speed

2700 Belt		RPM From Gearmotor	Mount Package		Pulley Kit		Gearmotor Chart	
m/min	ft/min		Top & Bottom	Side	Drive Pulley	Driven Pulley	Standard Load	Heavy Load
8.8	29	47	X	X	32	32	**7**	**8**
10	33	47	X		32	28	**7**	**8**
13	43	70	X	X	32	32	**7**	**8**
13	43	47	X		48	32	**7**	**8**
15	49	70	X		32	28	**7**	**8**
15	49	47	X		48	28	**7**	**8**
20	66	70	X		48	32	**7**	**8**
23	75	70	X		48	28	**7**	**8**
26	85	140	X	X	32	32	**7**	**8**
30	98	140	X		32	28	**7**	**8**
40	131	140	X		48	32	**7**	**8**
45	148	140	X		48	28	**7**	**8**
53	174	280	X	X	32	32	**7**	**8**
60	197	280	X		32	28	**7**	**8**
66	216	350	X	X	32	32	**7**	**8**
75	246	350	X		32	28	**7**	**8**
79	259	280	X		48		**7**	**8**
91	298	280	X		48		**7**	**8**
99	325	350	X		48		**7**	**8**
113	371	350	X		48		**7**	**8**

Cleated Belts operate at maximum 280 ft/min (86 m/min) °

Other speeds available. See www.dorner.com and run the DTools program for a full list of belt speeds

Variable Speed

2700 Belt		RPM 50Hz from Gearmotor	Mount Package		Pulley Kit		Gearmotor Chart	
m/min	Ft/min		Top & Bottom	Side	Drive Pulley	Driven Pulley	Standard Load	Heavy Load
3.5 - 12	12 - 41	47	X	X	32	32	**9**	**10**
4 - 14	13 - 46	47	X		32	28	**9**	**10**
5.2 - 18	17 - 60	70	X	X	32	32	**9**	**10**
5.2 - 18	17 - 60	47	X		48	32	**9**	**10**
6 - 21	20 - 69	70	X		32	28	**9**	**10**
6 - 21	20 - 69	47	X		48	28	**9**	**10**
8 - 28	26 - 92	70	X		48	32	**9**	**10**
9.2 - 32	30 - 105	70	X		48	28	**9**	**10**
10 - 36	34 - 119	140	X	X	32	32	**9**	**10**
12 - 42	39 - 137	140	X		32	28	**9**	**10**
16 - 56	52 - 183	140	X		48	32	**9**	**10**
18 - 63	59 - 207	140	X		48	28	**9**	**10**
21 - 74	70 - 244	280	X	X	32	32	**9**	**10**
24 - 84	79 - 276	280	X		32	28	**9**	**10**
26 - 92	86 - 302	350	X	X	32	32	**9**	**10**
30 - 105	98 - 344	350	X		32	28	**9**	**10**
32 - 111	104 - 363	280	X		48	32	**9**	**10**
36 - 127	119 - 417	280	X		48	28	**9**	**10**
40 - 139	130 - 455	350	X		48	32	**9**	**10**
45 - 158	148 - 519	350	X		48	28	**9**	**10**

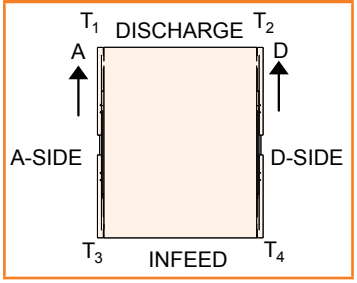
Note: Nose Bar transfers operate at maximum 23.5 m/min (77 ft/min) belt speed. Other speeds available. See www.dorner.com and run the DTools program for a full list of belt speeds.

2200 Series Motor Mounting Package

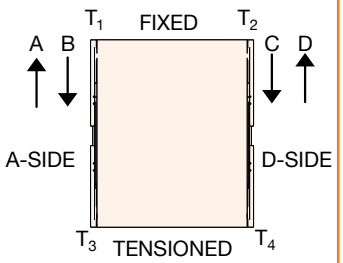
22 M Z B G S L A - PPPP

- **Pulley Kit: Top and Bottom** '2828, '4428, '4422, '4822
  Flush '2816, '4416, '4816
- **Mount Position: A, B, C, D**
- **Position: A, B, C, D**
- **Load Type: L** = Light, **S** = Standard, **H** = Heavy
- **Gearmotor Type: G** = European 90 Degree
- **Mount Style: B** = Bottom, **S** = Side, **T** = Top, **F** = Flush Bottom
  1 = Vertical Mount, **2** = Horizontal Mount
- **Conveyor Type:** E=End Drive, C=Center Drive, M=Mid Drive,Z= LPZ
- **Documentation Language: M** = English only

MODULAR BELT DRIVE SHAFT POSITION



BELT DRIVE SHAFT POSITION



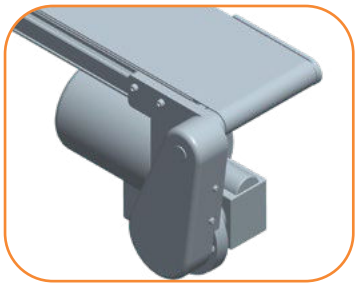
Since belts are being pulled, positions A & D are preferred. Pushing belts (B & C) reduce conveyor load capacity by approximately 66%.

2700 Series Drive Mount Packages

2 L M B P S A - 3 2 3 2

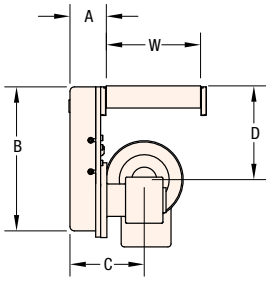
- **Drive / Driven Pulley Combination** pulley options see note
- **Controls/Flow/Drive Shaft Position: A, B, C or D A or D only for MID drive**
- **Gearmotor Type: S** = Standard Load, **H** = Heavy Load
- **Gearmotor Output Shaft: E** = eDrive 90
- **Mount Style: B** = Bottom Mount, **T** = Top Mount, **S** = Side Mount, **N** = MID drive Side Mount, **M** = MID drive Bottom Mount
- **Documentation Language: M** = US, **U** = Europe
- **Prefix: 2L** = End drive mount packages for 2700 Product

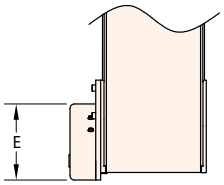
Flush Bottom Mount Package, 90º Gearmotor



Product Applications/Uses:

- Wide product transfers
- Product stops/escapements
- Product detection
- Lift stations
- Sheet handling





A: 2200 Light Load - 56 mm [2.20 in]
2200 Standard Load - 57 mm [2.26 in]
2200 Heavy Load - 58 mm [2.26 in]
2700 Series - 59 mm [2.31 in]

B: 2200 Series - 231 mm [9.10 in]
2700 Series - 235 mm [9.25 in]

C: 2200 Light Load - 102 mm [4.00 in]
2200 Standard Load - 119 mm [4.69 in]
2200 Heavy Load - 111 mm [4.38 in]
2700 Series - 108 mm [4.26 in]

D: 2200 Light Load - 158 mm [6.20 in]
2200 Standard Load - 156 mm [6.13 in]
2200 Heavy Load - 229 mm [9.00 in]
2700 Series - 144 mm [5.68 in]

E: 2200 Series - 122 mm [4.81 in]
2700 Series - 103 mm [4.06 in]

Dim = mm (in)

2200 Flush Mount End Drive Belt Speed

Fixed Speed

2200 Belt	2200 Precision Move	2200 Modular Belt			RPM From Gearmotor	Pulley Kit		Gearmotor Chart		
		2200 LPZ	Micropitch Belts 01 and 02	Metalworking Belts 30 thru 42						
Meter/min	Meter/min	Meter/min	Meter/min	Meter/min		Drive Pulley	Driven Pulley	Light Load	Standard Load	Heavy Load
4.1	4.8	7.8	5.5	6.0	23	28	16			**5**
4.5	5.3	8.5	6.0	6.6	25	28	16	**1**	**3**	
6.5	7.6		8.6	9.5	23	44	16			**5**
7.0	8.3		9.4	10.3	25	44	16	**1**	**3**	
7.0	8.3		9.4	10.4	23	48	16			**5**
7.7	9.0		10.2	11.3	25	48	16	**1**	**3**	
8.4	9.9	16.0	11.2	12.3	47	28	16	**1**	**3**	**5**
12.0	14.1	22.8	15.9	17.6	67	28	16			**5**
12.5	14.7	23.9	16.7	18.4	70	28	16	**1**	**3**	
13.2	15.5		17.6	19.4	47	44	16	**1**	**3**	**5**
14.4	16.9		19.2	21.2	47	48	16	**1**	**3**	**5**
16.6	19.5	31.7	22.1	24.4	93	28	16	**1**	**3**	**5**
18.8	22.1		25.1	27.6	67	44	16			**5**
19.7	23.1		26.2	28.9	70	44	16	**1**	**3**	
20.5	24.1		27.3	30.2	67	48	16			**5**
21.4	25.2		28.6	31.5	70	48	16	**1**	**3**	
22.2	26.0	42.3	29.5	32.6	124	28	16		**3**	
25.0	29.4	47.7	33.3	36.8	140	28	16	**1**		
25.9	30.5	49.4	34.5	38.1	145	28	16			**5**
26.1	30.7		34.8	38.4	93	44	16	**1**	**3**	**5**
28.5	33.5		37.9	41.9	93	48	16	**1**	**3**	**5**
34.8	40.9		46.4	51.2	124	44	16		**3**	
35.7	42.0	68.2	47.6	52.5	200	28	16	**1**	**3**	
37.5	44.1	71.6	50.0	55.1	210	28	16			**5**
38.0	44.6		50.6	55.8	124	48	16		**3**	
39.3	46.2		52.4	57.8	140	44	16	**1**		
40.7	47.9		54.2	59.8	145	44	16			**5**
42.9	50.4		57.1	63.0	140	48	16	**1**		
44.4	52.2		59.2	65.3	145	48	16			**5**
56.2	66.0		74.8	82.5	200	44	16	**1**	**3**	
59.0	69.3		78.5	86.6	210	44	16			**5**
61.3	72.0		81.6	90.0	200	48	16	**1**	**3**	
64.3	75.6		85.7	94.5	210	48	16			**5**

2200 Flush Mount End Drive Belt Speed

Variable Speed

2200 Belt	2200 Precision Move	2200 Modular Belt			RPM From Gearmotor	Pulley Kit		Gearmotor Chart		
		2200 LPZ	Micropitch Belts 01 and 02	Metalworking Belts 30 thru 42						
Meter/min	Meter/min	Meter/min	Meter/min	Meter/min		Drive Pulley	Driven Pulley	Light Load	Standard Load	Heavy Load
1.6 - 5.7	1.9 - 6.7	3.1 - 10.9	2.2 - 7.7	2.4 - 8.4	23	28	16			5
1.8 - 6.3	2.1 - 7.4	3.4 - 11.9	2.4 - 8.4	2.6 - 9.2	25	28	16	1	3	
2.6 - 9.1	3.0 - 10.6		3.4 - 12.0	3.8 - 13.3	23	44	16			5
2.8 - 9.8	3.3 - 11.6		3.8 - 13.2	4.1 - 14.4	25	44	16	1	3	
2.8 - 9.8	3.3 - 11.6		3.8 - 13.2	4.2 - 14.6	23	48	16			5
3.1 - 10.8	3.6 - 12.6		4.1 - 14.3	4.5 - 15.8	25	48	16	1	3	
3.4 - 11.8	4.0 - 13.9	6.4 - 22.4	4.5 - 15.7	4.9 - 17.2	47	28	16	1	3	5
4.8 - 16.8	5.6 - 19.7	9.1 - 31.9	6.4 - 22.3	7.0 - 24.6	67	28	16			5
5.0 - 17.5	5.9 - 20.6	9.6 - 33.5	6.7 - 23.4	7.4 - 25.8	70	28	16	1	3	
5.3 - 18.5	6.2 - 21.7		7.0 - 24.6	7.8 - 27.2	47	44	16	1	3	5
5.8 - 20.2	6.8 - 23.7		7.7 - 26.9	8.5 - 29.7	47	48	16	1	3	5
6.6 - 23.2	7.8 - 27.3	12.7 - 44.4	8.8 - 30.9	9.8 - 34.2	93	28	16	1	3	5
7.5 - 26.3	8.8 - 30.9		10.0 - 35.1	11.0 - 38.6	67	44	16			5
7.9 - 27.6	9.2 - 32.3		10.5 - 36.7	11.6 - 40.5	70	44	16	1	3	
8.2 - 28.7	9.6 - 33.7		10.9 - 38.2	12.1 - 42.3	67	48	16			5
8.6 - 30.0	10.1 - 35.3		11.4 - 40.0	12.6 - 44.1	70	48	16	1	3	
8.9 - 31.1	10.4 - 36.4	16.9 - 59.2	11.8 - 41.3	13.0 - 45.6	124	28	16		3	
10.0 - 35.0	11.8 - 41.2	19.1 - 66.8	13.3 - 46.6	14.7 - 51.5	140	28	16	1		
10.4 - 36.3	12.2 - 42.7	19.8 - 69.2	13.8 - 48.3	15.2 - 53.3	145	28	16			5
10.4 - 36.5	12.3 - 43.0		13.9 - 48.7	15.4 - 53.8	93	44	16	1	3	5
11.4 - 39.9	13.4 - 46.9		15.2 - 53.1	16.8 - 58.7	93	48	16	1	3	5
13.9 - 48.7	16.4 - 57.3		18.6 - 65.0	20.5 - 71.7	124	44	16		3	
14.3 - 50.0	16.8 - 58.8	27.3 - 95.5	19.0 - 66.6	21.0 - 73.5	200	28	16	1	3	
15.0 - 52.5	17.6 - 61.7	28.6 - 100.2	20.0 - 70.0	22.0 - 77.1	210	28	16			5
15.2 - 53.2	17.8 - 62.4		20.2 - 70.8	22.3 - 78.1	124	48	16		3	
15.7 - 55.0	18.5 - 64.7		21.0 - 73.4	23.1 - 80.9	140	44	16	1		
16.3 - 57.0	19.2 - 67.1		21.7 - 75.9	23.9 - 83.7	145	44	16			5
17.2 - 60.1	20.2 - 70.6		22.8 - 79.9	25.2 - 88.2	140	48	16	1		
17.8 - 62.2	20.9 - 73.1		23.7 - 82.9	26.1 - 91.4	145	48	16			5
22.5 - 78.7	26.4 - 92.4		29.9 - 104.7	33.0 - 115.5	200	44	16	1	3	
23.6 - 82.6	27.7 - 97.0		31.4 - 109.9	34.6 - 121.2	210	44	16			5
24.5 - 85.8	28.8 - 100.8		32.6 - 114.2	36.0 - 126.0	200	48	16	1	3	
25.7 - 90.0	30.2 - 105.8		34.3 - 120.0	37.8 - 132.3	210	48	16			5

