



ENGINEERING MANUAL

Complex configurations
that assemble in a snap

High speed performance -
Up to 250 fpm

Industry-best
product transfers



SMARTFLEX®

A high-performance, flexible, modular
chain conveyor that's simple to configure
and even simpler to acquire!

2200 SERIES

DORNER®
MOVE FAST. MOVE SMART.

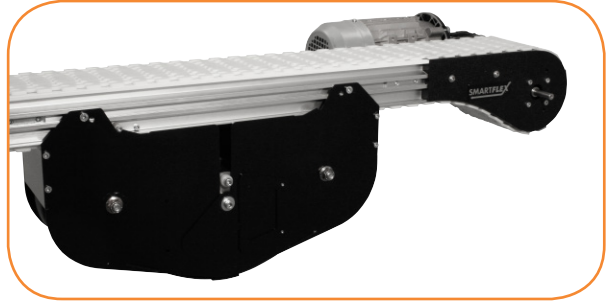
Powered Transfers

- Provides smooth in line transfer of small parts
- Slave driven off of drive or idler module
- Transfers parts as small as 3" in diameter
- Located at the infeed or discharge module



Weighted Take-Up Module

- Provides compact tail for tight spaces
- Uses weighted roller and sight gauge for belt take-up
- Ideal for infeed to machines
- Compact height for running over other equipment
- Improves safety for worker interface



Pallet Systems

- Top running "Racetrack" Drive Modules
- Accessories include:
 - Lift & Locates
 - Cushioned & Non-Cushioned Stops
 - Divert & Merge Modules
 - Pallets & Pallet Kits
- Modular design for simple configuration and ease of interface



The Benefits of a Dorner 2200 Series SmartFlex® Conveyor

Reduces Costs

- Delivered pre-assembled to your exact specifications; saving labor costs
- Reduces commissioning time
- Eliminates unnecessary cutting, inventory and waste
- Industry leading product transfers eliminate costly product jams, bottlenecks, and damage

Saves Time

- 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

Delivers Fast

- Dorner sets the industry standard for delivery
- SmartFlex® is shattering the norm with conveyors available to ship in 5 working days

ACCESSORIES
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POWER TRANSFER

FOR SMOOTH IN-LINE TRANSFER OF PRODUCT AS SMALL AS 3" IN DIAMETER

CONTINUOUS UHMW GUIDE RAIL

FOR SMOOTH PRODUCT CONVEYANCE

WHEEL CORNERS

ELIMINATE CORNER FRICTION ALLOWING MULTIPLE CORNER CONFIGURATIONS

WEIGHTED TAKE-UP MODULE

FOR IMPROVED OPERATOR SAFETY AND COMPACT DRIVE TAIL

T-SLOT FRAMEWORK

FOR EASE OF MOUNTING ACCESSORIES

SUPPORT POST

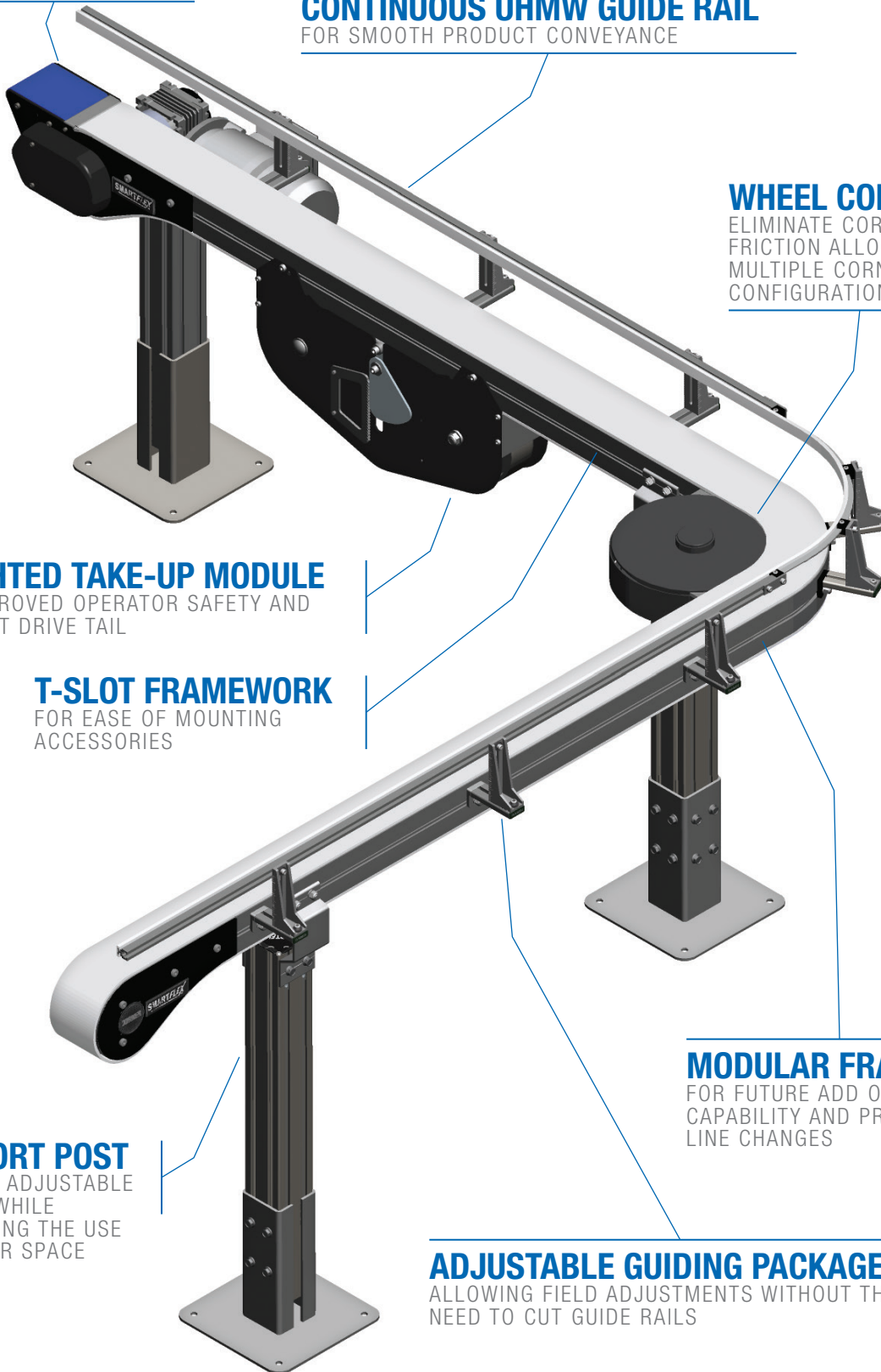
PROVIDE ADJUSTABLE HEIGHT WHILE OPTIMIZING THE USE OF FLOOR SPACE

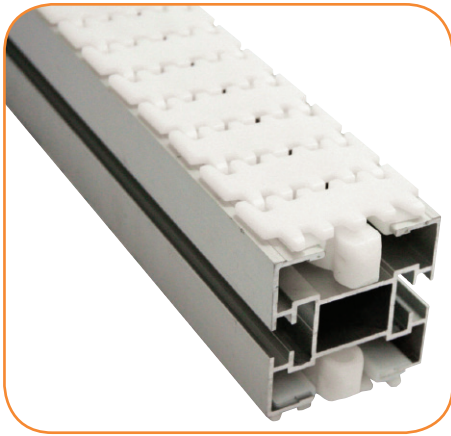
MODULAR FRAMING

FOR FUTURE ADD ON CAPABILITY AND PRODUCTION LINE CHANGES

ADJUSTABLE GUIDING PACKAGES

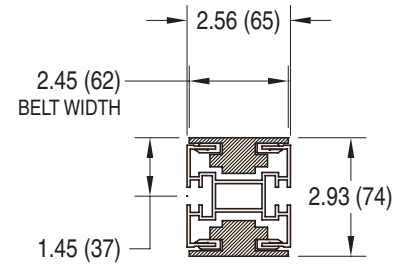
ALLOWING FIELD ADJUSTMENTS WITHOUT THE NEED TO CUT GUIDE RAILS





65mm

- Maximum load = 15 lbs/ft
- Maximum total load = 300 lbs non-accumulated
- Maximum length = 98'
- Maximum Speed = 190 ft/min

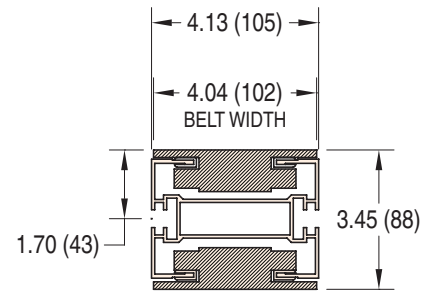


65MM WIDTH



105mm

- Maximum load = 25 lbs/ft
- Maximum total load = 600 lbs non-accumulated
- Maximum length = 98'
- Maximum Speed = 190 ft/min

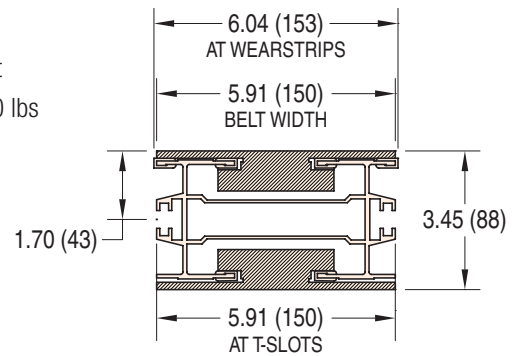


105MM WIDTH



150mm

- Maximum load = 30 lbs/ft
- Maximum total load = 600 lbs non-accumulated
- Maximum length = 98'
- Maximum Speed = 190 ft/min



150MM WIDTH

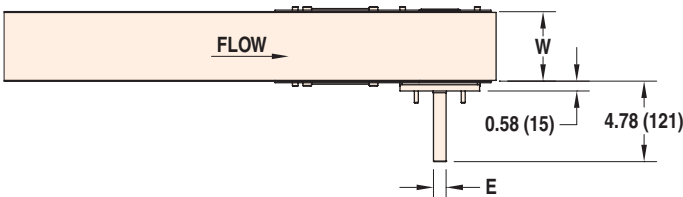
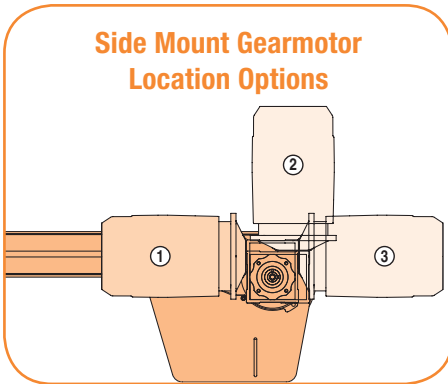
Note: Conveyor modules may be made up of several length of conveyor beam. Maximum length piece beam is 118" (2,997mm).

Note: Dimensions = in (mm)



Catenary Drive Module

- Lengths:
 - Minimum = 1.58' (481mm)
 - Maximum = 50' (15.24M)
 - Minimum tail only (knuckle modules, and plain bend corner) = 1.08' (329mm) (contact factory)
- Drive Sprocket:
 - 65mm = 16 tooth
 - 105mm and 150mm = 12 tooth
- Pitch Diameter:
 - 65mm = 5.093" (129mm)
 - 105mm and 150mm = 5.336" (136mm)
- Maximum incline or decline = 7°
- Uses catenary loop for belt take-up
- Side mount sealed gearmotors can be in position 1, 2 or 3
- Optional 20mm diameter x 1.5" long dual output shaft for common driven conveyors



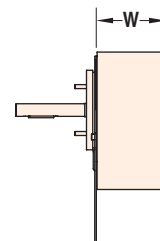
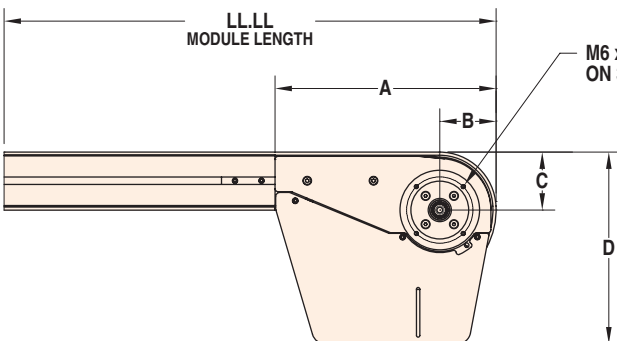
A = 12.78 (325) FOR 65 WIDTH CONVEYORS
13.12 (333) FOR 105 & 150 WIDTH CONVEYORS

B = 3.01 (76) FOR 65 WIDTH CONVEYORS
3.34 (85) FOR 105 & 150 WIDTH CONVEYORS

C = 3.13 (79) FOR 65 WIDTH CONVEYORS
3.44 (87) FOR 105 & 150 WIDTH CONVEYORS

D = 11.06 (281) FOR 65 WIDTH CONVEYORS
11.38 (289) FOR 105 & 150 WIDTH CONVEYORS

E = .75 (19) DIA. SHAFT WITH .19 (5) X 1.84 (47) KEYWAY FOR EDRIIVE, SEW AND CUSTOMER SUPPLIED MOTORS
.71 (18) DIA. SHAFT WITH .24 (6) X 1.84 (47) KEYWAY FOR CE MOTORS

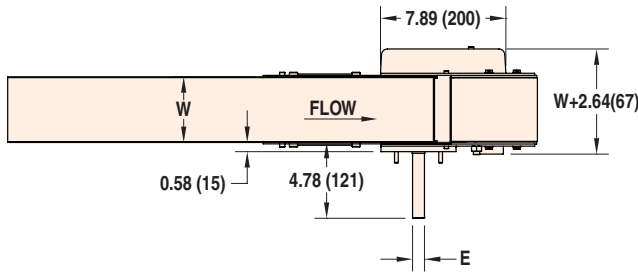
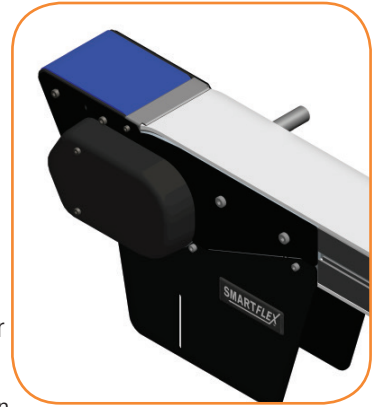


For part number information, see page 7

Note: Due to the wide variety of drive setups and applications, point of installation guarding is the responsibility of the end user. **Note:** Dimensions = in (mm)

Catenary Drive Module with Outfeed Power Transfer

- Power transfer for small part in-line transfer applications
- Lengths:
 - Minimum = 1.58' (481mm)
 - Maximum = 50' (15.24M)
 - Minimum tail only (knuckle modules, and plain bend corner) = 1.08' (329mm) (contact factory)
- Drive Sprocket:
 - 65mm = 16 tooth
 - 105mm and 150mm = 12 tooth
- Pitch Diameter:
 - 65mm = 5.093" (129mm)
 - 105mm and 150mm = 5.336" (136mm)
- Maximum incline or decline = 7°
- Power transfer is 10mm micro pitch chain slave driven off drive module
- Transfer parts as small as 3" in diameter
- Uses catenary loop for belt take-up
- Side mount sealed gearmotors can be in position 1, 2 or 3



A = 12.78 (325) FOR 65 WIDTH CONVEYORS
13.12 (333) FOR 105 & 150 WIDTH CONVEYORS

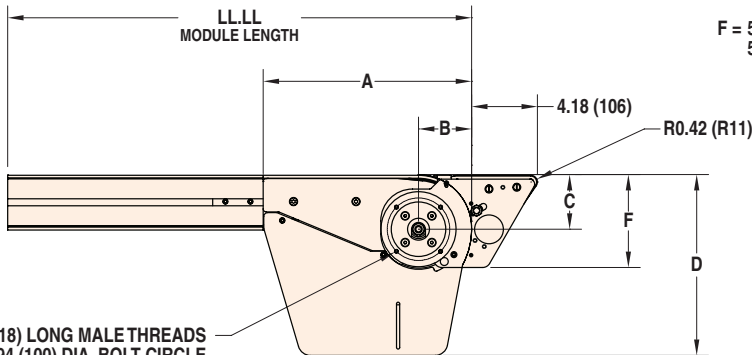
B = 3.01 (76) FOR 65 WIDTH CONVEYORS
3.34 (85) FOR 105 & 150 WIDTH CONVEYORS

C = 3.13 (79) FOR 65 WIDTH CONVEYORS
3.44 (87) FOR 105 & 150 WIDTH CONVEYORS

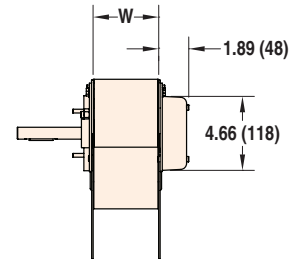
D = 11.06 (281) FOR 65 WIDTH CONVEYORS
11.38 (289) FOR 105 & 150 WIDTH CONVEYORS

E = .75 (19) DIA. SHAFT WITH .19 (5) X 1.84 (47) KEYWAY FOR EDRIIVE, SEW AND CUSTOMER SUPPLIED MOTORS
.71 (18) DIA. SHAFT WITH .24 (6) X 1.84 (47) KEYWAY FOR CE MOTORS

F = 5.53 (140) FOR 65 WIDTH CONVEYORS
5.85 (149) FOR 105 & 150 WIDTH CONVEYORS



M6 x .70 (18) LONG MALE THREADS ON 3.94 (100) DIA. BOLT CIRCLE



Note: Due to the wide variety of drive setups and applications, point of installation guarding is the responsibility of the end user.
Note: Dimensions = in (mm)

SMARTFLEX: Drive Modules

22SF 5 M WWW - L L L L D P T M P P P B B - S S

Sequence Number: 01 to 99

Belt Material: 01 = Low Friction 08 = Friction Inserts

Profile (D side): Same options as A side

Profile (A side):
01 = Lowside
04 = 3" aluminum high side
05 = 1½" aluminum high side

Motor Code: W = SEW E = eDrive C = CE Mount N = Customer Supplied

13 = Fully adjustable guiding
14 = Tool-less fully adjustable guiding
16 = Outboard adjustable guide

Weighted Take-Up Location From End:
0 = Catenary tail
1 = 18" from tail end to start of take-up
2 = 24" from tail end to start of take-up
3 = 36" from tail end to start of take-up
4 = 48" from tail end to start of take-up

Motor Shaft Position: A or D

Drive Tail Code: N = Drive tail R = Roller transfer P = Power transfer D = Dual shaft

Conveyor Length Reference: 0167 to 5000 (Note: if length = 0108, is tail only)

Conveyor Width Reference: 065 = 65mm 105 = 105mm 150 = 150mm

Documentation Language: M = US

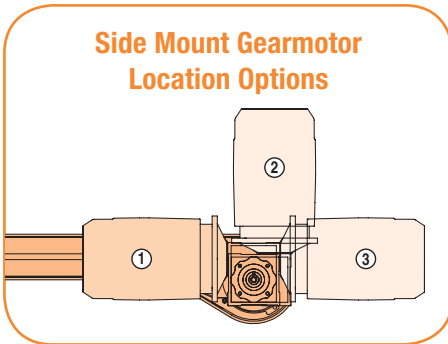
Conveyor Type: 5 = Drive Module

Drive Shaft Position



Weighted Take-Up Drive Module

- Provides compact tail for in machine applications
- Lengths:
 - Minimum = 4.08' (1,244mm)
 - Maximum = 50' (15,24M)
- Drive Sprocket:
 - 65mm = 16 tooth
 - 105mm and 150mm = 12 tooth
- Pitch Diameter:
 - 65mm = 5.093" (129mm)
 - 105mm and 150mm = 5.336" (136mm)
- Maximum incline or decline = 30°
- Not available for friction top chain
- Uses weighted idler roller and sight gauge for belt take-up
- Take-up module can be located 18", 24", 36" or 48" from discharge end
- Side mount sealed gearmotors can be in position 1, 2 or 3
- Optional 20mm diameter x 1.5" long dual output shaft for common driven conveyors



A = 12.90 (328) FOR 65 WIDTH CONVEYORS
13.12 (333) FOR 105 & 150 WIDTH CONVEYORS

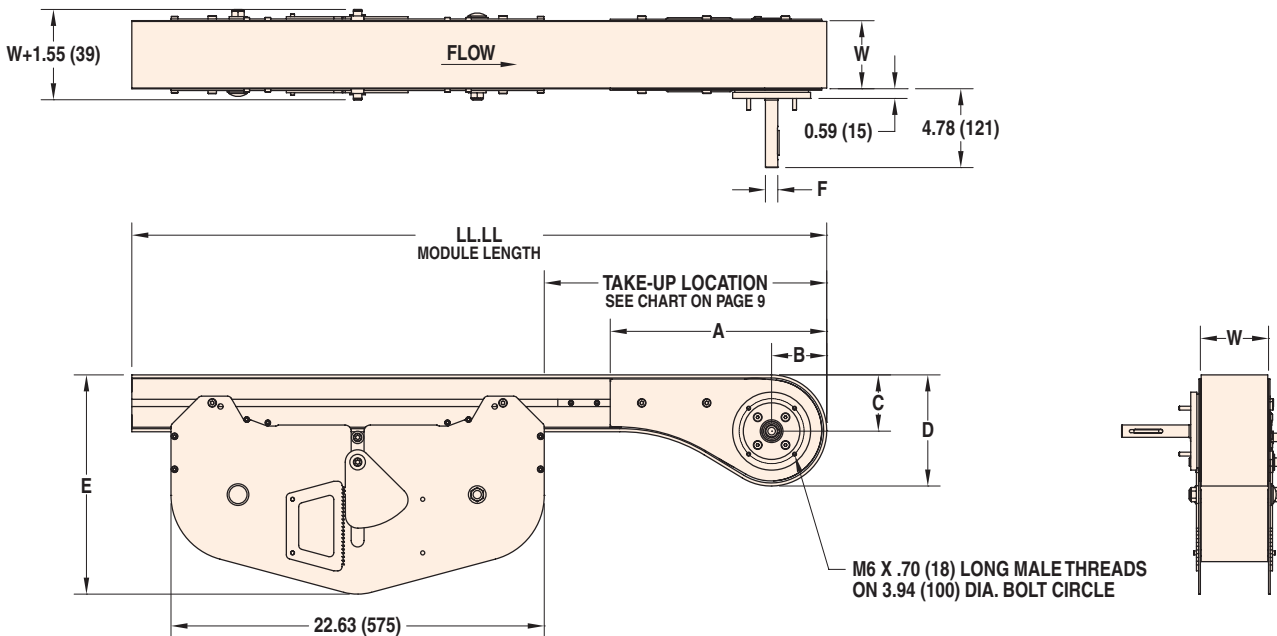
B = 3.12 (79) FOR 65 WIDTH CONVEYORS
3.34 (85) FOR 105 & 150 WIDTH CONVEYORS

C = 3.13 (79) FOR 65 WIDTH CONVEYORS
3.41 (87) FOR 105 & 150 WIDTH CONVEYORS

D = 6.21 (158) FOR 65 WIDTH CONVEYORS
6.71 (170) FOR 105 & 150 WIDTH CONVEYORS

E = 12.82 (326) FOR 65 WIDTH CONVEYORS
13.29 (338) FOR 105 & 150 WIDTH CONVEYORS

F = .75 (19) DIA. SHAFT WITH .19 (5) X 1.84 (47) KEYWAY
FOR EDRIVE, SEW, AND CUSTOMER SUPPLIED MOTORS
.71 (18) DIA. SHAFT WITH .24 (6) X 1.84 (47) KEYWAY
FOR CE MOTORS

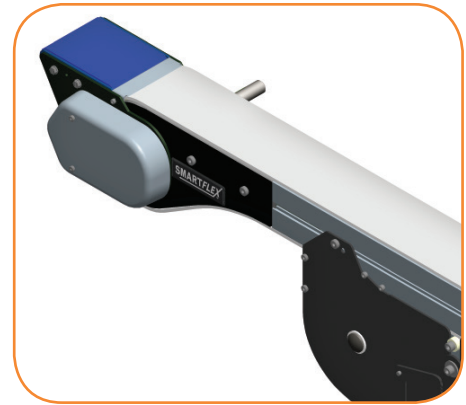


For part number information, see page 7

Note: Due to the wide variety of drive setups and applications, point of installation guarding is the responsibility of the end user. **Note:** Dimensions = in (mm)

Weighted Take-Up Drive Module with Outfeed Power Transfer

- Provides compact tail for in machine applications
- Power transfer for small part in-line transfer applications
- Lengths:
 - Minimum = 4.08' (1,244mm)
 - Maximum = 50' (15,24M)
- Drive Sprocket:
 - 65mm = 16 tooth
 - 105mm and 150mm = 12 tooth
- Pitch Diameter:
 - 65mm = 5.093" (129mm)
 - 105mm and 150mm = 5.336" (136mm)
- Maximum incline or decline = 10°
- Not available for friction top chain
- Power transfer is 10mm micro pitch chain slave driven off drive module
- Transfer parts as small as 3" in diameter
- Uses weighted idler roller and sight gauge for belt take-up
- Take-up module can be located 18", 24", 36" or 48" from discharge end
- Side mount sealed gearmotors can be in position 1, 2 or 3



Weighted Take-Up Location (end to start of take-up) vs Minimum Module Length

From End	Min Fixed Length (ft)	Min Length (ft)	Max Length (ft)
18"	3.50	4.08	50
24"	4.00	4.58	50
36"	5.00	5.58	50
48"	6.00	6.58	50