2200 Precision Move Gang Mid Drive Belt Speed Charts

Fixed Speed

2200 Precision Move	RPM From Gearmotor	Mount Package	Gearmotor Chart		
Meter/min		Side	Light Load	Standard Load	Heavy Load
3.7	23	X			**5**
4.0	25	X	**1**	**3**	
7.5	47	X	**1**	**3**	**5**
10.7	67	X			**5**
11.2	70	X	**1**	**3**	
14.9	93	X	**1**	**3**	**5**
19.8	124	X		**3**	
22.4	140	X	**1**		
23.2	145	X			**5**
32.0	200	X	**1**	**3**	
33.6	210	X			**5**

Variable Speed

2200 Precision Move	RPM From Gearmotor	Mount Package	Gearmotor Chart		
Meter/min		Side	Light Load	Standard Load	Heavy Load
1.5 - 5.2	23	X			**5**
1.6 - 5.6	25	X	**1**	**3**	
3.0 - 10.5	47	X	**1**	**3**	**5**
4.3 - 15.0	67	X			**5**
4.5 - 15.7	70	X	**1**	**3**	
6.0 - 20.9	93	X	**1**	**3**	**5**
7.9 - 27.7	124	X		**3**	
9.0 - 31.4	140	X	**1**		
9.3 - 32.5	145	X			**5**
12.8 - 44.8	200	X	**1**	**3**	
13.4 - 47.0	210	X			**5**

2200 Precision Move Gang Drive Side Mounting Package

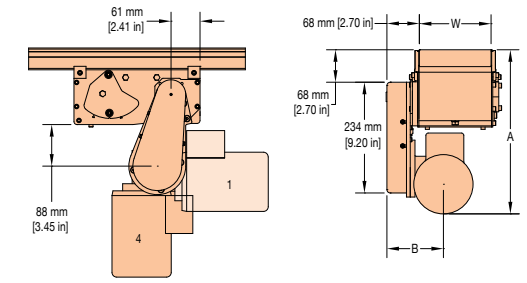
2 2 M G G S - W W O G G A

- **Position: A or D**
- **End Guard Length:** (00 to 20)
- **Conveyor Quantity:** **D** = Double **T** = Triple
- **Distance Between Outer Conveyor Edges** (05 to 48)
- **Load Type:** **L** = Light, **S** = Standard, **H** = Heavy
- **Shaft Type:** **G** = European 90° degree
- **Documentation Language:** **M** = English only

See page 29 for product details.

2200 Center Drive

TYPE 1 - Vertical Mount



MOTOR "A" & "B" DIMENSION KEY:

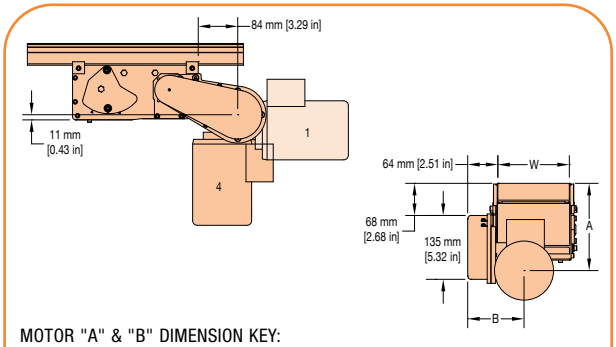
A: LIGHT - 336 mm [13.24 in]
STANDARD - 345 mm [13.57 in]
HEAVY - 359 mm [14.14 in]

B: LIGHT - 103 mm [4.06 in]
STANDARD - 119 mm [4.69 in]
HEAVY - 111 mm [4.38 in]

Shown in "D" Position

90° Gearmotor

TYPE 2 - Horizontal Mount



MOTOR "A" & "B" DIMENSION KEY:

A: LIGHT - 238 mm [9.36 in]
STANDARD - 246 mm [9.69 in]
HEAVY - 261 mm [10.26 in]

B: LIGHT - 103 mm [4.06 in]
STANDARD - 119 mm [4.69 in]
HEAVY - 111 mm [4.38 in]

Shown in "D" Position

90° Gearmotor

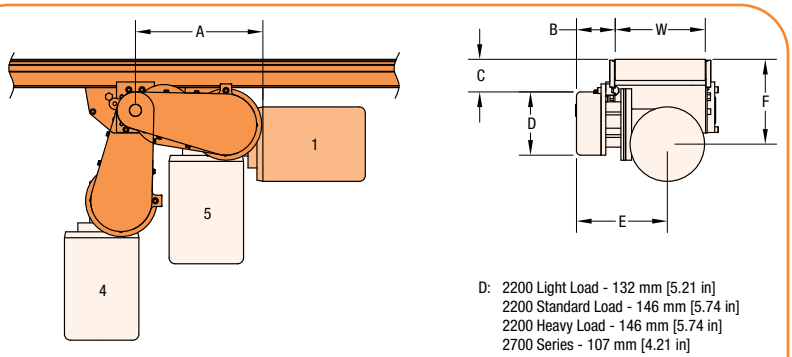
Standard position shown, can be reconfigured to alternative phantom position.

TYPE 2 recommended for tight spaces and allows for easy access to the drive module.

* Gearmotor not included in mounting package, see page 49-50 for gearmotor options. **Dim = mm** (in)

See page 52 for part number chart.

2200/2700 Mid Drive



A: 2200 Light Load - 183 mm [7.19 in]
2200 Standard Load - 192 mm [7.56 in]
2200 Heavy Load - 200 mm [7.87 in]
2700 Series - 212 mm [8.34 in]

B: 2200 Series - 64 mm [2.53 in]
2700 Series - 65 mm [2.57 in]

C: 2200 Series - 58 mm [2.29 in]
2700 Series - 78 mm [3.06 in]

D: 2200 Light Load - 132 mm [5.21 in]
2200 Standard Load - 146 mm [5.74 in]
2200 Heavy Load - 146 mm [5.74 in]
2700 Series - 107 mm [4.21 in]

E: 2200 Light Load - 103 mm [4.06 in]
2200 Standard Load - 119 mm [4.69 in]
2200 Heavy Load - 111 mm [4.38 in]
2700 Series - 108 mm [4.26 in]

F: 2200 Light Load - 170 mm [6.69 in]
2200 Standard Load - 186 mm [7.32 in]
2200 Heavy Load - 193 mm [7.60 in]
2700 Series - 171 mm [6.72 in]

Shown in "A" Position

90° Gearmotor

Standard position shown, can be reconfigured to alternative phantom position.
Dim = mm (in)

See page 52 for part number chart.

2200 Center & Mid Drive Belt Speed

Fixed Speed

2200 Belt	2200 Precision Move	2200 Modular Belt		RPM From Gearmotor	Mount Package		Pulley Kit		Gearmotor Chart		
		Micropitch Belts 01 and 02	Metalworking Belts 30 thru 42								
Meter/min	Meter/min	Meter/min	Meter/min		Bottom	Side	Drive Pulley	Driven Pulley	Light Load	Standard Load	Heavy Load
2.3	2.8	3.1	3.5	23	X	X	28	28			**5**
2.6	3.0	3.4	3.8	25	X	X	28	28	**1**	**3**	
3.7	4.3	4.9	5.4	23	X		44	28			**5**
4.0	4.7	5.3	5.9	25	X		44	28	**1**	**3**	
4.7	5.5	6.3	6.9	23	X		44	22			**5**
4.8	5.6	6.4	7.1	47	X	X	28	28	**1**	**3**	**5**
5.1	6.0	6.8	7.5	25	X		44	22	**1**	**3**	
5.1	6.0	6.8	7.5	23	X		48	22			**5**
5.6	6.5	7.4	8.2	25	X		48	22	**1**	**3**	
6.8	8.0	9.1	10.1	67	X	X	28	28			**5**
7.1	8.4	9.5	10.5	70	X	X	28	28	**1**	**3**	
7.5	8.9	10.0	11.1	47	X		44	28	**1**	**3**	**5**
9.5	11.2	12.6	14.0	93	X	X	28	28	**1**	**3**	**5**
9.6	11.3	12.8	14.1	47	X		44	22	**1**	**3**	**5**
10.5	12.3	13.9	15.4	47	X		48	22	**1**	**3**	**5**
10.8	12.6	14.3	15.8	67	X		44	28			**5**
11.2	13.2	15.0	16.5	70	X		44	28	**1**	**3**	
12.7	14.9	16.9	18.6	124	X	X	28	28		**3**	
13.7	16.1	18.2	20.1	67	X		44	22			**5**
14.3	16.8	19.0	21.0	140	X	X	28	28	**1**		
14.3	16.8	19.0	21.0	70	X		44	22	**1**	**3**	
14.8	17.4	19.7	21.8	145	X	X	28	28			**5**
14.9	17.5	19.9	21.9	93	X		44	28	**1**	**3**	**5**
14.9	17.5	19.9	21.9	67	X		48	22			**5**
15.6	18.3	20.8	22.9	70	X		48	22	**1**	**3**	
19.0	22.3	25.3	27.9	93	X		44	22	**1**	**3**	**5**
19.9	23.4	26.5	29.2	124	X		44	28		**3**	
20.4	24.0	27.2	30.0	200	X	X	28	28	**1**	**3**	
20.7	24.3	27.6	30.4	93	X		48	22	**1**	**3**	**5**
21.4	25.2	28.6	31.5	210	X	X	28	28			**5**
22.5	26.4	29.9	33.0	140	X		44	28	**1**		
23.3	27.3	31.0	34.2	145	X		44	28			**5**
25.3	29.8	33.7	37.2	124	X		44	22		**3**	
27.6	32.5	36.8	40.6	124	X		48	22		**3**	
28.6	33.6	38.1	42.0	140	X		44	22	**1**		
29.6	34.8	39.4	43.5	145	X		44	22			**5**
31.2	36.7	41.5	45.8	140	X		48	22	**1**		
32.1	37.7	42.7	47.1	200	X		44	28	**1**	**3**	
32.3	38.0	43.0	47.5	145	X		48	22			**5**
33.7	39.6	44.9	49.5	210	X		44	28			**5**
40.9	48.0	54.4	60.0	200	X		44	22	**1**	**3**	
42.9	50.4	57.1	63.0	210	X		44	22			**5**
44.6	52.4	59.3	65.5	200	X		48	22	**1**	**3**	
46.8	55.0	62.3	68.7	210	X		48	22			**5**