A = 12.90 (328) FOR 65 WIDTH CONVEYORS
13.12 (333) FOR 105 & 150 WIDTH CONVEYORS

B = 3.12 (79) FOR 65 WIDTH CONVEYORS
3.34 (85) FOR 105 & 150 WIDTH CONVEYORS

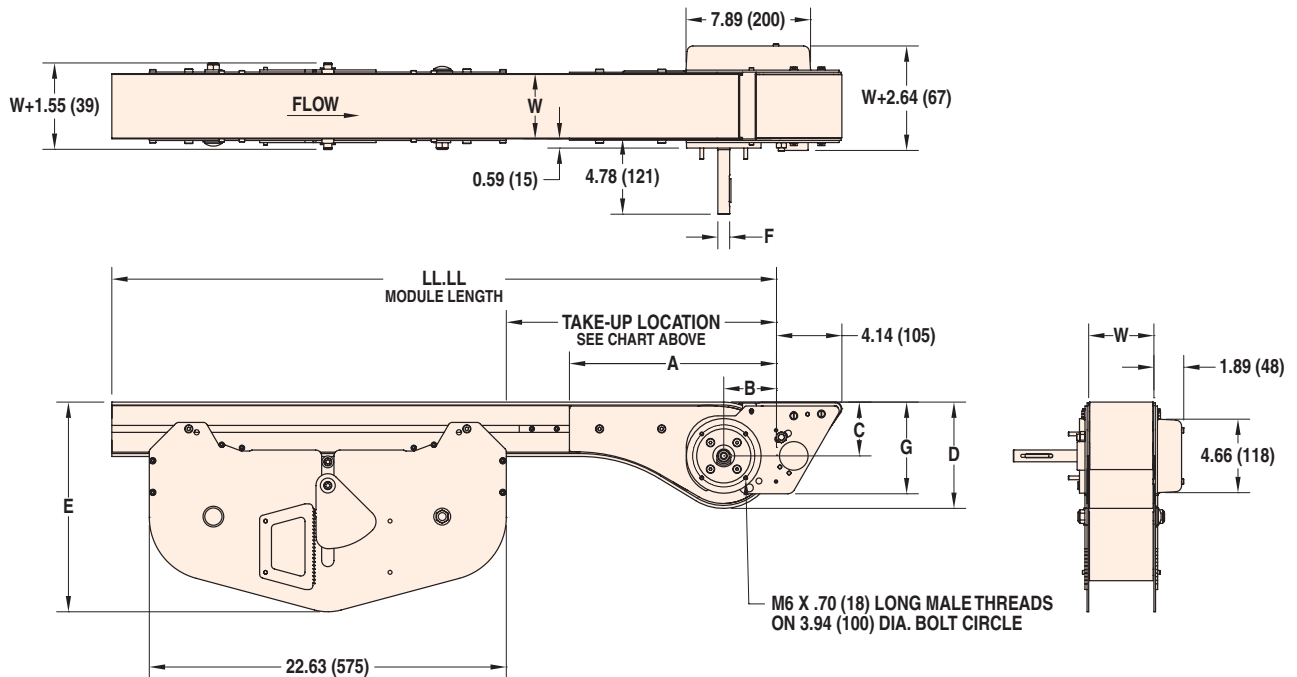
C = 3.13 (79) FOR 65 WIDTH CONVEYORS
3.41 (87) FOR 105 & 150 WIDTH CONVEYORS

D = 6.21 (158) FOR 65 WIDTH CONVEYORS
6.71 (170) FOR 105 & 150 WIDTH CONVEYORS

E = 12.82 (326) FOR 65 WIDTH CONVEYORS
13.29 (338) FOR 105 & 150 WIDTH CONVEYORS

F = .75 (19) DIA. SHAFT WITH .19 (5) X 1.84 (47) KEYWAY FOR EDRIIVE, SEW, AND CUSTOMER SUPPLIED MOTORS
.71 (18) DIA. SHAFT WITH .24 (6) X 1.84 (47) KEYWAY FOR CE MOTORS

G = 5.53 (140) FOR 65 WIDTH CONVEYORS
5.81(148) FOR 105 & 150 WIDTH CONVEYORS



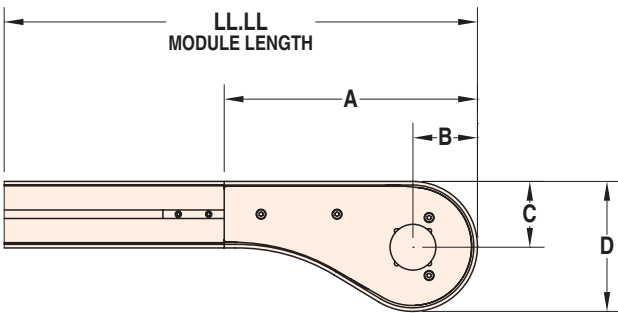
For part number information, see page 7

Note: Due to the wide variety of drive setups and applications, point of installation guarding is the responsibility of the end user. **Note:** Dimensions = in (mm)



Idler Module

- Lengths:
 - Minimum = 1.58' (481mm)
 - Maximum = 50' (15.24M)
 - Minimum tail only (knuckle modules, and plain bend corner) = 1.08' (329mm) (contact factory)
- Idler Roller Diameter:
 - 65mm = 5.70" (145mm)
 - 105mm and 150mm = 6.18" (157mm)
- Optional 20mm diameter x 1.5" long output shaft for encoders and other devices

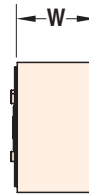


A = 12.90 (328) FOR 65 WIDTH CONVEYORS
13.12 (333) FOR 105 & 150 WIDTH CONVEYORS

B = 3.12 (79) FOR 65 WIDTH CONVEYORS
3.34 (85) FOR 105 & 150 WIDTH CONVEYORS

C = 3.13 (79) FOR 65 WIDTH CONVEYORS
3.41 (87) FOR 105 & 150 WIDTH CONVEYORS

D = 6.21 (158) FOR 65 WIDTH CONVEYORS
6.71 (170) FOR 105 & 150 WIDTH CONVEYORS



Note: Due to the wide variety of drive setups and applications, point of installation guarding is the responsibility of the end user.

Note: Dimensions = in (mm)

SMARTFLEX: Idler Modules

22SF 1 M WWW - L L L L I P P P B B - S S

Sequence Number: 01 to 99

Belt Material: 01 = Low Friction 08 = Friction Inserts

Profile (D side): Same options as A side

Profile (A side):

01 = Lowside

04 = 3" aluminum high side

05 = 1½" aluminum high side

13 = Fully adjustable guiding

14 = Tool-less fully adjustable guiding

16 = Outboard adjustable guide

Idler Tail Code:

N = Drive tail

R = Roller transfer

P = With power transfer, A side

T = With power transfer, D side

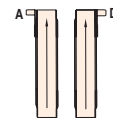
Conveyor Length Reference: 0167 to 5000 (Note: if length = 0108, is tail only)

Conveyor Width Reference: 065 = 65mm 105 = 105mm 150 = 150mm

Documentation Language: M = US

Conveyor Type: 1 = Infeed Module

Drive Shaft Position



17 = Puck guide

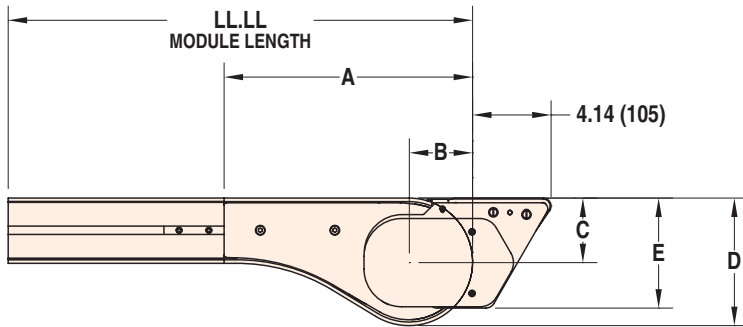
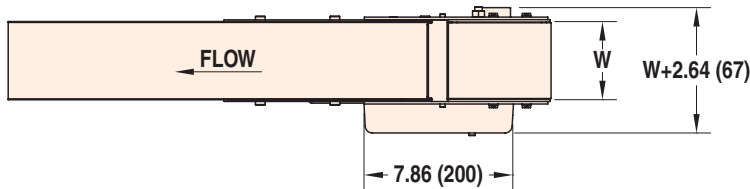
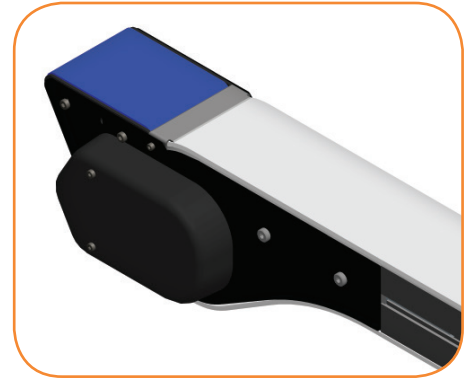
18 = Pallet guide

A = Output shaft, A side

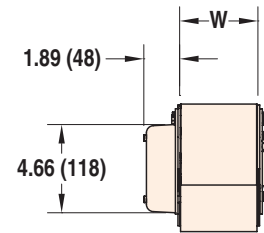
D = Output shaft, D side

Idler Module with Infeed Power Transfer

- Power transfer for small part in-line transfer applications
- Lengths:
 - Minimum = 1.58' (481mm)
 - Maximum = 50' (15.24M)
 - Minimum tail only (knuckle modules, and plain bend corner) = 1.08' (329mm) (contact factory)
- Idler Roller Diameter:
 - 65mm = 5.70" (145mm)
 - 105mm and 150mm = 6.18" (157mm)
- Not available for friction top chain
- Power transfer is 10mm micro pitch chain slave driven off idler module
- Transfer parts as small as 3" in diameter



- A = 12.90 (328) FOR 65 WIDTH CONVEYORS
13.12 (333) FOR 105 & 150 WIDTH CONVEYORS
- B = 3.12 (79) FOR 65 WIDTH CONVEYORS
3.34 (85) FOR 105 & 150 WIDTH CONVEYORS
- C = 3.13 (79) FOR 65 WIDTH CONVEYORS
3.41 (87) FOR 105 & 150 WIDTH CONVEYORS
- D = 6.21 (158) FOR 65 WIDTH CONVEYORS
6.71 (170) FOR 105 & 150 WIDTH CONVEYORS
- E = 5.53 (140) FOR 65 WIDTH CONVEYORS
5.81 (148) FOR 105 & 150 WIDTH CONVEYORS



For part number information, see page 10

Note: Due to the wide variety of drive setups and applications, point of installation guarding is the responsibility of the end user. **Note:** Dimensions = in (mm)



Wheel Corners

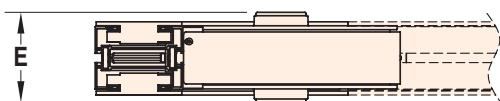
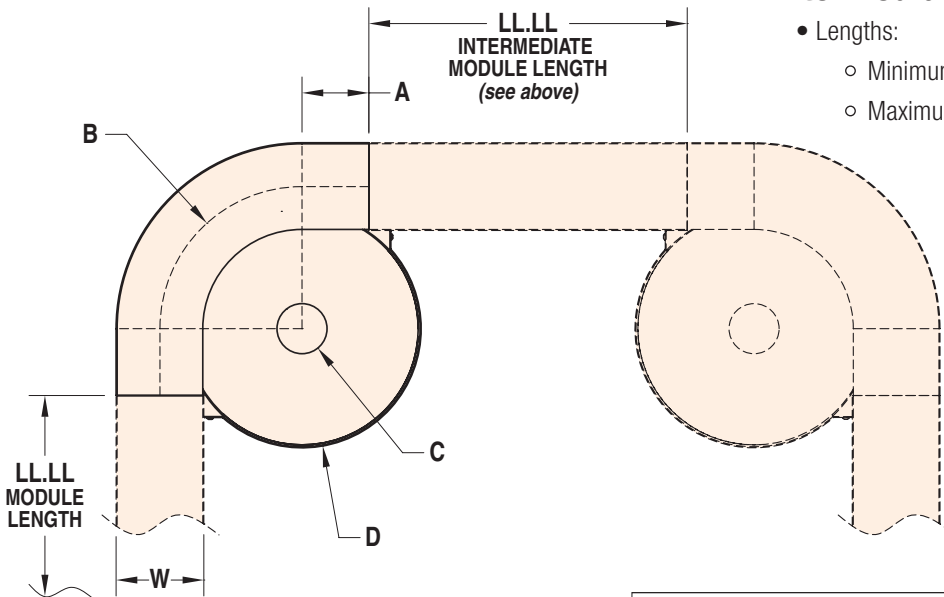
- Dynamic wheel eliminates friction and provides the tightest turn radius
- Angle:
 - 65mm wide = 45°, 90°, 180°
 - 105mm wide = 45°, 90°, 135°, 180°
 - 150mm wide = 45°, 90°, 180°
 - Other angles available, contact factory
- Radius at Centerline of Chain:
 - 65mm wide = 5.91" (150mm)
 - 105mm wide = 6.69" (170mm)
 - 150mm wide = 8.27" (210mm)
- Product can be wider than the chain.
Maximum Width of Product:
 - 65mm wide = 8" (203mm)
 - 105mm wide = 10" (254mm)
 - 150mm wide = 12" (305mm)

SMARTFLEX: Intermediate Modules

22SF	3	M	WWW	-	LLLL	PP	PP	BB	-	SS
- Sequence Number: 01 to 99										
- Belt Material: 01 = Low Friction 08 = Friction Inserts										
- Profile (D side): Same options as A side										
- Profile (A side):										
01 = Lowside			13 = Fully adjustable guiding							
04 = 3" aluminum high side			14 = Tool-less fully adjustable guiding							
05 = 1½" aluminum high side			16 = Outboard adjustable guide							
- Conveyor Length Reference										
- Conveyor Width Reference: 065 = 65mm 105 = 105mm 150 = 150mm										
- Documentation Language: M = US										
- Conveyor Type: 3 = Intermediate Module 8 = Top Running Intermediate										

Intermediate Module

- Lengths:
 - Minimum = 0.5' (152mm)
 - Maximum = 50' (15.24M)



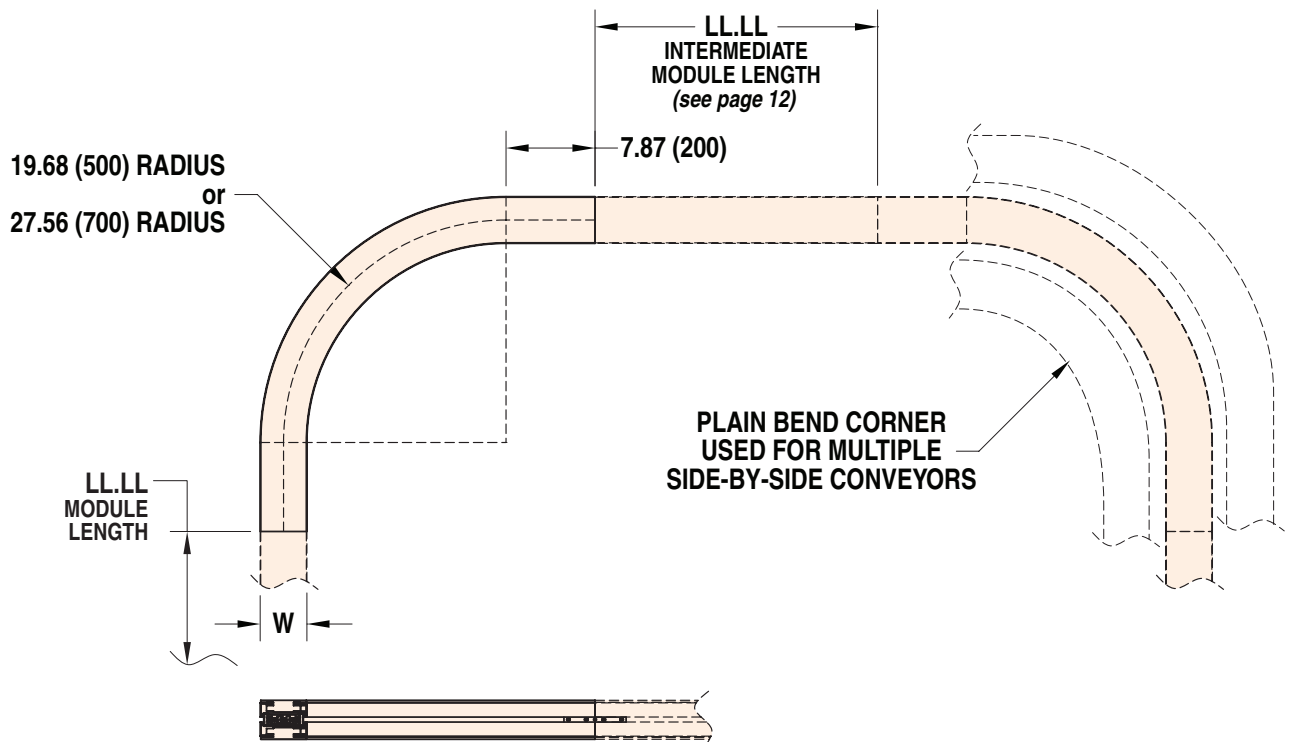
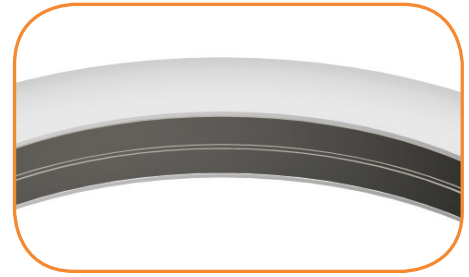
	CONVEYOR WIDTH		
	65MM	105MM	150MM
A	3.15 (80)	3.15 (80)	11.81 (300)
B	5.91 (150) RADIUS	6.69 (170) RADIUS	8.27 (210) RADIUS
C	2.55 (65) DIA.	2.55 (65) DIA.	2.55 (65) DIA.
D	11.23 (285) DIA.	11.23 (285) DIA.	14.94 (379) DIA.
E	3.79 (96)	4.24 (108)	4.30 (109)

For part number information, see page 13

Note: Due to the wide variety of drive setups and applications, point of installation guarding is the responsibility of the end user. **Note:** Dimensions = in (mm)

Plain Bend Corners

- Plain bend corners are used where a larger radius is needed or when multiple side by side corners are required
- Angle:
 - 65mm and 105mm wide = 90°
 - Other angles available, contact factory
- (2) Corner Radii Available: Radius at Centerline of Chain:
 - 65mm wide = 19.68" (500mm) and 27.56" (700mm)
 - 105mm wide = 19.68" (500mm) and 27.56" (700mm)
- Product can be wider than the chain
- Can mount directly to drive and idler tails without the need for an intermediate frame
- 150mm wide corners available, contact factory
- 300mm and 1000mm wide radii available, contact factory



Note: Due to the wide variety of drive setups and applications, point of installation guarding is the responsibility of the end user.

Note: Dimensions = in (mm)

SMARTFLEX: Curve Modules												Drive Shaft Position		
22SF	2	M	WWW	-	AAA	T	D	PP	PP	BB	-	SS		
Sequence Number: 01 to 99 Belt Material: 01 = Low Friction 08 = Friction Inserts Profile (D side): Same options as A side Profile (A side): 01 = Lowside 04 = 3" aluminum high side 05 = 1½" aluminum high side 13 = Fully adjustable guiding 14 = Tool-less fully adjustable guiding 16 = Outboard adjustable guide 17 = Puck guide 18 = Pallet guide														
Direction: L = Left hand R = Right hand Type: W = Wheel 5 = 500mm radius plain bend 7 = 700mm radius plain bend T = Top running wheel curve Angle: 045 = 45° 090 = 90° 180 = 180° Conveyor Width Reference: 065 = 65mm 105 = 105mm 150 = 150mm Documentation Language: M = US Conveyor Type: 2 = Curve Module														

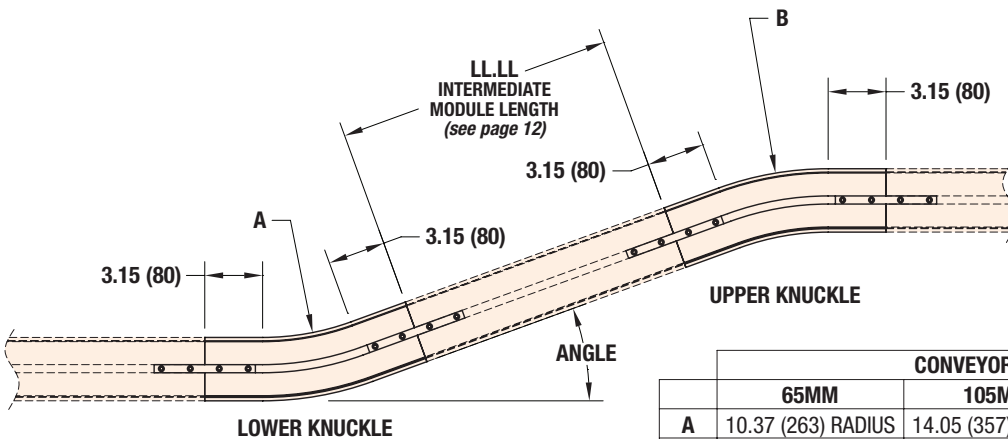


Lower Knuckle Modules

- Angle:
 - 65mm wide = 5°, 7°, 10°, 15°, 20° and 30°
 - 105mm wide = 5°, 7°, 10°, 15°, 20° and 30°
 - 150mm wide = 5°, 10°, 20° and 30°
- Radius at Top Surface of Chain:
 - 65mm wide = 10.4" (265mm)
 - 105mm wide = 14.0" (357mm)
 - 150mm wide = 18.0" (457mm)
- Incline angles of 10° and higher require friction top chain
- Can mount directly to drive/idler tails, wheel corners, and plain bend corners without the need for an intermediate frame

Upper Knuckle Modules

- Angle:
 - 65mm wide = 5°, 7°, 10°, 15°, 20° and 30°
 - 105mm wide = 5°, 7°, 10°, 15°, 20° and 30°
 - 150mm wide = 5°, 10°, 20° and 30°
- Radius at Top Surface of Chain:
 - 65mm wide = 13.2" (337mm)
 - 105mm wide = 17.4" (443mm)
 - 150mm wide = 21.4" (544mm)
- Incline angles of 10° and higher require friction top chain
- Can mount directly to drive/idler tails, wheel corners, and plain bend corners without the need for an intermediate frame



	CONVEYOR WIDTH		
	65MM	105MM	150MM
A	10.37 (263) RADIUS	14.05 (357) RADIUS	18.01 (457) RADIUS
B	13.26 (337) RADIUS	17.45 (443) RADIUS	21.41 (544) RADIUS

SMARTFLEX: Incline/Decline Modules

22SF 4 M WWW - AA U P P P B B - S S

— Sequence Number: 01 to 99

— Belt Material: 01 = Low Friction 08 = Friction Inserts

— Profile (D side): Same options as A side

— Profile (A side):

- 01 = Lowside
- 04 = 3" aluminum high side
- 05 = 1½" aluminum high side

— Knuckle Type: U = Upper L = Lower

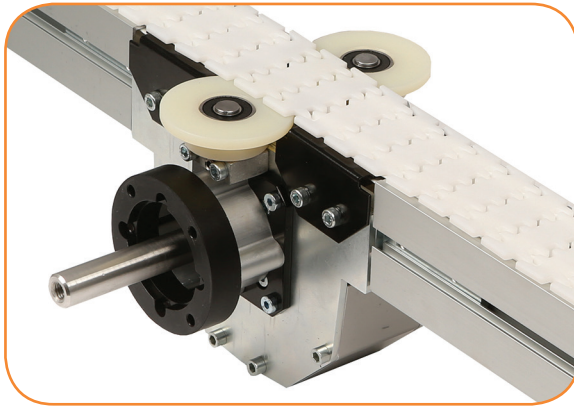
— Angle: 05 = 5° 07 = 7° 10 = 10° 15 = 15° 30 = 30°

— Conveyor Width Reference: 065 = 65mm 105 = 105mm 150 = 150mm

— Documentation Language: M = US

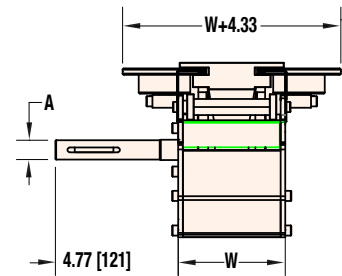
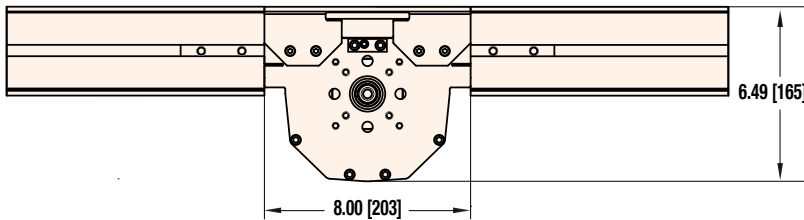
— Conveyor Type: 4 = Incline / Decline Module

Drive Shaft Position



Top Running Conveyor Loops

- Widths:
 - 65mm wide
 - 105mm wide
 - 150mm wide
- Drive module driving on single sprocket tooth
 - Includes belt hold down rollers
- Load Capacity
 - 65mm wide = 70 lbs total load capacity
 - 105mm wide = 100 lbs total load capacity
 - 150mm wide = 100 lbs total load capacity
- 30 ft maximum total conveyor length
- Compatible with standard load gearmotors
- Patent Pending Design

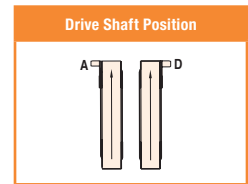


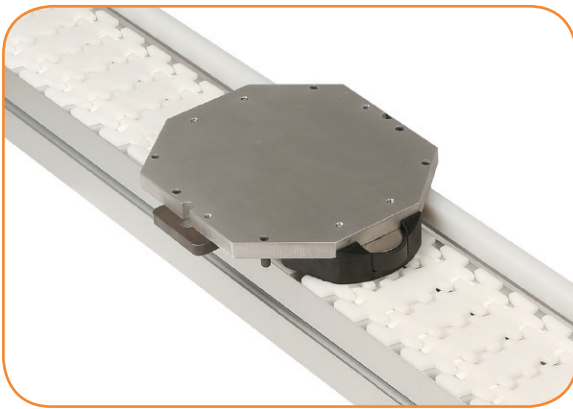
A = .75 [19] DIA. SHAFT WITH .19 [5] X 1.84 [47] KEYWAY FOR EDRIE, SEW AND CUSTOMER SUPPLIED MOTORS
 .74 [18] DIA. SHAFT WITH .24 [6] X 1.84 [47] KEYWAY FOR CE MOTORS