2200 Center & Mid Drive Belt Speed

Variable Speed

2200 Belt	2200 Precision Move	2200 Modular Belt		RPM From Gearmotor at 50 Hz	Mount Package		Pulley Kit		Gearmotor Chart		
		Micropitch Belts 01 and 02	Metalworking Belts 30 thru 42								
Meter/min	Meter/min	Meter/min	Meter/min		Bottom	Side	Drive Pulley	Driven Pulley	Light Load	Standard Load	Heavy Load
0.9 - 3.2	1.1 - 3.9	1.2 - 4.3	1.4 - 4.9	23	X	X	28	28			**5**
1.0 - 3.6	1.2 - 4.2	1.4 - 4.8	1.5 - 5.3	25	X	X	28	28	**1**	**3**	
1.5 - 5.2	1.7 - 6.0	2.0 - 6.9	2.2 - 7.6	23	X		44	28			**5**
1.6 - 5.6	1.9 - 6.6	2.1 - 7.4	2.4 - 8.3	25	X		44	28	**1**	**3**	
1.9 - 6.6	2.2 - 7.7	2.5 - 8.8	2.8 - 9.7	23	X		44	22			**5**
1.9 - 6.7	2.2 - 7.8	2.6 - 9.0	2.8 - 9.9	47	X	X	28	28	**1**	**3**	**5**
2.0 - 7.1	2.4 - 8.4	2.7 - 9.5	3.0 - 10.5	25	X		44	22	**1**	**3**	
2.0 - 7.1	2.4 - 8.4	2.7 - 9.5	3.0 - 10.5	23	X		48	22			**5**
2.2 - 7.8	2.6 - 9.1	3.0 - 10.4	3.3 - 11.5	25	X		48	22	**1**	**3**	
2.7 - 9.5	3.2 - 11.2	3.6 - 12.7	4.0 - 14.1	67	X	X	28	28			**5**
2.8 - 9.9	3.4 - 11.8	3.8 - 13.3	4.2 - 14.7	70	X	X	28	28	**1**	**3**	
3.0 - 10.5	3.6 - 12.5	4.0 - 14.0	4.4 - 15.5	47	X		44	28	**1**	**3**	**5**
3.8 - 13.3	4.5 - 15.7	5.0 - 17.6	5.6 - 19.6	93	X	X	28	28	**1**	**3**	**5**
3.8 - 13.4	4.5 - 15.8	5.1 - 17.9	5.6 - 19.7	47	X		44	22	**1**	**3**	**5**
4.2 - 14.7	4.9 - 17.2	5.6 - 19.5	6.2 - 21.6	47	X		48	22	**1**	**3**	**5**
4.3 - 15.1	5.0 - 17.6	5.7 - 20.0	6.3 - 22.1	67	X		44	28			**5**
4.5 - 15.7	5.3 - 18.5	6.0 - 21.0	6.6 - 23.1	70	X		44	28	**1**	**3**	
5.1 - 17.8	6.0 - 20.9	6.8 - 23.7	7.4 - 26.0	124	X	X	28	28		**3**	
5.5 - 19.2	6.4 - 22.5	7.3 - 25.5	8.0 - 28.1	67	X		44	22			**5**
5.7 - 20.0	6.7 - 23.5	7.6 - 26.6	8.4 - 29.4	140	X	X	28	28	**1**		
5.7 - 20.0	6.7 - 23.5	7.6 - 26.6	8.4 - 29.4	70	X		44	22	**1**	**3**	
5.9 - 20.7	7.0 - 24.4	7.9 - 27.6	8.7 - 30.5	145	X	X	28	28			**5**
6.0 - 20.9	7.0 - 24.5	8.0 - 27.9	8.8 - 30.7	93	X		44	28	**1**	**3**	**5**
6.0 - 20.9	7.0 - 24.5	8.0 - 27.9	8.8 - 30.7	67	X		48	22			**5**
6.2 - 21.8	7.3 - 25.6	8.3 - 29.1	9.2 - 32.1	70	X		48	22	**1**	**3**	
7.6 - 26.6	8.9 - 31.2	10.1 - 35.4	11.2 - 39.1	93	X		44	22	**1**	**3**	**5**
8.0 - 27.9	9.4 - 32.8	10.6 - 37.1	11.7 - 40.9	124	X		44	28		**3**	
8.2 - 28.6	9.6 - 33.6	10.9 - 38.1	12.0 - 42.0	200	X	X	28	28	**1**	**3**	
8.3 - 29.0	9.7 - 34.0	11.0 - 38.6	12.2 - 42.6	93	X		48	22	**1**	**3**	**5**
8.6 - 30.0	10.1 - 35.3	11.4 - 40.0	12.6 - 44.1	210	X	X	28	28			**5**
9.0 - 31.5	10.6 - 37.0	12.0 - 41.9	13.2 - 46.2	140	X		44	28	**1**		
9.3 - 32.6	10.9 - 38.2	12.4 - 43.4	13.7 - 47.9	145	X		44	28			**5**
10.1 - 35.4	11.9 - 41.7	13.5 - 47.2	14.9 - 52.1	124	X		44	22		**3**	
11.0 - 38.6	13.0 - 45.5	14.7 - 51.5	16.2 - 56.8	124	X		48	22		**3**	
11.4 - 40.0	13.4 - 47.0	15.2 - 53.3	16.8 - 58.8	140	X		44	22	**1**		
11.8 - 41.4	13.9 - 48.7	15.8 - 55.2	17.4 - 60.9	145	X		44	22			**5**
12.5 - 43.7	14.7 - 51.4	16.6 - 58.1	18.3 - 64.1	140	X		48	22	**1**		
12.8 - 44.9	15.1 - 52.8	17.1 - 59.8	18.8 - 65.9	200	X		44	28	**1**	**3**	
12.9 - 45.2	15.2 - 53.2	17.2 - 60.2	19.0 - 66.5	145	X		48	22			**5**
13.5 - 47.2	15.8 - 55.4	18.0 - 62.9	19.8 - 69.3	210	X		44	28			**5**
16.4 - 57.3	19.2 - 67.2	21.8 - 76.2	24.0 - 84.0	200	X		44	22	**1**	**3**	
17.2 - 60.1	20.2 - 70.6	22.8 - 79.9	25.2 - 88.2	210	X		44	22			**5**
17.8 - 62.4	21.0 - 73.4	23.7 - 83.0	26.2 - 91.7	200	X		48	22	**1**	**3**	
18.7 - 65.5	22.0 - 77.0	24.9 - 87.2	27.5 - 96.2	210	X		48	22			**5**

2700 Mid Drive Belt Speed

Fixed Speed

2700 Belt		RPM From Gearmotor	Mount Package		Pulley Kit		Gearmotor Chart	
m/min	ft/min		Top & Bottom	Side	Drive Pulley	Driven Pulley	Standard Load	Heavy Load
8.8	29	47	X	X	32	32	**7**	**8**
10	33	47	X		32	28	**7**	**8**
13	43	70	X	X	32	32	**7**	**8**
13	43	47	X		48	32	**7**	**8**
15	49	70	X		32	28	**7**	**8**
15	49	47	X		48	28	**7**	**8**
20	66	70	X		48	32	**7**	**8**
23	75	70	X		48	28	**7**	**8**
26	85	140	X	X	32	32	**7**	**8**
30	98	140	X		32	28	**7**	**8**
40	131	140	X		48	32	**7**	**8**
45	148	140	X		48	28	**7**	**8**
53	174	280	X	X	32	32	**7**	**8**
60	197	280	X		32	28	**7**	**8**
66	216	350	X	X	32	32	**7**	**8**
75	246	350	X		32	28	**7**	**8**
79	259	280	X		48		**7**	**8**
91	298	280	X		48		**7**	**8**
99	325	350	X		48		**7**	**8**
113	371	350	X		48		**7**	**8**

Cleated Belts operate at maximum 280 ft/min (86 m/min) °

Other speeds available. See www.dorner.com and run the DTools program for a full list of belt speeds

Variable Speed

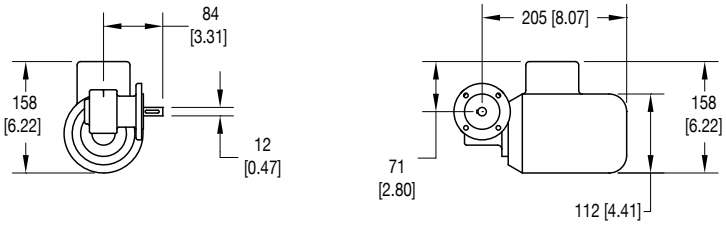
2700 Belt		RPM 50Hz from Gearmotor	Mount Package		Pulley Kit		Gearmotor Chart	
m/min	Ft/min		Top & Bottom	Side	Drive Pulley	Driven Pulley	Standard Load	Heavy Load
3.5 - 12	12 - 41	47	X	X	32	32	**9**	**10**
4 - 14	13 - 46	47	X		32	28	**9**	**10**
5.2 - 18	17 - 60	70	X	X	32	32	**9**	**10**
5.2 - 18	17 - 60	47	X		48	32	**9**	**10**
6 - 21	20 - 69	70	X		32	28	**9**	**10**
6 - 21	20 - 69	47	X		48	28	**9**	**10**
8 - 28	26 - 92	70	X		48	32	**9**	**10**
9.2 - 32	30 - 105	70	X		48	28	**9**	**10**
10 - 36	34 - 119	140	X	X	32	32	**9**	**10**
12 - 42	39 - 137	140	X		32	28	**9**	**10**
16 - 56	52 - 183	140	X		48	32	**9**	**10**
18 - 63	59 - 207	140	X		48	28	**9**	**10**
21 - 74	70 - 244	280	X	X	32	32	**9**	**10**
24 - 84	79 - 276	280	X		32	28	**9**	**10**
26 - 92	86 - 302	350	X	X	32	32	**9**	**10**
30 - 105	98 - 344	350	X		32	28	**9**	**10**
32 - 111	104 - 363	280	X		48	32	**9**	**10**
36 - 127	119 - 417	280	X		48	28	**9**	**10**
40 - 139	130 - 455	350	X		48	32	**9**	**10**
45 - 158	148 - 519	350	X		48	28	**9**	**10**

Note: Nose Bar transfers operate at maximum 23.5 m/min (77 ft/min) belt speed. Other speeds available. See www.dorner.com and run the DTools program for a full list of belt speeds.

Light Load, Fixed Speed*

Chart 1 90 Degree

- Sealed Gearmotor
- Totally enclosed fan cooled
- IP 54
- 230/400V 3 Phase 50 Hz



Regulatory Approvals

CE

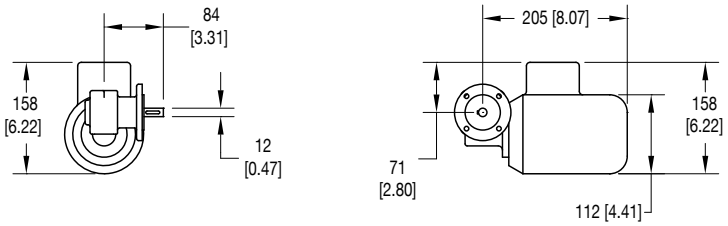
Part Number				3 Phase			1 Phase		
3 Phase	1 Phase	RPM	Gear Ratio	Watts	Amps	Nm	Watts	Amps	Nm
KT102552	BG200888	25	55:1	90	0.75 / 0.45	15	59	0.8	9.9
KT200294	BG200889	47	30:1	90	0.75 / 0.45	9	59	0.8	5.9
KT200293	BG200890	70	20:1	90	0.75 / 0.45	7.5	59	0.8	5
KT200292	BG200891	93	15:1	90	0.75 / 0.45	6.1	59	0.8	4
KT200291	BG200892	140	10:1	90	0.75 / 0.45	4.3	59	0.8	2.8
KT200290	BG200893	200	7:1	90	0.75 / 0.45	3.3	59	0.8	2.2

*Not available on LPZ Conveyors

Light Load, Variable Speed*

Chart 2 90 Degree

- VFD Variable Speed, 20 to 70 Hz
- 40-60 Hz Full Capacity, 20-39 Hz and 61 to 70 Hz 80% capacity
- Sealed Gearmotor
- Totally enclosed fan cooled
- IP 54
- 230/400V 3 Phase



Regulatory Approvals

CE

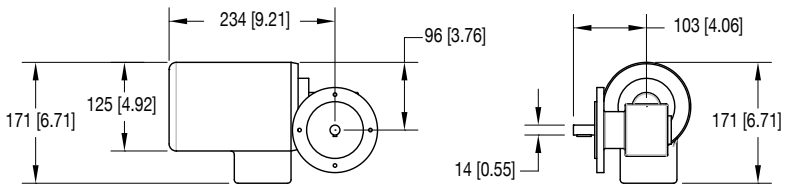
Part Number						Full Capacity	80% Capacity
3 Phase	MAX RPM	MIN RPM	Gear Ratio	Watts	Amps	Nm	Nm
KT102552	35	10	55:1	90	0.75 / 0.45	15	12
KT200294	66	19	30:1	90	0.75 / 0.45	9	7.2
KT200293	98	28	20:1	90	0.75 / 0.45	7.5	6
KT200292	130	37	15:1	90	0.75 / 0.45	6.1	4.9
KT200291	196	56	10:1	90	0.75 / 0.45	4.3	3.4
KT200290	280	80	7:1	90	0.75 / 0.45	3.3	2.6

*Not available on LPZ Conveyors

Standard Load, Fixed Speed

Chart 3 90 Degree

- Sealed Gearmotor
- Totally enclosed fan cooled
- IP 54
- 230/400V 3 Phase 50 Hz



Regulatory Approvals

CE

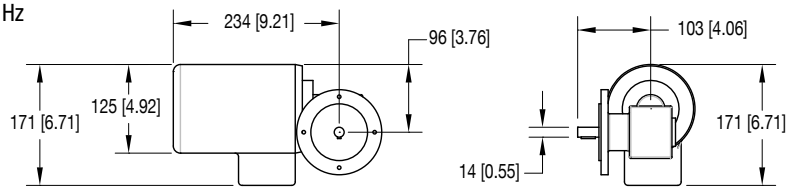
Part Number				3 Phase			1 Phase		
3 Phase	1 Phase	RPM	Gear Ratio	Watts	Amps	Nm	Watts	Amps	Nm
KT200301	BG200882	25	56:1	180	1.20 / 0.7	21	119	1.3	13.9
KT200300	BG200883	47	30:1	180	1.20 / 0.7	17	119	1.3	11.2
KT102553	BG200884	70	20:1	180	1.20 / 0.7	14	119	1.3	9.2
KT200299	BG200885	93	15:1	180	1.20 / 0.7	11	119	1.3	7.3
KT200298	BG200886	124	11:1	180	1.20 / 0.7	9.3	119	1.3	6.1
KT200297	BG200887	200	7:1	180	1.20 / 0.7	6.4	119	1.3	4.2