SMARTFLEX: Top Running Drive Module

22SF	9	M	WWW	-	LLLL	N	P	T	M	PP	PP	BB	-	SS
------	---	---	-----	---	------	---	---	---	---	----	----	----	---	----

- Sequence Number: 01 to 99
- Belt Material: 01 = Low Friction 08 = Friction Inserts
- Profile (D side): Same options as A side
- Profile (A side):
 - 01 = Lowside
 - 04 = 3" aluminum high side
 - 05 = 1½" aluminum high side
- Motor Code: E = eDrive C = CE Mount N = Customer Supplied
 - 13 = Fully adjustable guiding
 - 14 = Tool-less fully adjustable guiding
 - 16 = Outboard adjustable guide
- Drive Module Location: 0 = at Infeed End 1 = at Center of Module 5 = at Exit End
- Motor Shaft Position: A or D
- Drive Tail Code: N = No Drive tail
- Conveyor Length Reference: 0167 to 5000 (Note: if length = 0108, is tail only)
- Conveyor Width Reference: 065 = 65mm 105 = 105mm 150 = 150mm
- Documentation Language: M = US
- Conveyor Type: 9 = Top Running Drive Module



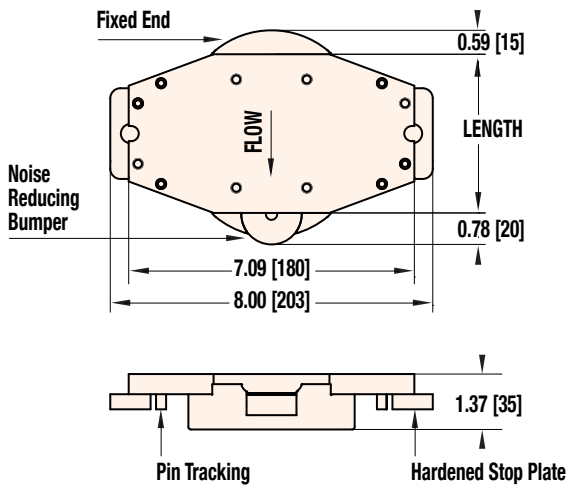


Pallets

- Pallet Sizes: 105mm Conveyor

190mm wide	Length		
	100	150	200

- Recessed hardened stop plates provide complete access to full top plate for part tooling
- Maximum weight per pallet = 20 lbs
- Base Pucks
 - 3/4" thick molded plastic
 - Round shape to match conveyor guides
 - Optional noise reducing bumper can be added to base pucks
- Pallet is 1/2" thick machined aluminum
- Contains pin tracking system to guide pallet on conveyor and divert modules
- Pallets can be purchased as assembled units or as kits containing all components except for aluminum top plate
- See page 35 for pallet sensor brackets



SMARTFLEX: Pallets

22 SF P M WWW - L L L A

Pallet Options:

- A = Assembled with std 1/2" aluminum top plate
- B = Assembled with std 1/2" aluminum top plate and bumper on one end
- C = Kit only without aluminum top plate
- D = Kit only without aluminum top plate includes bumper on one end

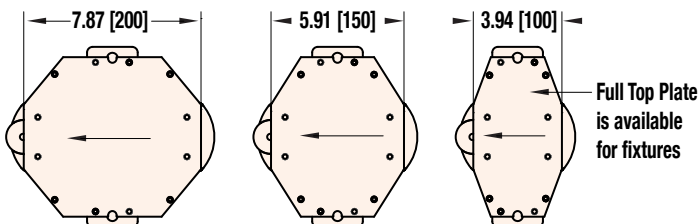
Length Reference:

100 = 100mm 150 = 150mm
200 = 200mm

Width Reference: 105 = 105mm

Documentation Language: M = US

P = Pallet



Contact factory for detailed drawing of top plate.



Cushioned



Non-Cushioned

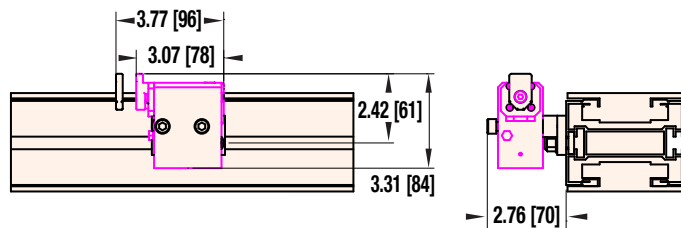
Pallet Stops

- All stops are pneumatic activate with spring return
- Stops can be cushioned or non-cushioned for use with pallets
- Stops can be added to the conveyor without guide modification
- Optional sensor mounts for pallet
- Sensor mounts are for standard 12mm diameter proximity switch
- Pallet assembly includes stop, mounting bracket, hardware and pneumatic push in fittings for 1/4" air line
- See page 35 for verticle sensor mounts

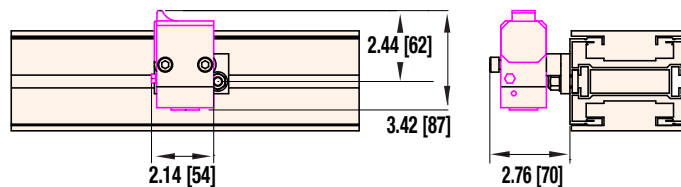
Speed vs. Load Characteristics

Belt Speed (ft./min)	Max. Allowed Accumulated Load (lbs.)
Cushioned Stops	
20	120
30	80
40	70
60	60
75	50
100	35
Non-Cushioned Stops*	
20	150
30	150
40	150
60	140
75	120
100	100

*Note: Pallet bumpers are recommended.

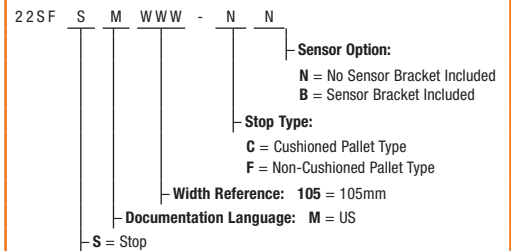


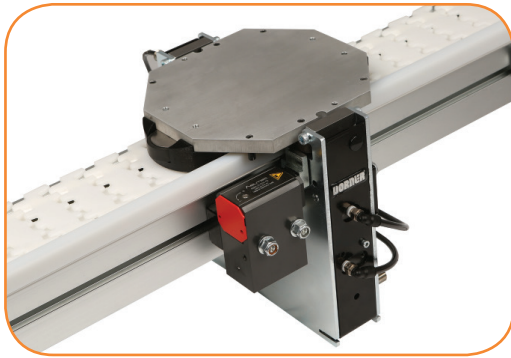
Cushioned



Non-Cushioned

SMARTFLEX: Stops





Module with Pallet in Located Position

Lift and Locates:

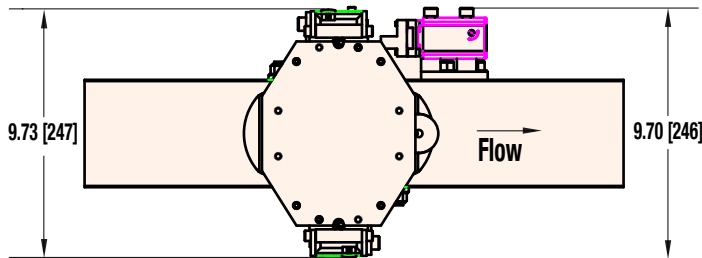
- Conveyor width: 105mm
- Lifts from outside of conveyor – provides 200 lbs. of holding force
- Lifts are pneumatic
- Rated for pneumatic force up to 100 psi.
- Repeatability accuracy of $\pm 0.004"$
- Includes (1) Cushioned or Non-Cushioned pallet stop
- Includes sensor mounts for lift cylinder and pallet
- Sensor mounts are for standard 12mm diameter proximity switch
- Can be supported by conveyor or have SmartFlex support post added for additional support
- Includes push-in pneumatic push in fittings for 1/4" air line



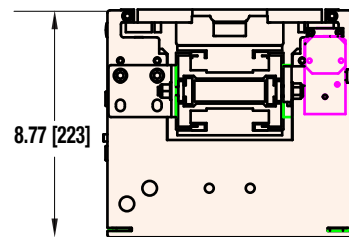
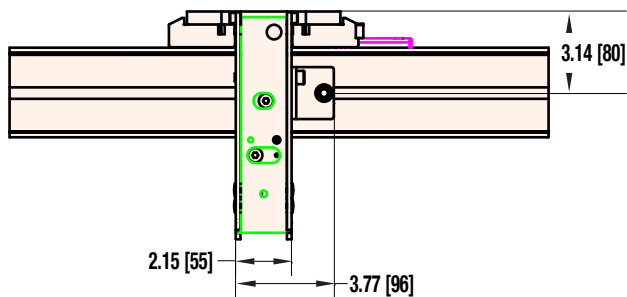
Module Only

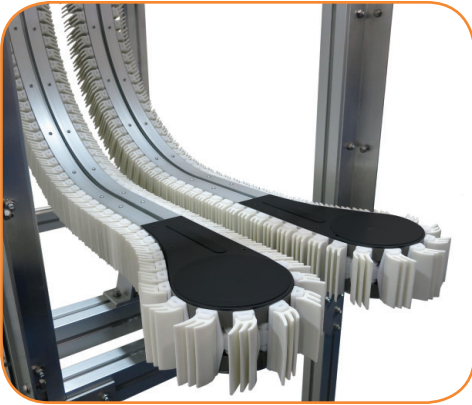
SMARTFLEX: Lift and Locate

22 SF	L	M	WWW	-	N
					Stop Type:
					C = Cushioned Stop
					F = Non-Cushioned Stop
					Width Reference: 105 = 105mm
					Documentation Language: M = US
					L = Lift and Locate



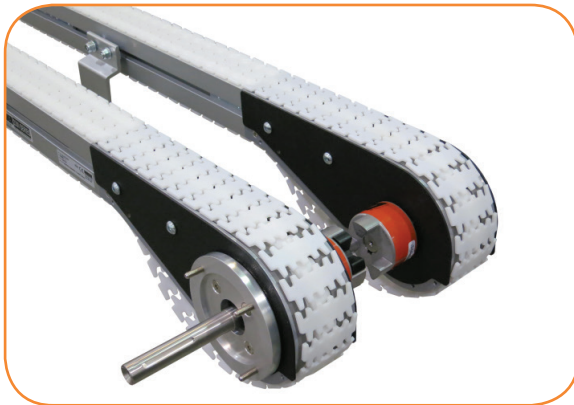
Pallet in Locked Location





Wedge Elevators

- Specialty chain designed to securely convey a product by gripping the sides
- Saves footprint space by vertically lifting or lowering a product
- Available in 65mm and 85mm widths



Common Drive Systems

- Multiple conveyors can be coupled together and driven from a single gearmotor
- Conveyors move at same relative belt speed
- Creates single lanes for handling parts
- Wide parts or pallets can be carried by each conveyor to allow access from below
- Can be used on systems with curves



Specialty Belt Conveyors

A number of specialty belts are available through the factory including:

- Hardened Steel Top
- Plastic chain with plastic pins for metal free applications
- Stainless Steel Top
- Roller Cleat
- Magnet Top
- Conductive
- Cleated
- Roller Top



Helical Bend Conveyors

- Allows for change in elevation through the corner
- Can be used to reduce the overall angle needed
- Available in a 180mm belt width

Standard Chain Selection Guide

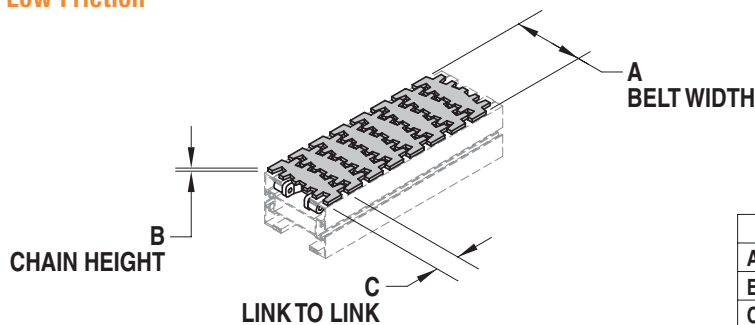
Type	Part Number	Belt Specifications	Color	Pivot Material	Pin Material	Maximum Incline*	Maximum Chain Temperature***	Chain Tensile Strength	FDA Approved
Low Friction	01	Acetal	White	Polyamide	Stainless Steel	7°	140°F (60°C)	65mm = 900 lbs (4000N)	No**
Friction Insert	08	Acetal with TPE Insert	White with Gray Insert	Polyamide	Stainless Steel	30°	140°F (60°C)	105mm & 150mm = 1350 lbs (6000N)	No**

* Maximum Incline is provided for reference only. Product testing is recommended.

** Base chain material, Acetal is FDA approved. However the chain is impregnated with silicon lubricant for improved performance. The silicone is not FDA approved. Full FDA compliant material is available on a per request basis.