Note: Dim = mm (in)

Standard Load, Variable Speed

Chart 4 90 Degree

- VFD Variable Speed, 20 to 70 Hz
- 40-60 Hz Full Capacity, 20-39 Hz and 61 to 70 Hz 80% capacity
- Sealed Gearmotor
- Totally enclosed fan cooled
- IP 54
- 230/400V 3 Phase



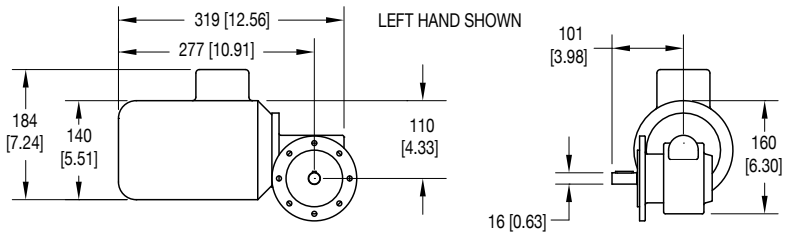
Regulatory Approvals CE

Part Number						Full Capacity	80% Capacity
3 Phase	MAX RPM	MIN RPM	Gear Ratio	Watts	Amps	Nm	Nm
KT200301	35	10	56:1	180	1.20 / 0.7	21	17
KT200300	66	19	30:1	180	1.20 / 0.7	17	14
KT102553	98	28	20:1	180	1.20 / 0.7	14	11
KT200299	130	37	15:1	180	1.20 / 0.7	11	9
KT200298	174	50	11:1	180	1.20 / 0.7	9.3	7
KT200297	280	80	7:1	180	1.20 / 0.7	6.4	5

Heavy Load, Fixed Speed

Chart 5 90 Degree

- Sealed Gearmotor
- Totally enclosed fan cooled
- IP 54
- 230/400V 3 Phase 50 Hz



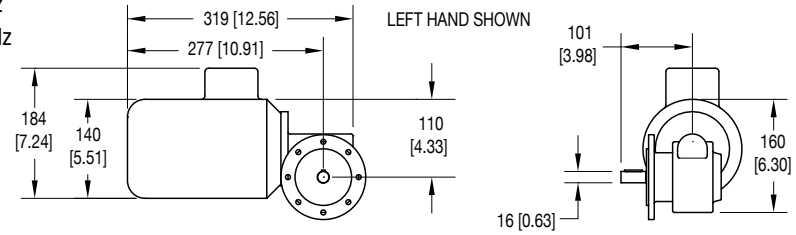
Regulatory Approvals CE

Part Number						3 Phase			1 Phase		
3 Phase – LH	3 Phase – RH	1 Phase – LH	1 Phase – RH	RPM	Gear Ratio	Watts	Amps	Nm	Watts	Amps	Nm
KT200854	KT200848	BG200870	BG200876	23	60:1	370	2.0 / 1.20	44	244	2.3	29
KT200853	KT200847	BG200871	BG200877	47	30:1	370	2.0 / 1.20	40	244	2.3	26
KT200852	KT200846	BG200872	BG200878	67	21:1	370	2.0 / 1.20	32	244	2.3	21
KT200851	KT200845	BG200873	BG200879	93	15:1	370	2.0 / 1.20	25	244	2.3	16.5
KT200850	KT200844	BG200874	BG200880	145	10:1	370	2.0 / 1.20	19	244	2.3	12.5
KT200849	KT200843	BG200875	BG200881	210	7:1	370	2.0 / 1.20	15	244	2.3	9.9

Heavy Load, Variable Speed

Chart 6 90 Degree

- VFD Variable Speed, 20 to 70 Hz
- 40-60 Hz Full Capacity, 20-39 Hz and 61 to 70 Hz 80% capacity
- Sealed Gearmotor
- Totally enclosed fan cooled
- IP 54
- 230/400V 3 Phase



Regulatory Approvals CE

Part Number							Full Capacity	80% Capacity
3 Phase – LH	3 Phase – RH	MAX RPM	MIN RPM	Gear Ratio	Watts	Amps	Nm	Nm
KT200854	KT200848	32	9	60:1	370	2.0 / 1.20	44	35
KT200853	KT200847	66	19	30:1	370	2.0 / 1.20	40	32
KT200852	KT200846	94	27	21:1	370	2.0 / 1.20	32	25
KT200851	KT200845	130	37	15:1	370	2.0 / 1.20	25	20
KT200850	KT200844	203	58	10:1	370	2.0 / 1.20	19	15.2
KT200849	KT200843	294	84	7:1	370	2.0 / 1.20	15	12

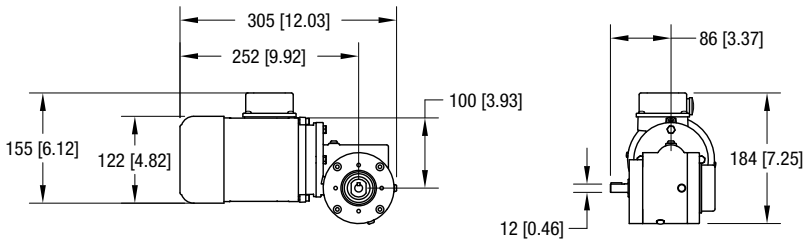
FLA = Full Load Amperes

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

Standard Load, Fixed Speed

Chart 7 90 Degree

- 230/400 Volts 50Hz
- Sealed Gearmotor
- Totally enclosed fan cooled
- IP55
- 2800 rpm



Regulatory Approvals

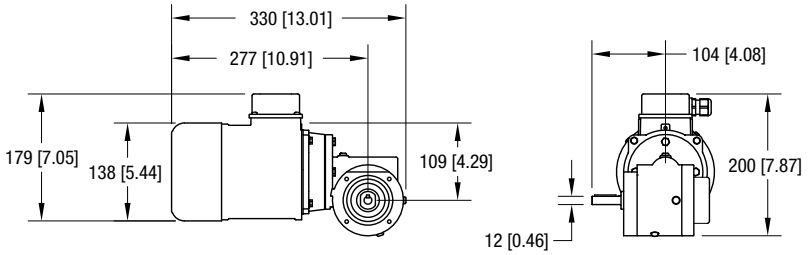
CE

Part Number					Torque
3 Phase	RPM	Gear Ratio	Watts	230Δ/400Λ Amps	Nm
KT201192	47	60	250	1,17 / 0,67	23
KT201193	70	40	250	1,17 / 0,67	27
KT201188	140	20	250	1,17 / 0,67	14
KT201189	280	10	250	1,17 / 0,67	7
KT201194	350	8	250	1,17 / 0,67	5

Heavy Load, Fixed Speed

Chart 8 90 Degree

- 230/400 Volts 50Hz
- Sealed Gearmotor
- Totally enclosed fan cooled
- IP55
- 2800 rpm



Regulatory Approvals

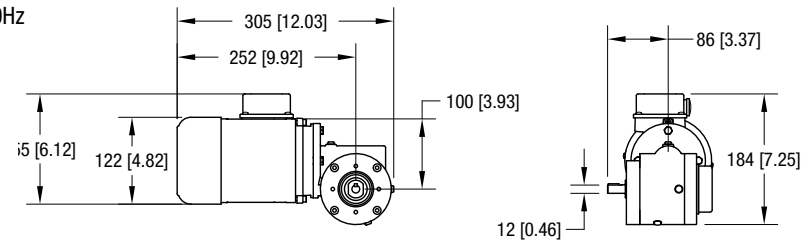
CE

Part Number					Torque
3 Phase	RPM	Gear Ratio	Watts	230Δ/400Λ Amps	Nm
KT201195	47	60	370	1,94 / 1,12	23
KT201196	70	40	370	1,94 / 1,12	34
KT201197	140	20	370	1,94 / 1,12	20
KT201198	280	10	370	1,94 / 1,12	10
KT201199	350	8	370	1,94 / 1,12	8

Standard Load, Variable Speed

Chart 9 90 Degree

- VFD variable speed 20 to 70Hz
- 40-60Hz full capacity; Other Hz 80% capacity
- 230/400 Volts 50Hz
- Sealed Gearmotor
- Totally enclosed fan cooled
- IP55



Regulatory Approvals

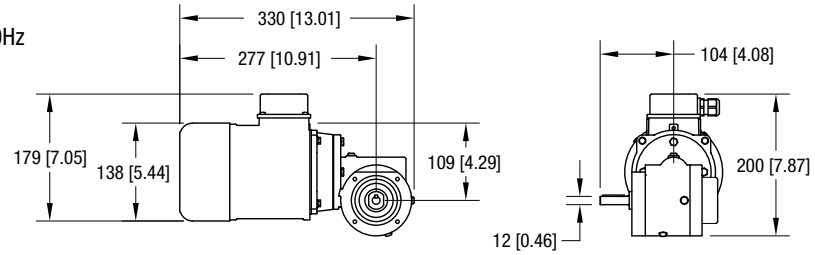
CE

Part Number						Full Capacity	80% Capacity
3 Phase	MAX RPM	MIN RPM	Gear Ratio	Watts	230Δ/400ʎ Amps	Nm	Nm
KT201192	66	19	60	250	1,17 / 0,67	23	18.4
KT201193	98	28	40	250	1,17 / 0,67	27	21.6
KT201188	196	56	20	250	1,17 / 0,67	14	11.2
KT201189	392	112	10	250	1,17 / 0,67	7	5.6
KT201194	490	140	8	250	1,17 / 0,67	5	4

Heavy Load, Variable Speed

Chart 10 90 Degree

- VFD variable speed 20 to 70Hz
- 40-60Hz full capacity; Other Hz 80% capacity
- 230/400 Volts 50Hz
- Sealed Gearmotor
- Totally enclosed fan cooled
- IP55



Regulatory Approvals

CE

Part Number						Full Capacity	80% Capacity
3 Phase	MAX RPM	MIN RPM	Gear Ratio	Watts	230Δ/400ʎ Amps	Nm	Nm
KT201195	66	19	60	370	1,94 / 1,12	23	18.4
KT201196	98	28	40	370	1,94 / 1,12	34	27.2
KT201197	196	56	20	370	1,94 / 1,12	20	16.0
KT201198	392	112	10	370	1,94 / 1,12	10	8.0
KT201199	490	140	8	370	1,94 / 1,12	8	6.4

Frequency Converter

Chart A Variable Speed Frequency Converter, Full CE Compliance

- Adjustable Speed, 20 to 70 Hz
- IP 54 Enclosure
- Digital Device
- Adjustable Start and Stop
- Adjustable timing generator built in
- Control by external signals via free inputs
- Integrated motor protection
- Includes standard plug for 230V, 50 Hz, 1 Phase

Regulatory Approvals

CE

	Input				Output		
Part Number	Volts	Phase	Hz	Watts	Volts	Phase	Watts
KT103342	230	1	50	250	230	3	90
KT200350	230	1	50	250	230	3	180
KT103343	230	1	50	446	230	3	370

Motor Protection Switch

Chart B Fixed Speed Motor Protection

- Provides motor protection
- IP 54 Enclosure
- Adjustable for motor current
- Rotary switch
- Includes IEC 60309 plug for 400V, 50 Hz, 3 Phase or Type F plug for 250V, 50 Hz, 1 Phase
- Includes start stop push button

Regulatory Approvals

CE

	Input				
Part Number	Volts	Phase	Hz	Max Amps	Motor Type
KT103682	400	3	50	0.4	90 Watt
KT103723	400	3	50	0.8	180 Watt
KT103724	400	3	50	1.2	370 Watt
KT103682	230	1	50	0.8	59 Watt
KT103683	230	1	50	1.3	119 Watt
KT103684	230	1	50	2.3	244 Watt

Note: Dim = mm (in)

Emergency Stop Switch

Chart C Motor Protection

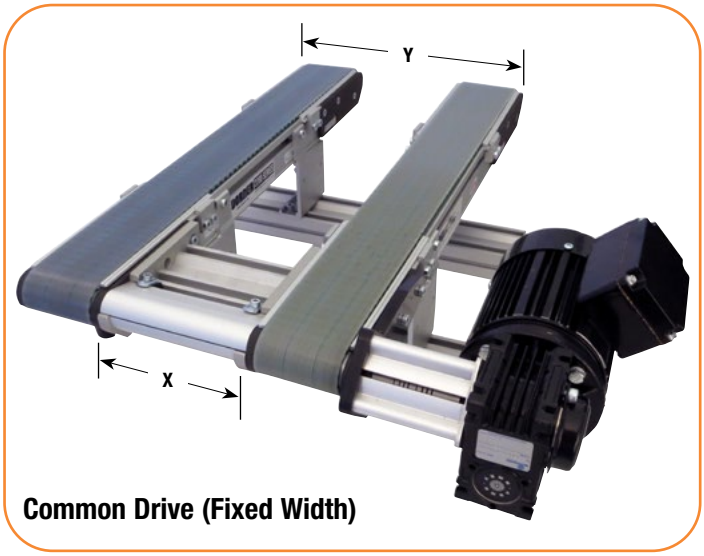
- Compatible with Frequency Converter
- Compatible with Motor Protection Switch
- IP 54 Enclosure
- Several interconnected switches can be used
- Includes on/off push button
- Wiring by others