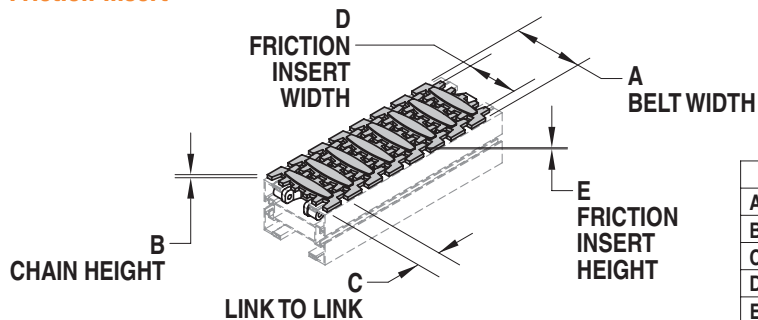
*** Part temperature can typically exceed chain temperature by 20° to 30°F assuming parts are not stopped on the chain for long durations.

Low Friction



	CONVEYOR WIDTH		
	65MM	105MM	150MM
A	2.48 (63)	4.06 (103)	5.91 (150)
B	0.14 (4)	0.18 (5)	0.17 (4)
C	1.00 (25)	1.40 (36)	1.40 (36)

Friction Insert



	CONVEYOR WIDTH		
	65MM	105MM	150MM
A	2.48 (63)	4.06 (103)	5.91 (150)
B	0.14 (4)	0.18 (5)	0.17 (4)
C	1.00 (25)	1.40 (36)	1.40 (36)
D	2.40 (61)	2.87 (73)	4.25 (108)
E	0.02 (0.5)	0.08 (2)	0.09 (2)

Note: Dimensions = in (mm)

Specialty Chain Selection Guide

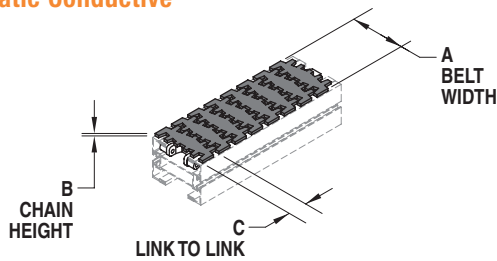
Type	Part Number	Belt Specifications	Color	Pivot Material	Pin Material	Maximum Incline*	Maximum Chain Temperature***	Chain Tensile Strength	FDA Approved
Static Conductive	Contact Factory	Acetal	Black	Polyamide	Stainless Steel	7°	140°F (60°C)	65mm = 900 lbs (4000N) 105mm & 150mm = 1350 lbs (6000N)	No
Cleated		Acetal	White	Polyamide	Stainless Steel	60°	140°F (60°C)		No**
Accumulation Roller Top		Acetal with Acetal Rollers	White	Polyamide	Stainless Steel	0°	140°F (60°C)		No**
Magnet Top		Acetal with Rare Earth Magnet	White	Polyamide	Stainless Steel	90°	86°F (30°C)		No

* Maximum Incline is provided for reference only. Product testing is recommended.

** Base chain material, Acetal is FDA approved. However the chain is impregnated with silicon lubricant for improved performance. The silicone is not FDA approved. Full FDA compliant material is available on a per request basis.

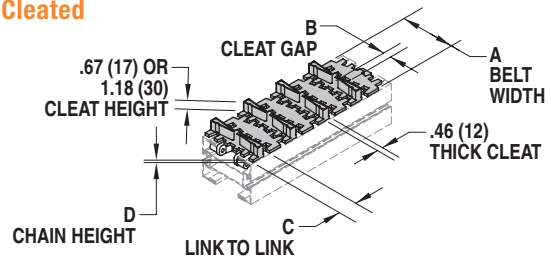
*** Part temperature can typically exceed chain temperature by 20° to 30°F assuming parts are not stopped on the chain for long durations.

Static Conductive



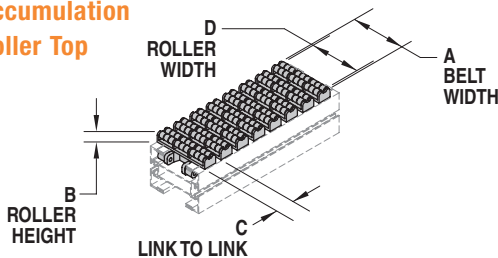
	CONVEYOR WIDTH		
	65MM	105MM	150MM
A	2.48 (63)	4.06 (103)	5.91 (150)
B	0.14 (4)	0.18 (5)	0.17 (4)
C	1.00 (25)	1.40 (36)	1.40 (36)

Cleated



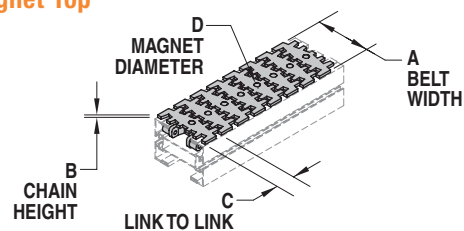
CLEAT DETAIL	CONVEYOR WIDTH	
	65MM	105MM
A	2.48 (63)	4.06 (103)
B	0.31 (8)	0.59 (15)
C	1.00 (25)	1.40 (36)
D	0.14 (4)	0.18 (5)

Accumulation Roller Top



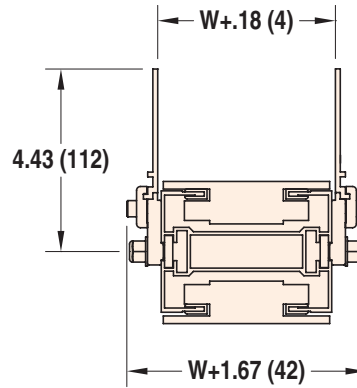
	CONVEYOR WIDTH		
	65MM	105MM	150MM
A	2.48 (63)	4.06 (103)	5.91 (150)
B	0.47 (12)	0.75 (19)	1.00 (25)
C	1.00 (25)	1.40 (36)	1.40 (36)
D	2.13 (54)	3.78 (96)	4.62 (117)

Magnet Top



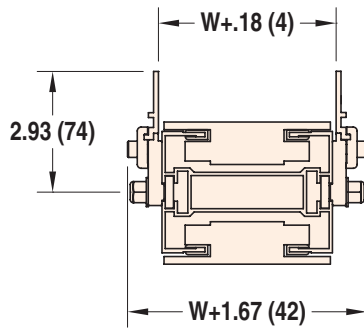
	CONVEYOR WIDTH	
	65MM	105MM
A	2.48 (63)	4.06 (103)
B	0.14 (4)	0.18 (5)
C	1.00 (25)	1.40 (36)
D	0.31 (8)	0.39 (10)

Note: Dimensions = in (mm)



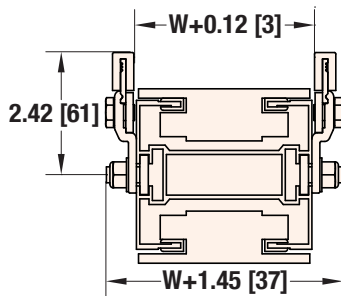
Profile 04: 3" Aluminum High Side

- Anodized aluminum high side
- Extends 3.0" above belt surface for the 65mm, and 2.75" above for the 105 and 150mm conveyors
- Guide Opening Width = frame width + 0.18"
- Guiding pre-bent to fit around all corners



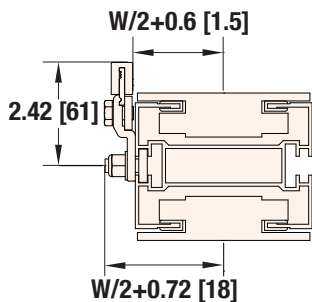
Profile 05: 1½" Aluminum High Side

- Anodized aluminum high side
- Extends 1.5" above belt surface for the 65mm, and 1.25" above for the 105 and 150mm conveyors
- Guide Opening Width = frame width + 0.18"
- Guiding pre-bent to fit around all corners



Profile 17: Puck Guide

- UHMW high side guide 0.72" above belt
- Anodized aluminum support rail
- Guiding is cold bent around outside corners
- Guide wheels provided in inside corners
- Guide Opening Width = frame width + 0.13"



Profile 18: Pallet Guide (One Side)

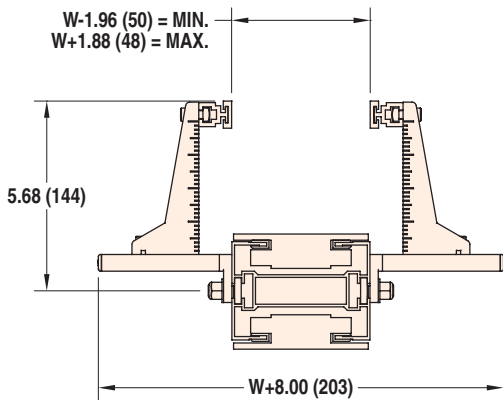
- Used for guiding pallet systems
- UHMW guide match pallet pin tracking system
- Anodized aluminum support rail
- Guiding is cold bent around corners

Note: Due to the wide variety of drive setups and applications, point of installation guarding is the responsibility of the end user.

Note: Dimensions = in (mm)

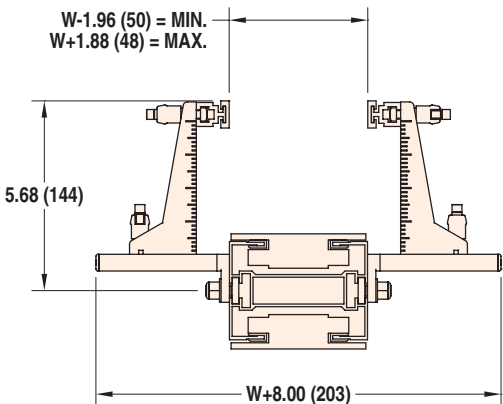


Profile 13



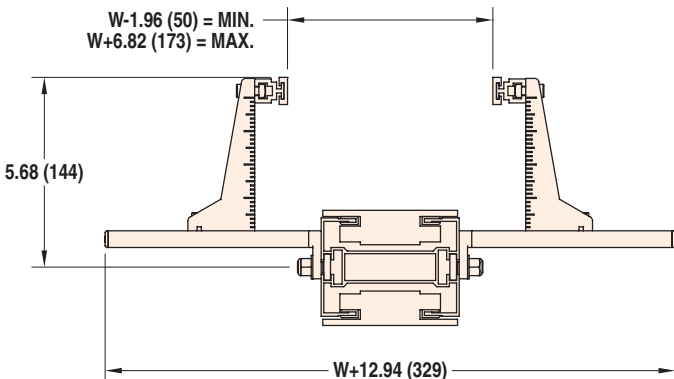
Profile 13: Fully Adjustable Guide

- Anodized aluminum rail with 1" UHMW flat face
- Guide height is adjustable to 4" above belt surface
- UHMW face width is adjustable to 1" inside and 1" outside conveyor edge per side
- Overall Width to Outside of Supports = frame width + 8" (203mm)
- Equipped with flexible backing rail for corner support
- UHMW face is continuous around straights and curve, no seams



Profile 14: Tool-less Fully Adjustable Guide

- Equipped with tool-less handles at adjustment points
- Anodized aluminum rail with 1" UHMW flat face
- Guide height is adjustable to 4" above belt surface
- UHMW face width is adjustable to 1" inside and 1" outside conveyor edge per side
- Overall Width to Outside of Supports = frame width + 8" (203mm)
- Equipped with flexible backing rail for corner support
- UHMW face is continuous around straights and curve, no seams



Profile 16: Outboard Adjustable Guide

- Anodized aluminum rail with 1" UHMW flat face
- Guide height is adjustable to 4" above belt surface
- UHMW face width is adjustable to 1" inside and 3.5" outside conveyor edge per side
- Overall Width to Outside of Supports = frame width + 13" (330mm)
- Equipped with flexible backing rail for corner support
- UHMW face is continuous around straights and curve, no seams

Note: Due to the wide variety of drive setups and applications, point of installation guarding is the responsibility of the end user.