Regulatory Approvals

CE

Part Number	Input Volts	Input Phase	Input Hz	
KT101166	230/400	1/3	50	

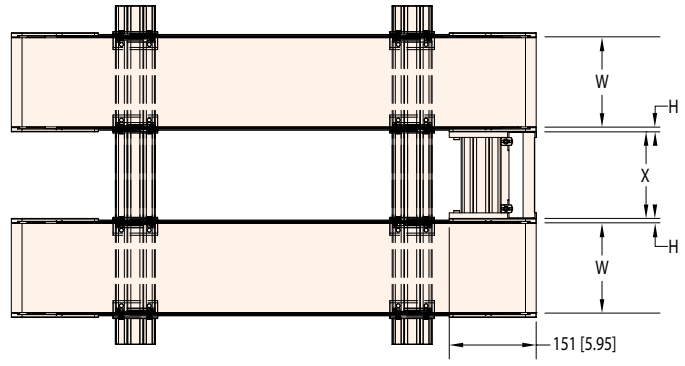
Note: Dim = mm (in)



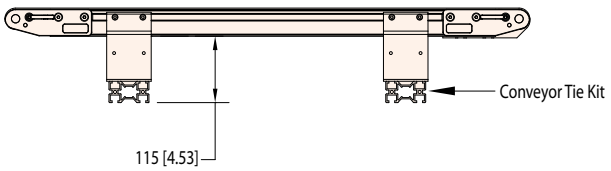
Common Drive (Fixed Width)

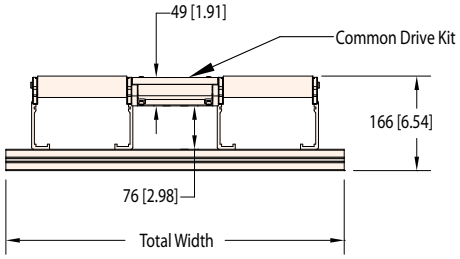
Specifications

- Parts can be wider than conveyor
- Conveyors can be different widths & lengths
- Minimum width (x) = 69 mm
- Maximum width (y) = 914 mm belt to belt
- Maximum number of conveyors = 3
- Maximum total torque = 11 Nm
- Keyless coupling allows belt synchronization between conveyors
- Includes shafts, couplings and guards
- Order conveyor tie kits separately
- Requires stub output shafts between conveyors



Headplate offset "H"
- Belted = 8.6 (.34)
- Precision Move = 8.6 (.34)
- Modular Belt = 13.2 (.52)





2200 Series Common Drive Kit

22CDMK GGGGG
- **00270** (2.70") to **03600** (36.00")

Note: One kit must be ordered for each pair of conveyors

Kit Includes:
- Shafts, couplings and guards
- Rigid tie plate for alignment
- Conveyor must be ordered with stubshaft on fixed end

2200 Series Common Drive Table Mount Tie Kit

39MCT WW - Y
- **Number of Conveyors: 1** to **6**
- **Total Width: 02** to **48**

Kit Includes:
- Conveyor mounting brackets
- Support extrusion

Note: 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.

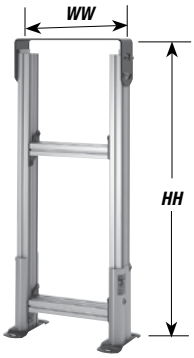
Fixed Height Supports Stands

Fixed Foot Model			
Stand Width (WW)	305 mm	51 mm increments **up to...**	1,219 mm
Part # Reference	12	in 02 increments **up to...**	48
Stand Height (HH)* Belt	381 - 483 mm	in 25 mm increments **up to...**	2,413 - 2,515 mm
Part # Reference Belt	1519	in 0101 increments **up to...**	9599

Swivel Locking Caster Model			
Stand Width (WW)	305 mm	51 mm increments **up to...**	1,219 mm
Part # Reference	12	in 02 increments **up to...**	48
Stand Height (HH)* Belt	508 - 610 mm	in 25 mm increments **up to...**	1,727 - 1,829 mm
Part # Reference Belt	2024	in 0101 increments **up to...**	6872

- 102 mm Height Adjustment
- Provides most access to outside T-Slots
- Includes height indicator
- Full width is top plate on 305 mm wide stands only

* Dependent on stand width, stands over 1,067 mm may include outriggers



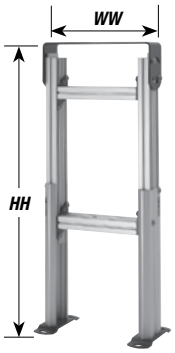
Adjustable Height Supports Stands

Fixed Foot Model											
Stand Width (WW)	305 mm			51 mm increments **up to...**						1,219 mm	
Part # Reference	12			in 02 increments **up to...**						48	
Stand Height (HH) Belt	305 - 330 mm	330 - 381 mm	356 - 432 mm	406 - 660 mm	483 - 686 mm	610 - 914 mm	762 - 1,219 mm	1,067 - 1,524 mm	1,372 - 1,829 mm	1,676 - 2,134 mm	1,981 - 2,438 mm
Part # Reference Belt	1213	1315	1417	1621	1926	2436	3048	4260	5472	6684	7896

Swivel Locking Caster Model									
Stand Width (WW)	305 mm			51 mm increments **up to...**			1,219 mm		
Part # Reference	12			in 02 increments **up to...**			48		
Stand Height (HH) Belt	432-457 mm	457 - 508 mm	483 - 559 mm	533 - 660 mm	61 0-787mm	737 - 1,041 mm	762 - 1,34 6mm	1,194 - 1,651mm	1,499 - 1,956mm
Part # Reference Belt	1718	1820	1922	2126	2431	2941	3553	4765	5977

- Includes height indicator
- Full width is top plate on 305 mm wide stands only

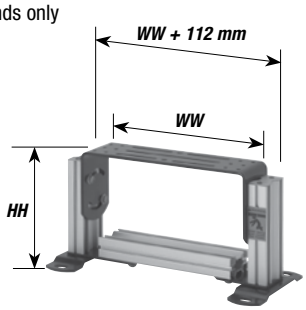
* Dependent on stand width, stands over 1,067 mm may include outriggers



Short Support Stands

Fixed Foot Model			
Stand Width (WW)	305 mm	51 mm increments **up to...**	1,219 mm
Part # Reference	12	in 02 increments **up to...**	48
Stand Height (HH)* Belt	152 - 203 mm	in 25 mm increments **up to...**	305 - 356 mm
Part # Reference Belt	0608	in 0101 increments **up to...**	1214
Swivel Locking Caster Model			
Stand Width (WW)	05 mm	51 mm increments **up to...**	1,219 mm
Part # Reference	12	in 02 increments **up to...**	48
Stand Height (HH)* Belt	279 - 330 mm	in 25 mm increments **up to...**	305 - 483 mm
Part # Reference Belt	1113	in 0101 increments **up to...**	1719

- For top belt heights below 508 mm
- Full width is top plate on 305 mm wide stands only



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.

For ordering information, please see page 67.

Quick Adjust Stands

Fixed Foot Model			
Stand Width (WW)*	305 mm	51mm increments **up to...**	914 mm
Part # Reference	12	in 02 increments **up to...**	36
Stand Height (HH)* Belt	610 - 762 mm	in 25 mm increments **up to...**	1,676 - 1,829 mm
Part # Reference Belt	2430	in 0101 increments **up to...**	6672
Swivel Locking Caster Model			
Stand Width (WW)*	305 mm	51 mm increments **up to...**	914 mm
Part # Reference	12	in 02 increments **up to...**	36
Stand Height (HH)* Belt	686 - 838 mm	in 25 mm increments **up to...**	1,524 - 1,676 mm
Part # Reference Belt	2733	in 0101 increments **up to...**	6066

* Under 305 mm wide use full top plate option

- Metric fasteners
- +/- 76 mm Height Adjustment
- Allows for Quick Height Adjustment
- Tool-less lock and adjustment handles

Fixed Foot Model

Swivel Locking Caster Model

2200 Series Support Stands

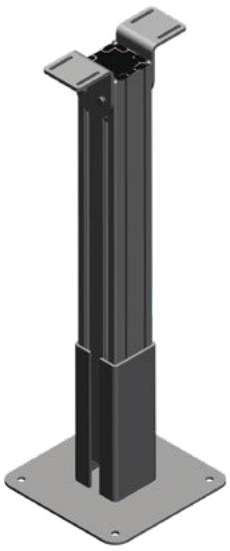
3 9 M T T W W - **HH**(min) **HH** (max) F

- **Feet or Casters:** **F** = fixed foot pad **C** = total lock swivel caster
- **Height Reference**
- **Width Reference**
- **Stand Type:**
  - **LH** = short stand
  - **FT** = tall fixed*
  - **QA** = quick adjust
  - **FH** = fixed height
  - **AT** = tall adjustable*
  - **AH** = adjustable height
- **Documentation Language:** **M** = English Only

EXAMPLE: 39MAH12-2126CP

Note: Due to the wide variety of conveyor and stand options along with possible configurations, stability is final setup of the responsibility of the end user.
*Tall stands are required when the stand width is 3.5 times the stand height.

Support Post Stands



Specifications

- ± 51 mm height adjustment
- Compatible with 51 mm – 305 mm wide conveyors
- Top of Belt Heights:
  - Minimum = 508 mm
  - Maximum = 2,464 mm
  - Available in 25 mm height increments
- Mounting Configurations:
  - ± 30° angle mount
- Equipped with a steel base plate for floor mounting
- Stand must be lagged to the floor

2200 Series: Support Post - Beam Type

320 R P M WW - LH UH

- **Tallest Height to Top of Bracket** (in inches)
- **Lowest Height to Top of Bracket** (in inches)
- **Width Reference**
- **Documentation Language:** **M** = English Only
- **Width Range:** **3** = 45 and 95 mm, **4** = 152 and 203 mm, **5** = 254 and 305 mm

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.

Quantity Charts

Support Stands	
Conveyor Length	Number of Supports
610 to 2743 mm	2
2744 to 5486 mm	3
5487 to 8230 mm	4
8231 to 9144 mm	5

Required Return Roller Quantity Chart

Maximum Distance Between Rollers mm (in)

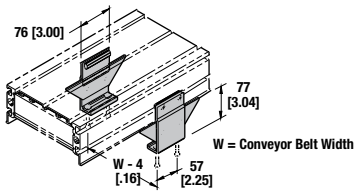
Conveyor Width mm (in)	44 (1.75)	70 (2.75)	95 (3.75)	127 (5)	152 (6)	203 (8)	254 (10)	305 (12)	356 (14)	406 (16)	457 (18)	508 (20)	559 (22)	610 (24)
Flat Belt	2667 (105)	2591 (102)	2286 (90)	2210 (87)	2134 (84)	2057 (81)	1981 (78)	1829 (72)	1753 (69)	1676 (66)	1676 (66)	1524 (60)	1448 (57)	1372 (54)
Cleated Belt	1753 (69)	1676 (66)	1600 (63)	1524 (60)	1448 (57)	1372 (54)	1295 (51)	1219 (48)	1143 (45)	1067 (42)	1067 (42)	991 (39)	914 (36)	914 (36)

Quantity of return rollers required = whole number result of: $\frac{\text{conveyor length in mm}}{\text{max distance between return rollers in mm}}$

Example: 2200 flat belt 203 mm wide x 4267 mm long $\frac{4267\text{ m}}{2057} = 2.07$ **2 return rollers required**

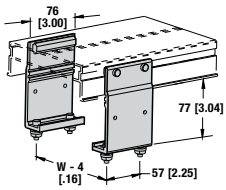
Mounting Brackets

Cleated Belt Stand Mounting Bracket



Part Number	Description
240838	Cleated Belt Conveyor

Flat Belt & Modular Belt Stand Mounting Bracket

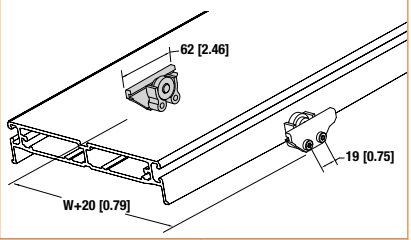


Part Number	Description
240839	Belted Conveyor
202389	Modular Belt Conveyor

Note: Conveyors can be ordered with the required number of mounting brackets. If desired, order additional mounting brackets separately.

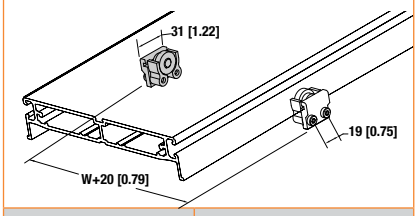
Return Rollers (Belted Conveyors Only)

Cleated Belt Return Roller



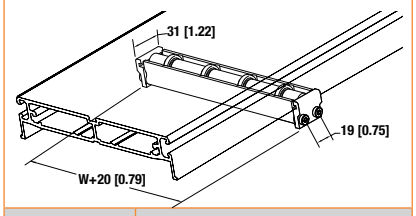
Part Number	Description
206521	Return Roller for Cleated Belt Conveyors

Flat Belt Return Roller for 44 to 152 mm Wide Conveyors



Part Number	Description
206522	Return Roller for 44 mm - 152 mm wide Flat Belt Conveyors

Flat Belt Return Roller for 203 to 1,219 mm Wide Conveyors



Part Number	Description
206523-WW	Return Roller for 203 mm to 1,219 mm wide Flat Belt Conveyors

Pulley Transfer Plate (2200 Belted Conveyor Only)

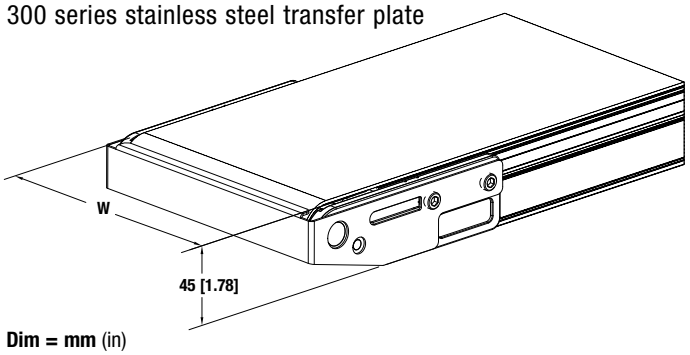
Part Number	Description
207218-WW	2200 Series Pulley Transfer Plate

WW = Conveyor Width Reference

Not compatible with clipper splice or high friction belts
Not compatible with cleated belt conveyors

Specifications

- 22 mm diameter minimum product transfer
- 300 series stainless steel transfer plate



Note: Dim = 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.

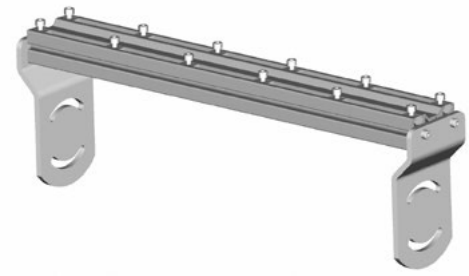
Stand Accessories

Diagonal Bracing

- For use on steel, aluminum and single post support stands with casters
- Metric fastener mounting hardware included
- For use on all stands with casters and any stands over 1829 mm tall
- One brace per stand for conveyors up to 305 mm wide
- Two braces per stand for conveyors over 305 mm wide

Part Number	Description
39MB-TS	for two-legged H style stands up to 762 mm tall
39MB-TT	for two-legged H style stands over 762 mm tall

Common Mount Kit



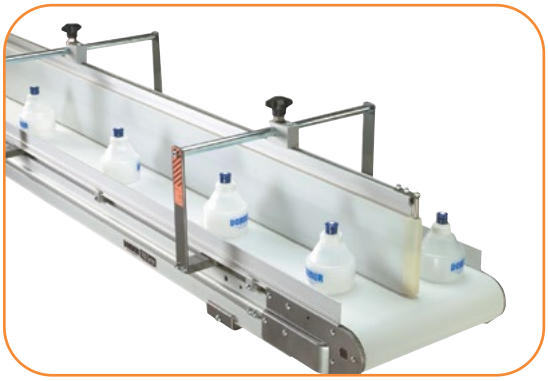
- Stand accessory for mounting multiple conveyors in parallel to one stand
- Adds 40 mm to stand height
- Adds 71 mm to overall stand width

2200 Series: Common Mount Kit

39MCM WW - #
- **Number of Conveyors**
- **Width Stand**

Example: 39MCM24-4

Adjustable Lane Guiding (2200 Belted Conveyors only)



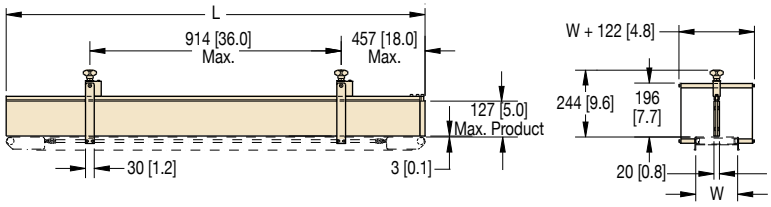
Specifications

- UHMW guide surface on an anodized aluminum mounting rail
- Painted Steel mounting hardware
- Available in standard 305 mm increments or can be ordered to any length
- 127 mm maximum, 7 mm minimum part height
- 6 mm minimum lane width
- Package includes one lane guide, mounting hardware and adjusting knobs
- For conveyors up to 610 mm wide – Consult factory for wider lane guide availability
- Compatible with standard Dorner bolt-on profiles
- Easily adjusts for quick product change over
- Attach additional guides to create multiple lanes
- Create lanes, plows, merges and transfers
- Order additional lane kits separately

2200 Series Adjustable Lane Guiding

27M GGG - WW LL
- **Conveyor Length Reference**
- **Conveyor Width Reference**
- **Guide Type:**
  500 = 2200 Package (Belted)
  502 = Additional Lane Guide

Example: 27M500-0620



Important: Exceeding 127 mm product height will produce a pinch point.

Note: Dim = mm (in)

Side Tables

Specifications

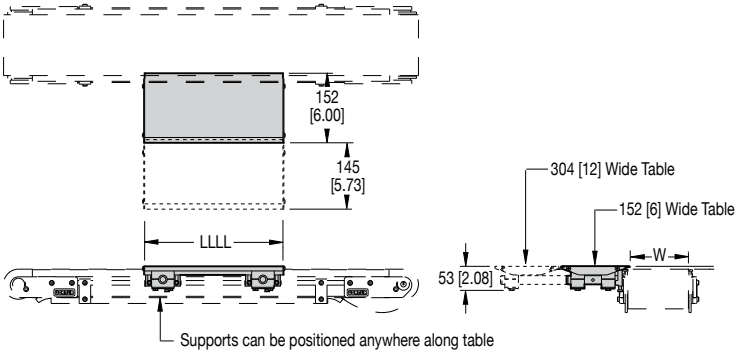
- Provides a 6" (152 mm) or 12" (305 mm) wide working surface
- Adjusts in/out and up/down (0.25" max above bedplate) for product transfer on/off conveyor belts
- Can be positioned anywhere along the conveyor
- Anodized aluminum work surface
- Max load: 5 lbs/ft (6 kg/m), use Adjustable Tie Brackets for added capacity
- Available in 1' (305 mm) increments from 1' (305 mm) to 99' (30,175 mm)

2200 Series Side Tables

27M TTT - 06 LLLL

- **Table Length**
  ex. 0200 = 610 mm (2 ft)
- **Table Width:**
  06 = 152 mm (6 in)
  12 = 610 mm (12 in)
- **Conveyor / Table Type:**
  601 = one side
  602 = two sides

Example: 27M601-060200



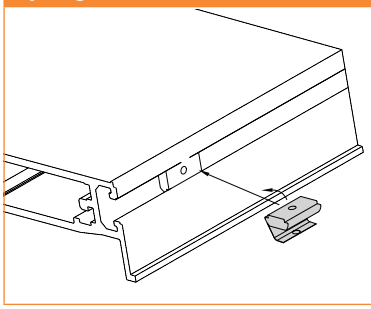
LLLL = 305 to 30,175 mm (1 to 99 ft); Maximum 2,438 mm (8 ft) length single piece

Note: 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.

T-Slot Hardware Accessories

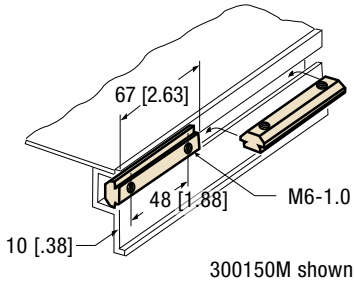
Spring T-Nut



- Retains position in T-slot

Part Number	Description
205504	M4 x 0.7 Spring Nut
205505	M5 x 0.8 Spring Nut
205506	M6 x 1.0 Spring Nut
205508	M8 x 1.25 Spring Nut

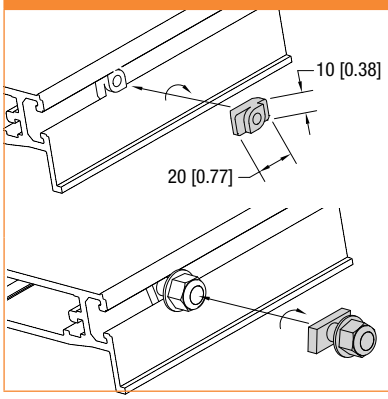
T-Bars



- Mounts in T-slots to attach heavy accessories

Part Number	Description
639971M	M6 x 1.0, T-bar, 1 hole, 19 mm long
202390M	M8 x 1.25, T-bar, 1 hole, 16 mm long
643874M	M6 x 1.0, T-bar, 2 hole, 19.0 mm centers, 38 mm long
200626M	M6 x 1.0, T-bar, 2 hole, 22.2 mm centers, 41 mm long
200830M	M6 x 1.0, T-bar, 2 hole, 25.4 mm centers, 44 mm long
639717M	M6 x 1.0, T-bar, 2 hole, 31.8 mm centers, 51 mm long
300150M	M6 x 1.0, T-bar, 2 hole, 47.6 mm centers, 64 mm long
300536M	M6 x 1.0, T-bar, 2 hole, 53.9 mm centers, 73 mm long

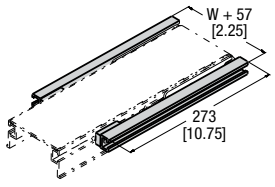
T-Bolts & T-Nuts



- Mounts in T-slots to attach accessories
- 1/2 turn install and remove
- T-nut requires thread lock screw

Part Number	Description
203446	M8 x 20mm long Twist Bolt and Nut, Package of 5
203447	M8 x 35mm long Twist Bolt and Nut, Package of 5
206685	M6 Twist T-Nut

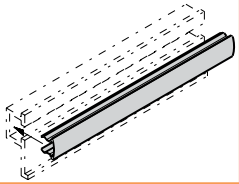
T-Slot Extenders



- Provides additional T-slots to the end of conveyor
- Includes mounting brackets and hardware
- Metric fasteners

Part Number	Description
307000M	T-Slot Extender, Pair

T-Slot Cover



- Snaps into conveyor and aluminum stand T-slots
- Black plastic extrusion
- Can be trimmed to fit

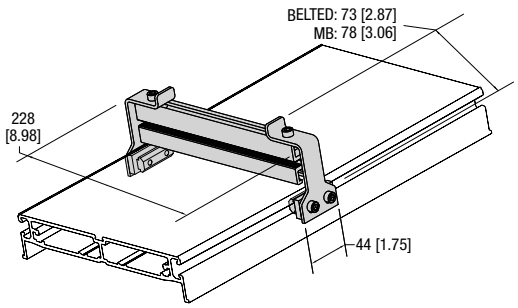
Part Number	Description
645656P	T-Slot Cover, Per 305 mm of length

Note: 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.

Stops

Adjustable Stop*



- Slides up and down T-slot length
- Includes metric mounting hardware

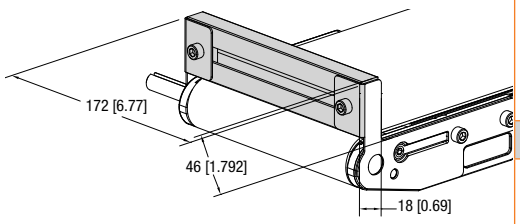
Part Number	Description
207133-WW	Adjustable Stop: Belted
207137-WW	Adjustable Stop: Modular Belt and Precision Move

WW = Conveyor Width Reference

* Not compatible with high friction belts

* Not compatible with cleated belt conveyors

End Stop*



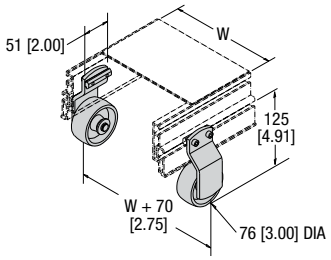
- Anodized aluminum stop
- Includes tail plates and mounting hardware

Part Number	Description
207213-WW	End Stop: Belted
207214-WW	End Stop: Precision Move
207215-WW	End Stop: Modular Belt

Note: Not compatible with gang drive nosebar, cleated belt, or modular belt center drive options

Brackets

Frame Mount Casters (2200 Belted Conveyor Only)

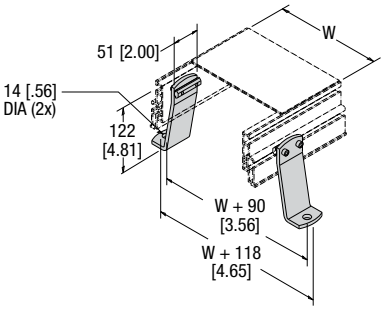


- Includes metric mounting hardware

*Provides floor to T-Slot height of: 125mm

Part Number	Description
390207	Frame mount casters, pair

Floor Mount Brackets



- Includes metric mounting hardware

*Provides floor to T-Slot height of: 12 2mm

Part Number	Description
390217	Floor mount brackets, pair

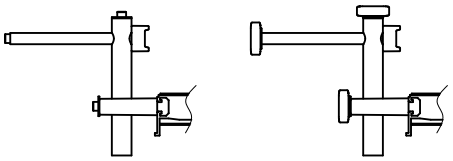
WW = Conveyor Width Reference

Note: 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.