Note: Dimensions = in (mm)

Standard Load, Fixed Speed

Chart 6 90° eDrive® NEMA C-Face

- Sealed gearmotors
- NEMA 56 C face
- Totally enclosed, fan cooled
- 115V 1 phase includes switch, cord and overload protection
- 208-230/460V 3 phase wiring by others
- 60 Hz
- Order 3 phase starter separately, see page 25

Regulatory Approvals
 CE
 RoHS
 SP

Part Number	Belt Speed				RPM	1 Phase			3 Phase			in.-lbs.	Nm	Starter Chart
	65mm		105 and 150mm			Hp	kW	FLA	Hp	kW	FLA			
	Ft/min	M/min	Ft/min	M/min										
32M060ES4(vp)FN	38	11.6	40	12.2	29	0.5	0.37	7.4	0.5	0.37	2.1-2 / 1.0	226	25.5	M
32M040ES4(vp)FN	58	17.7	60	18.3	43	0.5	0.37	7.4	0.5	0.37	2.1-2 / 1.0	247	27.9	M
32M020ES4(vp)FN	115	35.1	121	36.9	86	0.5	0.37	7.4	0.5	0.37	2.1-2 / 1.0	248	27.9	M

(vp) = Voltage and Phase 11 = 115V, 1 phase 23 = 208 - 230 / 460V, 3 phase

Chart 8 90° eDrive® IEC C-Face

- Sealed gearmotor
- IEC 71 B5 C face for 0.37 kW Motor
- IEC 63 B5 C face for 0.18 kW Motor
- IP55 protection rating
- Totally enclosed, fan cooled
- Non-reversible
- 50 Hz
- Order starter separately, see page 25

Regulatory Approvals
 CE
 RoHS
 SP

Part Number	Belt Speed				RPM	1 Phase		3 Phase		Nm	Starter Chart
	65mm		105 and 150mm			kW	FLA	kW	FLA		
	Ft/min	M/min	Ft/min	M/min							
62Z060ES4(vp)FN	31	9.4	33	10.1	23	0.18	1.6	0.18	1.4 / 0.8	26.8	I
62Z040ES4(vp)FN	47	14.3	49	14.9	35	0.18	1.6	0.18	1.4 / 0.8	29.4	I
32Z020ES4(vp)FN	93	28.3	98	29.9	70	0.37	2.6	0.37	2.1 / 1.2	29.9	J
32Z010ES4(vp)FN	187	57.0	196	59.7	140	0.37	2.6	0.37	2.1 / 1.2	21.5	J

(vp) = Voltage and Phase 21 = 230V, 1 phase 23 = 230V / 460V, 3 phase 43 = 400V, 3 phase

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

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

Standard Load, Fixed Speed

Chart 21		90° SEW									
<ul style="list-style-type: none"> • SEW SA37 Gearmotor • Bottom and side mount packages available • 230 / 460 V 3 Phase • VFD Compatible with constant torque from 10 to 60 Hz • Sealed gear head, totally enclosed fan cooled motor 								Regulatory Approvals 			
Part Number	Belt Speed				RPM*	Hp	kW	FLA	in-lbs	Nm	Starter Chart
	65mm		105 and 150mm								
	Ft/min	M/min	Ft/min	M/min							
32M038WS423EN	63	19.2	66	20.1	47	0.50	0.37	1.84 / 0.92	548	61.9	M
32M013WS423EN	179	54.6	187	57.0	134	0.75	0.56	2.50 / 1.25	327	37.0	M

Standard Load, Variable Speed

Chart 9		90° NEMA C-Face Brush-Type DC									
<ul style="list-style-type: none"> • 90V DC • Sealed gearmotor • NEMA 56 C Face • Totally enclosed, fan cooled • Order controller separately, see page 24 								Regulatory Approvals 			
Part Number	Belt Speed				RPM	Hp	kW	FLA	in.-lbs.	Nm	Vari-Speed Control Chart
	65mm		105 and 150mm								
	Ft/min	M/min	Ft/min	M/min							
32M060ESD9DEN	6.8 - 56.0		2.1 - 17.1		42	0.5	0.37	5.0	198	22.4	C
32M040ESD9DEN	10.0 - 83.0		3.0 - 25.3		63	0.5	0.37	5.0	215	24.3	C
32M020ESD9DEN	20.0 - 167.0		6.1 - 50.9		125	0.5	0.37	5.0	196	22.1	C
62M010EHD9DEN	40.0 - 190.0		12.2 - 57.9		250	0.75	0.5	7.5	108	12.2	C

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

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

Standard Load, Variable Speed

Chart 10 90° eDrive® NEMA C-Face VFD Rated

- Variable frequency drive, 6 - 60 Hz
- Sealed gearmotor
- NEMA 56 C Face
- Totally enclosed, fan cooled
- 230/460 Volts, 3 Phase
- Order controller separately, see page 24

Regulatory Approvals
 CE, RoHS, SR

Part Number	Belt Speed				RPM*	3 Phase			in.-lbs.*	Nm*	Vari-Speed Control Chart
	65mm		105 and 150mm			Hp	kW	FLA			
	Ft/min	M/min	Ft/min	M/min							
32M060ES423EN	3.8 - 38.0	1.2 - 11.6	4.0 - 40.0	1.2 - 12.2	29	0.75**	0.55	2.6 / 1.3	226	25.5	D and E
32M040ES423EN	5.8 - 58.0	1.8 - 17.7	6.0 - 60.0	1.8 - 18.3	43	0.75**	0.55	2.6 / 1.3	247	27.9	D and E
32M020ES423EN	12.0 - 115.0	3.7 - 35.1	12.0 - 121.0	3.7 - 36.9	86	0.75**	0.55	2.6 / 1.3	248	27.9	D and E
32M010ES423EN	23.0 - 190.0	7.0 - 57.9	24.0 - 190.0	7.3 - 57.9	173	0.75**	0.55	2.6 / 1.3	156	17.6	D and E

* = At 60 Hz ** = Motor is de-rated to 0.5 Hp (2.2 / 1.1 amp) for full torque throughout the speed range.

Chart 11 90° IEC C-Face VFD Rated

- Variable frequency drive, 25 - 63 Hz
- Sealed gearmotor
- IEC 63 B5 C face for 0.18 kW Motor
- IEC 71 B5 C face for 0.37 kW Motor
- IP 55 protection rating
- Totally enclosed, fan cooled
- 230/400 Volts, 3 Phase
- Order controller separately, see page 24

Regulatory Approvals
 CE, RoHS, SR

Part Number	Belt Speed				RPM	3 Phase		Nm*	Vari-Speed Control Chart
	65mm		105 and 150mm			kW	FLA		
	Ft/min	M/min	Ft/min	M/min					
62Z060ES423EN	16.0 - 39.0	4.9 - 11.9	17.0 - 42.0	5.2 - 12.8	23	0.18	1.4 / 0.8	26.8	B
62Z040ES423EN	24.0 - 59.0	7.3 - 18.0	25.0 - 62.0	7.6 - 18.9	35	0.18	1.4 / 0.8	29.4	B
32Z020ES423EN	47.0 - 117.0	14.3 - 35.7	49.0 - 123.0	14.9 - 37.5	70	0.37	2.1 / 1.2	29.9	B
32Z010ES423EN	94.0 - 190.0	28.7 - 57.9	98.0 - 190.0	29.9 - 57.9	140	0.37	2.1 / 1.2	21.5	B

* = At 50 Hz

Chart 22 90° SEW VFD Rated

- SEW SA37 Gearmotor
- Bottom and side mount packages available
- 230 / 460 V 3 Phase
- VFD Compatible with constant torque from 10 to 60 Hz
- Sealed gear head, totally enclosed fan cooled motor

Regulatory Approvals
 CE, RoHS, SR

Part Number	Belt Speed				RPM*	Hp	kW	FLA	in.-lbs	Nm	Vari-Speed Control Chart
	65mm		105 and 150mm								
	Ft/min	M/min	Ft/min	M/min							
32M038WS423EN	6.3 - 63.0	1.9 - 19.2	6.6 - 66.0	2.0 - 20.1	47	0.50	0.37	1.84 / 0.92	548	61.9	D and E
32M013WS423EN	18.0 - 179.0	5.5 - 54.6	19.0 - 187.0	5.8 - 57.0	134	0.75	0.56	2.50 / 1.25	327	37.0	D

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

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

Heavy Load, Fixed Speed

Chart 15 90° eDrive® NEMA C-Face

- NEMA 56 C face for .5 & 1 Hp
- NEMA 145TC C face for 1.5 Hp
- NEMA 145TC C face for 2 Hp
- Totally enclosed, fan cooled
- 115V, 1 Phase includes switch, cord and overload protection
- 208 - 230/460 V, 3 Phase wiring by others
- 60 Hz
- Order 3 phase starter separately, see page 25

Regulatory Approvals

CE
RoHS
SP

Part Number	Belt Speed				RPM	1 Phase			3 Phase			in. - lbs.	Nm	3 Phase Starter Chart
	65mm		105 and 150mm			Hp	kW	FLA	Hp	kW	FLA			
	Ft/min	M/min	Ft/min	M/min										
32M100EH4(vp)FN	23	7.0	24	7.3	17	0.5	0.37	8.0	0.5	0.37	2.0 / 1.0	913	103	M
32M080EH4(vp)FN	29	8.8	31	9.4	22	0.5	0.37	8.0	0.5	0.37	2.0 / 1.0	833	94	M
32M060EH4(vp)FN	39	11.9	41	12.5	29	0.5	0.37	8.0	0.5	0.37	2.0 / 1.0	679	76	M
32M050EH423FN	47	14.3	49	14.9	35	n/a	n/a	n/a	1.0	0.74	3.4 / 1.7	1205	136	P
32M040EH423FN	57	17.4	60	18.3	43	n/a	n/a	n/a	1.0	0.74	3.4 / 1.7	1023	115	P
32M030EH423FN	77	23.5	81	24.7	58	n/a	n/a	n/a	1.5	1.11	5.0 / 2.5	1216	137	Q
32M025EH423FN	92	28.0	96	29.3	70	n/a	n/a	n/a	1.5	1.11	5.0 / 2.5	1068	121	Q
32M020EH423FN	115	35.1	120	36.6	86	n/a	n/a	n/a	2.0	1.49	6.2 / 3.1	1183	134	Q
32M015EH423FN	153	46.6	161	49.1	115	n/a	n/a	n/a	2.0	1.49	6.2 / 3.1	909	103	Q

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

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

Heavy Load, Variable Speed

Chart 18 90° NEMA C-Face VFD Rated

- Variable frequency drive, 15 - 60 Hz
- NEMA 56 C face for .5 Hp + 1 Hp
- NEMA 145TC C face for 1.5 + 2 Hp
- Totally enclosed, fan cooled
- 230/460 Volts, 3 phase
- Order controller separately, see page 24

Regulatory Approvals

CE
RoHS
SP

Part Number	Belt Speed				RPM	Hp	kW	FLA	in. - lbs.*	Nm*	Vari-Speed Control Chart
	65mm		105 and 150mm								
	Ft/min	M/min	Ft/min	M/min							
32M100HH423EN	2.3 - 23.0	0.7 - 7.0	2.4 - 24.0	0.7 - 7.3	17	0.5	0.37	1.6 / 0.8	913	103	D
32M080HH423EN	2.9 - 29.0	0.9 - 8.8	3.1 - 31.0	0.9 - 9.4	22	0.5	0.37	1.6 / 0.8	833	94	D
32M060HH423EN	3.9 - 39.0	1.2 - 11.9	4.1 - 41.0	1.2 - 12.5	29	0.5	0.37	1.6 / 0.8	679	76	D
32M050HH423EN	4.7 - 47.0	1.4 - 14.3	4.9 - 49.0	1.5 - 14.9	35	1.0	0.74	3.2 / 1.6	1205	136	D
32M040HH423EN	5.7 - 57.0	1.7 - 17.4	6.0 - 60.0	1.8 - 18.3	43	1.0	0.74	3.2 / 1.6	1023	115	D
32M030HH423EN	7.7 - 77.0	2.3 - 23.5	8.1 - 81.0	2.5 - 24.7	58	1.5	1.11	4.2 / 2.1	1216	137	D
32M025HH423EN	9.2 - 92.0	2.8 - 28.0	9.6 - 96.0	2.9 - 29.3	70	1.5	1.11	4.2 / 2.1	1068	121	D
32M020HH423EN	12.0 - 115.0	3.7 - 35.1	12.0 - 120.0	3.7 - 36.6	86	2.0	1.49	5.0 / 2.5	1183	134	D
32M015HH423EN	15.0 - 153.0	4.6 - 46.6	16.0 - 161.0	4.9 - 49.1	115	2.0	1.49	5.0 / 2.5	909	103	D
32M010HH423EN	23.0 - 190.0	7.0 - 57.9	24.0 - 190.0	7.3 - 57.9	173	2.0	1.49	5.0 / 2.5	636	72	D

* = At 60 Hz

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

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

Variable Speed Controllers

Chart B		VFD Controller, Full CE Compliance						
<ul style="list-style-type: none"> VFD control IP 65 enclosure EMC filter Variable speed Mounting hardware Line cord and motor cord Motor cord only on 460V 							Regulatory Approvals 	
Part Number	Input Volts	Input Phase	Input Hz	Output Volts	Output Phase	Max Kw*	Max Amps	Reversing
62UV2121	230	1	50	230	3	0.75	4.2	Yes
62UV4341	400	3	50	400	3	0.75	2.1	Yes
62UV2127	230	1	50	230	3	1.50	6.8	Yes
62UV4347	400	3	50	400	3	1.50	3.4	Yes

Chart C		Brush-Type DC Controller						
<ul style="list-style-type: none"> PWM DC control NEMA 1 enclosure Line cord and motor cord On/Off switch for 62MD1192 and 62MD1193 Forward/Off/Reverse switch for 62MD1192R and 62MD1193R Speed potentiometer Mounting hardware 		62MD1192 & 62MD1192R 			62MD1193 & 62MD1193R 		Regulatory Approvals 	
Part Number	Input Volts	Input Phase	Input Hz	Output Volts	Max Amps*	Reversing		
62MD1192	115	1	60	90VDC	5.0	No		
62MD1192R	115	1	60	90VDC	5.0	Yes		
62MD1193	115	1	60	90VDC	7.5	No		
62MD1193R	115	1	60	90VDC	7.5	Yes		

Chart D		VFD Controller						
<ul style="list-style-type: none"> Full feature VFD control NEMA 4 enclosure Digital display Keypad with Start/Stop, Forward/Reverse and speed variations Includes cord to motor Power to controller by others 62MV1122 includes line cord to controller Mounting hardware 							Regulatory Approvals 	
Part Number	Input Volts	Input Phase	Input Hz	Output Volts	Output Phase	Max Hp	Output Amps*	Reversing
32MV1122	115	1	60	230	3	0.5	2.2	Yes
32MV2122	230	1	60	230	3	0.5	2.2	Yes
32MV1121	115	1	60	230	3	1.0	4.0	Yes
32MV2121	230	1	60	230	3	1.0	4.0	Yes
32MV2127	230	1	60	230	3	2.0	6.8	Yes
32MV2322	230	3	60	230	3	0.5	2.2	Yes
32MV2327	230	3	60	230	3	2.0	6.8	Yes
32MV4341	460	3	60	460	3	1.0	2.0	Yes
32MV4347	460	3	60	460	3	2.0	3.4	Yes

In order for this drive to meet full CE requirements for European application a separate CE approve RFI filter must be installed. Product shown in chart B above have this filter pre-installed and are recommended for use in the European Union.