Guide Mounts

Guide Mount Brackets for Adjustable Profiles

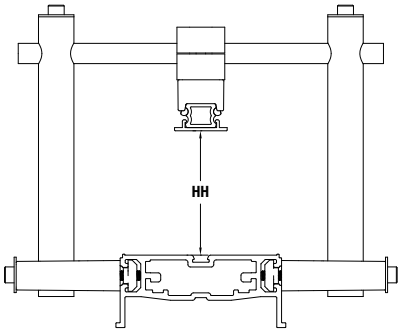


Profile 13 **Profile 14**

Part Number	Description
206686	Fully adjustable guide mount assembly (Profiles 13, 33 & 43)
206687	Tool-less Fully adjustable guide mount assembly (Profiles 14, 34 - 44)

Note: Order guide extrusion separately

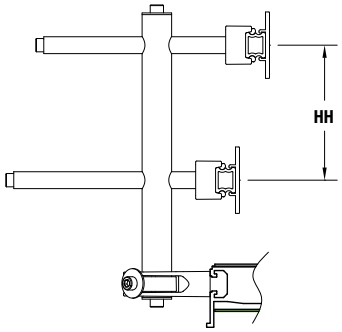
Overhead Guide Mounting Bracket



Part Number	Description
206185-WW-03	Adjustable 0 to 76 mm Overhead Guide Mount Bracket
206185-WW-05	Adjustable 0 to 127 mm Overhead Guide Mount Bracket
206185-WW-08	Adjustable 0 to 203 mm Overhead Guide Mount Bracket

Note: Order guide extrusion separately

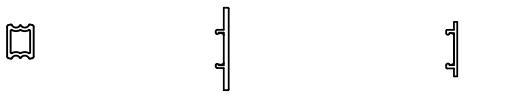
Dual Guide Mounting Bracket



Part Number	Description
206186-02	Dual Guide Bracket, 51 mm Between Guides
206186-03	Dual Guide Bracket, 76 mm Between Guides
206186-04	Dual Guide Bracket, 102 mm Between Guides

Note: Order guide extrusion separately

Adjustable Guide Rail Extrusion



Aluminum Extrusion **50 mm HDPE Extrusion** **33 mm HDPE Extrusion**

Part Number	Description
FGRR-15X20	Adjustable guide aluminum extrusion, 3 M long
FGRT-3X33	Adjustable guide 33 mm HDPE Cover, 3 M long
FGRT-3X50	Adjustable guide 50 mm HDPE Cover, 3 M long
FGRR-15X20P	Adjustable guide HDPE extrusion, 3 M long

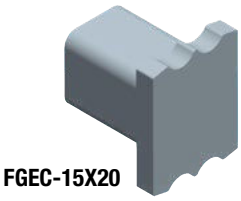
Note: Order guide mount brackets separately

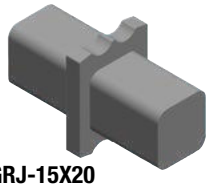
Note: Dim = mm (in)

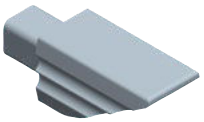
Due to the wide variety of drive set-ups and applications, point of installation guarding is the responsibility of the end user.

Guide Mounts (continued)

Adjustable Guide Rail Accessories


FGEC-15X20


FGRJ-15X20

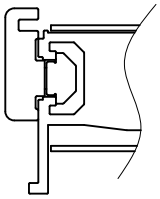

FGEC-30D


FGRC-100

Part Number	Description
FGEC-15X20	End cap for aluminum guide extrusion, 10 pack
FGRJ-15X20	Plastic plug connecting piece for aluminum guide extrusion, 10 pack
FGEC-30D	Lead in for aluminum guide extrusions, 10 pack
FGRC-100	Aluminum connection piece for aluminum guide extrusion, 10 pack

Note: Order guide extrusion separately

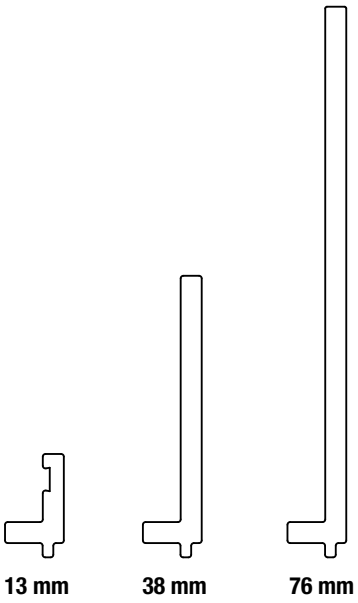
Bolt on Guide Clip Assembly



Part Number	Description
203661	For use with all High Side Guide Profiles

Note: Order guide extrusion separately

High Side Guide Rails



Part Number	Description
GTB09A04	13 mm Aluminum High Side guide extrusion 1220 mm long.
GTB09A08	13 mm Aluminum High Side guide extrusion 2438 mm long.
GTB05A04	38 mm Aluminum High Side guide extrusion 1220 mm long.
GTB05A08	38 mm Aluminum High Side guide extrusion 2438 mm long.
GTB04A04	76 mm Aluminum High Side guide extrusion 1220 mm long.
GTB04A08	76 mm Aluminum High Side guide extrusion 2438 mm long.

Drive Shaft Accessories

Spline Shaft

- Compatible with Precision Move Gang Mid Drive

Part Number	Description
202432-04800	0.50 inch diameter x 16 tooth x 1219 mm long Spline Shaft

Regulatory Approvals:

Conveyors:

All Dorner 2200/2700 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 2200/2700 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 2200/2700 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 manufacture 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.
	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 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.
	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. standard and it meets the requirements of an applicable CSA standard or another recognized document used as a basis for certification.
c UL us	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.

Clean Room Certifications:

The 2200 Series Conveyors are often used in clean room applications where the generation of particulates from the conveyor are a concern. In these applications the correct installation and application of the conveyor is critical to the proper running of the conveyor and minimizing the dust generated by the conveyor belt or modular belt. The end user must ensure that the conveyor belts are properly tracked and product accumulation is minimized to providing minimal dust generation.

All of the 2200 Series products are designed and constructed to be used in clean room environments. The following 2200 Series products have gone through third party testing and certification and are certified for use in ISO Standard 14644-1 Class 5 and Federal Standard 209 Class 100 Clean Room applications.

1100 Series Belted Conveyor
FlexMove Series Flexible Chain Conveyor
FlexMove Stainless Series Conveyor
2200 Series Modular Belted Conveyor
2200 Series Belted Conveyor
2200 Series Precision Move Conveyor
3200 Series Belted Conveyor
3200 Series Modular Belted Conveyor
3200 Series Precision Move 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 2200 Series conveyor:	
Material	**Conveyor Component**
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
Aluminum, anodized (Note: cut ends of aluminum is not anodized)	Conveyor Frame, Support Legs, High Side Guiding, Adjustable Guide Horizontal Post, Adjustable Guide Rail

The materials used in the 2200/2700 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.

Legend:
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	Aluminum
Acetic acid	3	1	4	1	2
Benzoic acid	3	1	4	1	4
Boric acid	3	1	2	1	2
Citric acid	3	1	2	1	2
Chromic acid	4	1	4	1	3
Hydrofluoric acid	4	1	4	1	4
Hydrochloric acid	4	1	4	1	3
Hydro cyanic acid	4	X	4	1	1
Nitric acid	4	1	4	1	3
Oleic acid	3	1	2	1	1
Oxalic acid	4	1	2	1	1
Phosphoric acid	4	1	4	1	3
Sulphuric acid	4	2	4	1	3
Tartaric acid	3	1	2	1	1
Basic Compounds	**Acetal POM**	**Polypropylene**	**Polyamide PA**	**UHMW-PE**	**Aluminum**
Ammonia	1	1	2	1	2
Calcium hydroxide	1	X	2	1	4
Caustic soda	1	X	2	1	3
Potassium hydroxide	1	1	2	1	4

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

Belting:

The following is a list of the top coat materials used in 2200 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.

Legend:
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
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

Resistance to Materials: Belting *(continued)*

Legend:
1 = Good resistance | 3 = Limited resistance | 4 = Not recommended

Materials	Urethane	PVC (non FDA)	Silicone	Polyester	Urethane (hard)
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
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

Resistance to Materials: Belting *(continued)*

Legend:
1 = Good resistance | 3 = Limited resistance | 4 = Not recommended

Materials	Urethane	PVC (non FDA)	Silicone	Polyester	Urethane (hard)
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
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

Resistance to Materials: Belting *(continued)*

Legend:
1 = Good resistance | 3 = Limited resistance | 4 = Not recommended

Materials	Urethane	PVC (non FDA)	Silicone	Polyester	Urethane (hard)
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
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

Resistance to Materials: Belting *(continued)*

Legend:
1 = Good resistance | 3 = Limited resistance | 4 = Not recommended

Materials	Urethane	PVC (non FDA)	Silicone	Polyester	Urethane (hard)
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 the 2200/2700 Series conveyor are sealed and lubricated for life. No grease zerk is available and no greasing over the life of the product is required.

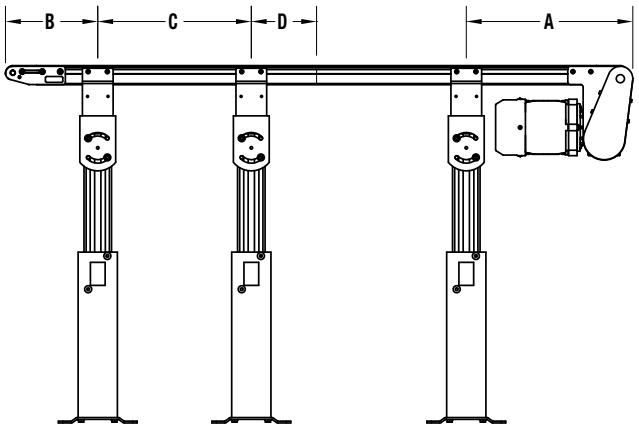
All gearmotors used on the 2200/2700 series conveyor are sealed and may be mounted in any position. Changing gear oil lubrication may be needed over the life of the gearbox. Please check the appropriate gearmotor manual for instructions.

Support Stand Locations:

Support Stand Locations

Symbol	Description	Value, mm
A*	Maximum distance back at drive end	457
B	Maximum distance back at idler end	610
C	Maximum distance between supports	2743
D**	Maximum distance away from frame split	600

***Note:** For heavy load mount packages stand location must be mounted directly under gearmotor.
****Note:** Mounting offset frame split requires tie kit 206519

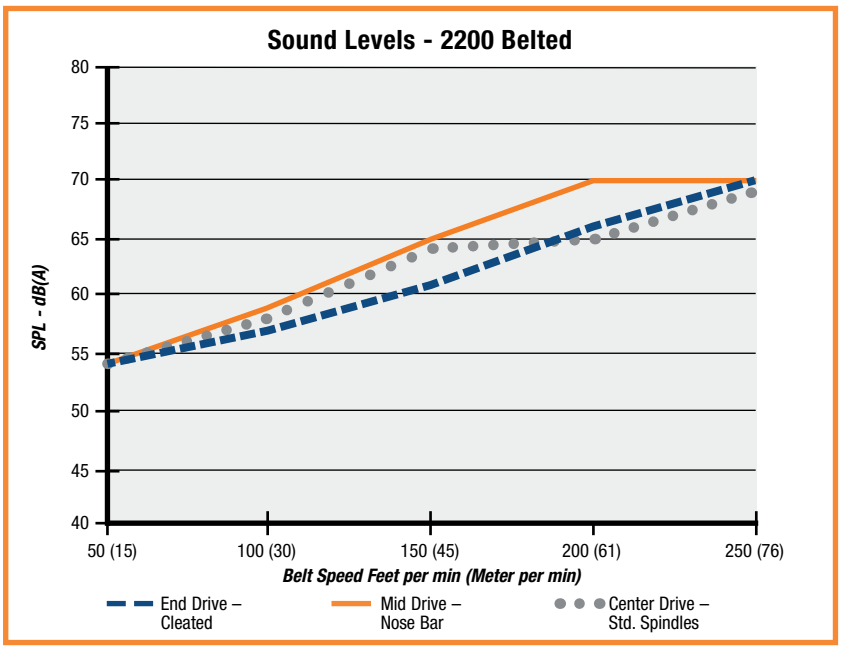


Conveyor Noise Level (Decibel Ratings)

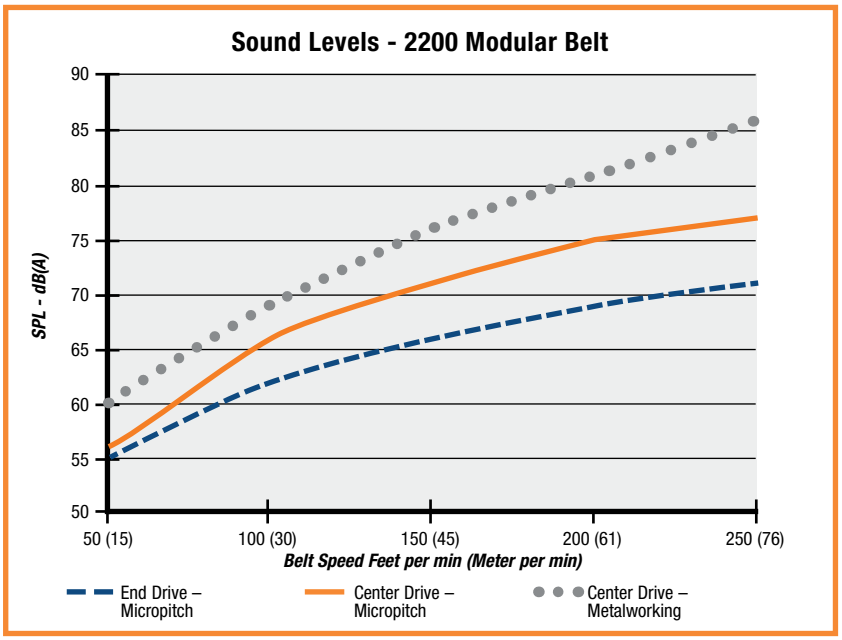
The actual noise level generated by the conveyor depends on several factors; the installation configuration, the product running on the conveyor, the surrounding equipment, the conveyor options and belt speed. The noise level generated by the conveyor is typically less than the general noise level of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

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.

2200 Series End Drive Belted Conveyor

Belt Width	Direction 1, Pulling the Belt	Direction 2, Pushing the Belt
51 (2 in) wide	14 kg (30 lbs)	7 kg (15 lbs)
76 (3 in) wide	16 kg (35 lbs)	8 kg (18 lbs)
102 (4 in) wide	19 kg (42 lbs)	10 kg (21 lbs)
127 (5 in) wide	23 kg (50 lbs)	11 kg (25 lbs)
152 (6 in) wide	27 kg (60 lbs)	14 kg (30 lbs)
203 (8 in) wide	32 kg (70 lbs)	16 kg (35 lbs)
254 to 610 mm (10 to 24 in) wide	36 kg (80 lbs)	18 kg (40 lbs)

2200 Series Belted Center Drive Conveyor

Belt Width	Direction 1, Pulling the Belt	Direction 2, Pushing the Belt
51 (2 in) wide	18 kg (40 lbs)	6 kg (13 lbs)
76 (3 in) wide	23 kg (50 lbs)	8 kg (17 lbs)
102 (4 in) wide	27 kg (60 lbs)	9 kg (20 lbs)
127 (5 in) wide	34 (75 lbs)	11 kg (25 lbs)
152 (6 in) wide	41 kg (90 lbs)	14 kg (30 lbs)
203 (8 in) wide	48 kg (105 lbs)	16 kg (35 lbs)
254 to 610 mm (10 to 24 in) wide	54 kg (120 lbs)	18 kg (40 lbs)

2200 Series Mid Drive Belted Conveyor

Belt Width	Direction 1, Pulling the Belt
51 (2 in) wide	14 kg (30 lbs)
76 (3 in) wide	16 kg (35 lbs)
102 (4 in) wide	19 kg (42 lbs)
127 (5 in) wide	23 kg (50 lbs)
152 (6 in) wide	27 kg (60 lbs)
203 (8 in) wide	32 kg (70 lbs)
254 to 610 mm (10 to 24 in) wide	36 kg (80 lbs)

2200 Series Precision Move End and Mid Drive Conveyor

Belt Width	Direction 1, Pulling the Belt
25 mm (1 in) wide	91 kg (200 lbs)
51 (2 in) wide	91 kg (200 lbs)
76 (3 in) wide	91 kg (200 lbs)
102 (4 in) wide	91 kg (200 lbs)
152 (6 in) wide	91 kg (200 lbs)
203 (8 in) wide	91 kg (200 lbs)
305 (12 in) wide	91 kg (200 lbs)
457 (18 in) wide	91 kg (200 lbs)
610 (24 in) wide	91 kg (200 lbs)

2700 Series End Drive Belted Conveyor

Belt Width	Direction 1, Pulling the Belt	Direction 2, Pushing the Belt
203 (8 in) wide	45 kg (99 lbs)	15 kg (33 lbs)
254 (10 in) wide	48 kg (106 lbs)	16 kg (35 lbs)
305 (12 in) wide	51 kg (112 lbs)	17 kg (37 lbs)
356 (14 in) wide	54 kg (119 lbs)	18 kg (40 lbs)
406 (16 in) wide	57 kg (125 lbs)	19 kg (42 lbs)
457 (18 in) wide	60 kg (132 lbs)	20 kg (44 lbs)
508 (20 in) wide	63 kg (139 lbs)	21 kg (46 lbs)
559 (22 in) wide	66 kg (145 lbs)	22 kg (48 lbs)
"610 to 914 mm (24 to 36 in) wide"	68 kg (150 lbs)	23 kg (51 lbs)

2700 Series Mid Drive Belted Conveyor

Belt Width	Direction 1, Pulling the Belt
203 (8 in) wide	45 kg (99 lbs)
254 (10 in) wide	48 kg (106 lbs)
305 (12 in) wide	51 kg (112 lbs)
356 (14 in) wide	54 kg (119 lbs)
406 (16 in) wide	57 kg (125 lbs)
457 (18 in) wide	60 kg (132 lbs)
508 (20 in) wide	63 kg (139 lbs)
559 (22 in) wide	66 kg (145 lbs)
"610 to 914 mm (24 to 36 in) wide"	68 kg (150 lbs)

2200 Series Modular Belt End and Center Drive Conveyor

Belt Width	Direction 1, Pulling the Belt
76 (3 in) wide	36 kg (80 lbs)
102 (4 in) wide	36 kg (80 lbs)
152 (6 in) wide	45 kg (100 lbs)
203 (8 in) wide	45 kg (100 lbs)
305 (12 in) wide	68 kg (150 lbs)
457 (18 in) wide	68 kg (150 lbs)
610 (24 in) wide	68 kg (150 lbs)

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 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

2200 Series Belted Conveyor No Load Torque			
Belt Width mm (in)	End Drive Nm (in-lbs)	Mid Drive Nm (in-lbs)	Center Drive Nm (in-lbs)
44 (1.75)	0.5 (4)	0.8 (7)	1 (9)
70 (2.75)	0.6 (5)	0.9 (8)	1.1 (10)
95 (3.75)	0.7 (6)	1 (9)	1.2 (11)
127 (5)	0.8 (7)	1.1 (10)	1.4 (12)
152 (6)	0.9 (8)	1.4 (12)	1.7 (15)
203 (8)	1.1 (10)	1.7 (15)	2.3 (20)
254 (10)	1.4 (12)	2 (18)	2.6 (23)
305 (12)	1.6 (14)	2.3 (20)	2.8 (25)
356 (14)	1.7 (15)	2.4 (21)	3.1 (27)
406 (16)	1.8 (16)	2.5 (22)	3.2 (28)
457 (18)	1.9 (17)	2.7 (24)	3.4 (30)
508 (20)	2 (18)	2.8 (25)	3.6 (32)
559 (22)	2.1 (19)	2.9 (26)	3.7 (33)
610 (24)	2.3 (20)	3.2 (28)	4 (35)

2700 Series Belted Conveyor No Load Torque		
Belt Width mm (in)	End Drive Nm (in-lbs)	Mid Drive Nm (in-lbs)
203 (8)	0.68 (6)	1.02 (9)
254 (10)	0.85 (7.5)	1.19 (10.5)
305 (12)	1.02 (9)	1.36 (12)
356 (14)	1.19 (10.5)	1.53 (13.5)
406 (16)	1.36 (12)	1.69 (15)
457 (18)	1.53 (13.5)	1.86 (16.5)
508 (20)	1.69 (15)	2.03 (18)
559 (22)	1.86 (16.5)	2.2 (19.5)
610 (24)	2.03 (18)	2.37 (21)
660 (26)	2.2 (19.5)	2.54 (22.5)
711 (28)	2.37 (21)	2.71 (24)
762 (30)	2.54 (22.5)	2.88 (25.5)
813 (32)	2.71 (24)	3.05 (27)
864 (34)	2.88 (25.5)	3.22 (28.5)
914 (36)	3.05 (27)	3.39 (30)

2200 Modular Belt Conveyor:

The no load torque on modular belt 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)

Micropitch No Load Torque (Nm) = (0.3COF)*(L/1000*(W/1000)*(2)*(6.35 Kg/sq m)*(43.2/1000 in pitch)*9.81

Metalworking No l=Load Torque (Nm) = (0.3COF)*(L/1000*(W/1000)*(2)*(6.35 Kg/sq m)*(47.8/1000 in pitch)*9.81

Example: 2200 Series Modular Belt Micropitch, 305 mm wide x 3000 mm long

Micropitch No Load Torque (Nm) = (0.3COF)*(3000/1000*(305/1000)*(2)*(6.35 Kg/sq m)*(47.8/1000 in pitch)*9.81

Micropitch No Load Torque (Nm) = 0.74 Nm

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	Coefficient of Friction
2200/2700 Series Belted	Impregnated polyester fabric to anodized aluminum bed plate	Dry	0.33
2200 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:

2200/2700 Series Belted

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

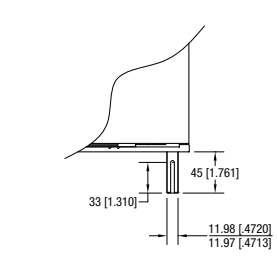
2200 Series Modular Belt

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

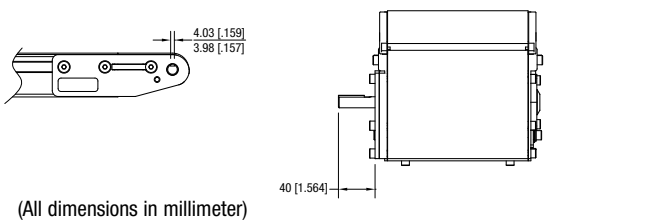
Product Being Accumulated	Typical Coefficient of Friction
Steel	0.25
Glass	0.20
Aluminum	0.25
Plastic	0.25
Wood	0.30
Paper and Cardboard	0.30

Conveyor Drive Shaft Tolerances:

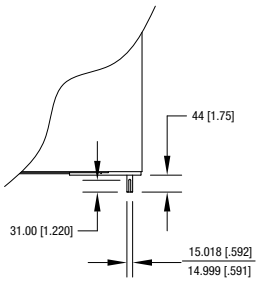
2200 Belted & Modular Belt End Drive:



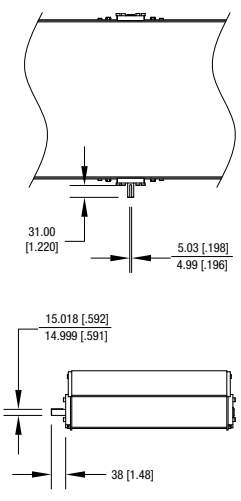
2200 Center Drive:



2700 Belted End Drive:



2700 Mid Drive:



(All dimensions in millimeter)

Calculating Conveyor Belt Speed

2200/2700 Series Belted Conveyors:
To calculate the conveyor belt speed you need to know the following factors:

- Drive roller diameter
  - 32 mm (1.25 in) for 2200 end, mid and center drives
  - 60 mm (2.4 in) for 2700 end and mid drives
- Number of teeth of pulley located at drive roller (if equipped)
- Number of teeth of pulley located at gearmotor (if equipped)
- RPM of gearmotor

$$\text{Belt Speed (Meter/min)} = (\text{Drive roller diameter}/1000)*(3.14)*(\text{RPM of gearmotor})*\frac{(\text{Teeth at gearmotor})}{(\text{Teeth at drive roller})}$$

Example:

2200 Series End Drive with a Bottom mount with a 28 tooth pulley located at the drive roller and a 44 tooth pulley located on the gearmotor. The gearmotor is a 20:1 ratio with 86 rpm output.

Belt Speed (M/min) = (32/1000)*(3.14)*(86)*(44/28)
Belt speed (M/min) = 13.6 M/min

2200 Series Modular Belt Conveyors:
To calculate the conveyor belt speed you need to know the following factors:

- Drive sprocket pitch diameter
  - 43.2 mm for Belts 01 and 02
  - 47.8 mm for Belts 30, 31, 32, 40, 41 and 42
- Number of teeth of pulley located at drive roller (if equipped)
- Number of teeth of pulley located at gearmotor (if equipped)
- RPM of gearmotor

$$\text{Belt Speed (M/min)} = (\text{Drive pitch diameter}/1000)*(3.14)*(\text{RPM of gearmotor})*\frac{(\text{Teeth at gearmotor})}{(\text{Teeth at drive roller})}$$

Example:
2200 Series Straight Modular Belt Conveyor with a Bottom mount with a 28 tooth pulley located at the drive roller and a 44 tooth pulley located on the gearmotor. The gearmotor is a 20:1 ratio with 86 rpm output. Belt type is 30.

Belt Speed (M/min) = (42.8/1000)*(3.14)*(86)*(44/28)
Belt speed (M/min) = 20.3 M/min

Calculating Conveyor Load Capacity

There are several factor that effect the overall conveyor load of the 2200/2700 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.

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

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

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

2200/2700 SERIES

2200 & 2700 Series Conveyors are best for:

- Small to Medium Part Handling
- Transfers
- Accumulation
- Precision Part Movement
- Part Incline/Decline Routing (Z Frames)
- Positioning
- Automated and Manual Assembly

Sizes & Measurements

- 25 - 914 mm (1 - 36 in) widths
- 457 - 9144 mm (18 in - 30 ft) lengths

Loads & Speeds

- Up to 68 kg (150 lbs)
- Up to 122 mpm (400 fpm)

Conveyor Configurations

Straight

Z-Frame

2700 Series

Horizontal to Incline

Nose-Over

Industrial

Flexible Chain

Pallet Systems

Sanitary Stainless Steel

Engineered Solutions Group

Custom engineered solutions for almost any application.

CAD Configurator Tool

Industry leading tool! Configure your own custom conveyor in minutes.

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