* = See FLA from motor charts **Note:** Dimensions = in (mm)

Manual Motor Starters

Manual motor starts are manual electronic disconnects that provide motor overload protection and are required by the National Electric Code (NEC) for safe motor operation.

- IP 55 Enclosure
- Push button Start / Stop
- Includes mounting hardware

Regulatory Approvals

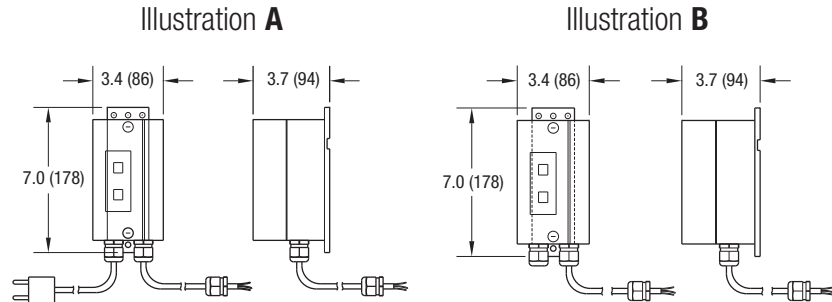


Chart I		230/400V 50Hz to 2.5 amp		
<ul style="list-style-type: none"> • 230 Volts, 1 phase includes cord, plug and starter • 230/400 Volts, 3 phase wiring to starter by others • Wiring between motor and starter provided when ordered together • 50 Hz 				
Part Number	In Volts	In Phase	Amp Range	Illustration
62(c)M21T	230	1	1.6 - 2.5	A
62(c)M23T	230	3	1.0 - 1.6	B
62(c)M43T	400	3	0.63 - 1.0	B

Chart J		230/400V 50 Hz to 4 amp		
<ul style="list-style-type: none"> • 230 Volts, 1 phase includes cord, plug and starter • 230/400V, 3 phase wiring to starter by others • Wiring between motor and starter provided when ordered together • 50 Hz 				
Part Number	In Volts	In Phase	Amp Range	Illustration
62(c)M21J	230	1	2.5 - 4.0	A
62(c)M23J	230	3	1.6 - 2.5	B
62(c)M43J	400	3	1.0 - 1.6	B

Chart L		230/460V 60 Hz to 1.6 amp		
<ul style="list-style-type: none"> • 230/460 Volts, 3 phase wiring to starter by others • Wiring between motor and starter provided when ordered together • 60 Hz 				
Part Number	In Volts	In Phase	Amp Range	Illustration
62MM23L	230	3	1.0 - 1.6	B
62MM43L	460	3	0.4 - .63	B

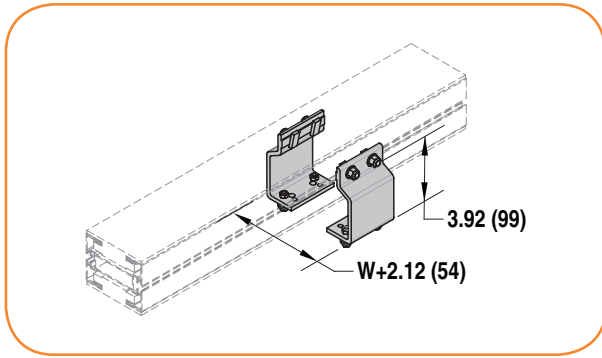
Chart M		230/460V 60Hz to 2.5 amp		
<ul style="list-style-type: none"> • 230/460 Volts, 3 phase wiring to starter by others • Wiring between motor and starter provided when ordered together • 60 Hz 				
Part Number	In Volts	In Phase	Amp Range	Illustration
62MM23M	208 -	3	1.6 - 2.5	B
62MM43M	230	3	1.0 - 1.6	B
	460			

Chart P		230/460V 60Hz to 4 amp		
<ul style="list-style-type: none"> • 230/460 Volts, 3 phase wiring to starter by others • Wiring between motor and starter provided when ordered together • 60 Hz 				
Part Number	In Volts	In Phase	Amp Range	Illustration
62MM23U	208 -	3	2.5 - 4.0	B
62MM43P	230	3	1.6 - 2.5	B
	460			

Chart Q		230/460V 60Hz to 6.3 amp		
<ul style="list-style-type: none"> • 230/460 Volts, 3 phase wiring to starter by others • Wiring between motor and starter provided when ordered together • 60 Hz 				
Part Number	In Volts	In Phase	Amp Range	Illustration
62MM23Q	208 -	3	4.0 - 6.3	B
62MM43Q	230	3	2.5 - 4.0	B
	460			

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

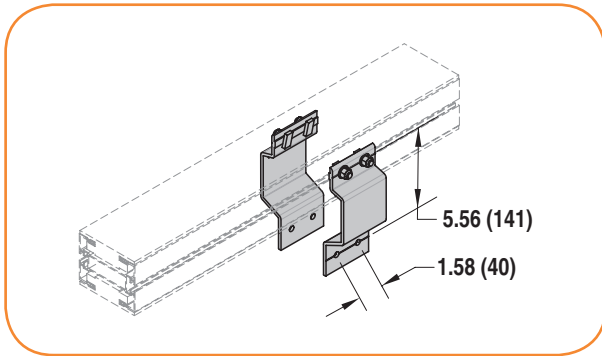
(c) = Electrical Configuration G = CE German
 F = CE French U = CE Great Britain **Note:** Dimensions = in (mm)



Horizontal Mounting Bracket

- For mounting conveyor to horizontal framework or table top
- Includes a pair of brackets and mounting hardware

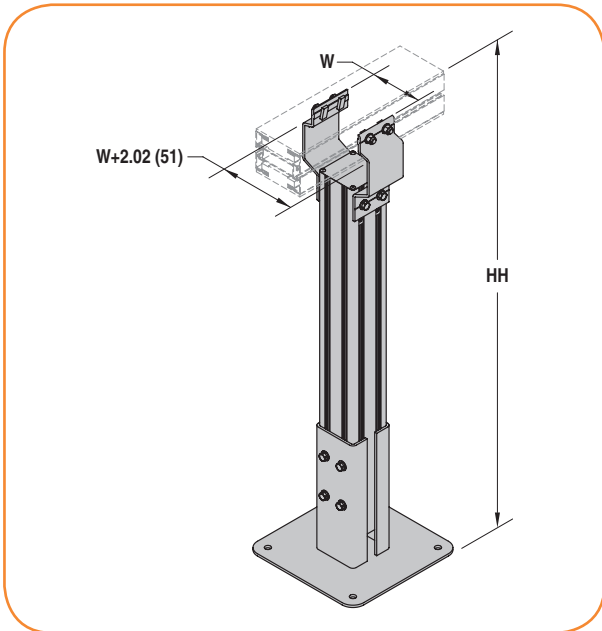
Part Number	203150
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Vertical Mounting Bracket

- For mounting conveyor to vertical framework or surfaces
- Includes a pair of brackets and mounting hardware

Part Number	203448
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Support Post

- $\pm 2"$ height adjustment
- Top of Belt Heights:
 - Minimum = 20" (508mm)
 - Maximum = 97" (2,464mm)
 - Available in 1" (25mm) height increments
- (4) Mounting Configurations:
 - Horizontal Mount
 - $\pm 30^\circ$ angle mount
 - Gearmotor mount
 - Dual sided mount for 180° curves
- Equipped with a steel base plate for floor mounting
- Stand must be lagged to the floor

Top of Belt Height Chart		
Stand Type	Minimum Height	Maximum Height
Horizontal Mount	20" (508mm)	97" (2,464mm)
Angle Mount	20" (508mm)	97" (2,464mm)
Gearmotor Mount	23" (584mm)	97" (2,464mm)
Dual Side Mount (180° Curve)	16" (406mm)	97" (2,464mm)

SMARTFLEX: Support Post - Beam Type

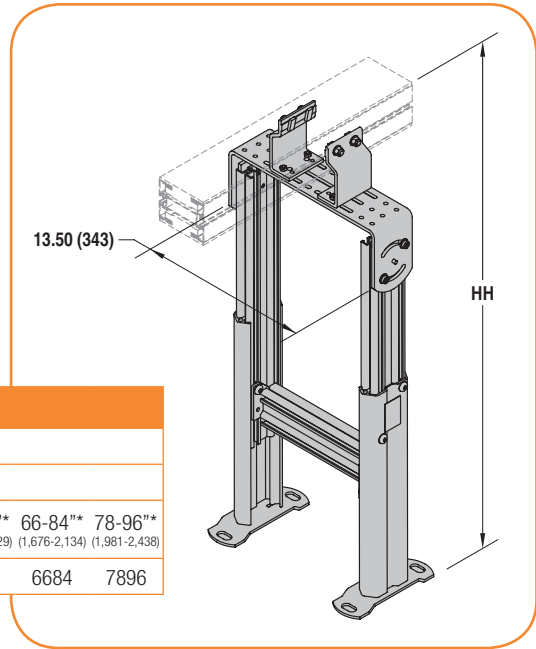
22 SF P M WWW - L H U H A

— Position: H = Horizontal A = Angle
 — Tallest Height to TOB (in inches)
 — Lowest Height to TOB (in inches)
 — Conveyor Width Reference:
 065 = 65mm 105 = 105mm 150 = 150mm MTR = Gearmotor mount
 DSM = Dual Side / 180 curve for 65 and 105mm wide
 DSW = Dual Side / 180 curve for 150mm wide
 — Documentation Language: M = US
 — Post Type

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.
Note: Due to the wide variety of drive setups and applications, point of installation guarding is the responsibility of the end user. **Note:** Dimensions = in (mm)

Adjustable Height Support Stand

- For use when larger adjustment range is needed
- For use when floor anchoring is not possible
- Height adjustment is height dependent
- Top of Belt Heights (middle of adjustment range):
 - Minimum = 18.1" (406mm)
 - Maximum = 92.6" (2,352mm)
- Angle adjustable $\pm 90^\circ$
- All stands are 12" wide



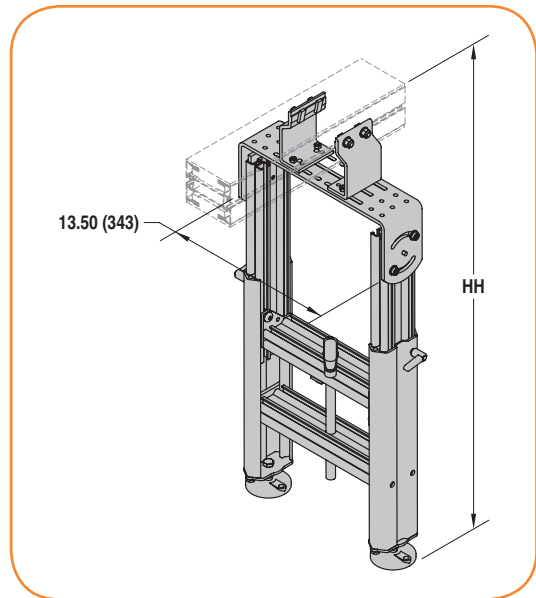
Fixed Foot Model

Stand Width (WW)	12" (305mm)										
Part # Reference	12										
Stand Height (HH)	12-13" (305-330)	13-15" (330-381)	14-17" (356-432)	16-21" (406-660)	19-26" (483-686)	24-36" (610-914)	30-48" (762-1,219)	42-60" (1,067-1,524)	54-72" (1,372-1,829)	66-84" (1,676-2,134)	78-96" (1,981-2,438)
Part # Reference	1213	1315	1417	1621	1926	2436	3048	4260	5472	6684	7896

* Dependant on stand width, stands over 42" (1,067mm) may include outriggers

Quick Adjust Support Stand

- For use when tool-less adjustment range is needed
- For use when floor anchoring is not possible
- Height adjustment is $\pm 3"$
- Top of Belt Heights (middle of adjustment range):
 - Minimum = 32.6" (828mm)
 - Maximum = 74.6" (1,895mm)
- Angle adjustable $\pm 90^\circ$
- All stands are 12" wide



Fixed Foot Model

Stand Width (WW)**	12" (305mm)		
Part # Reference	12		
Stand Height (HH)**	24" - 30" (610 - 762mm)	in 1" (25mm) increments up to...	66" - 72" (1,676 - 1,829mm)
Part # Reference	2430	in 0101 increments up to...	6672

** Under 12" wide use full top plate option

SMARTFLEX: Support Stands

S 9 M T T W W - HH (min) HH (max) F A

— Feet: F = fixed foot pad

— Height Reference

— Width Reference

— Stand Type:

LH = short stand AH = adjustable height

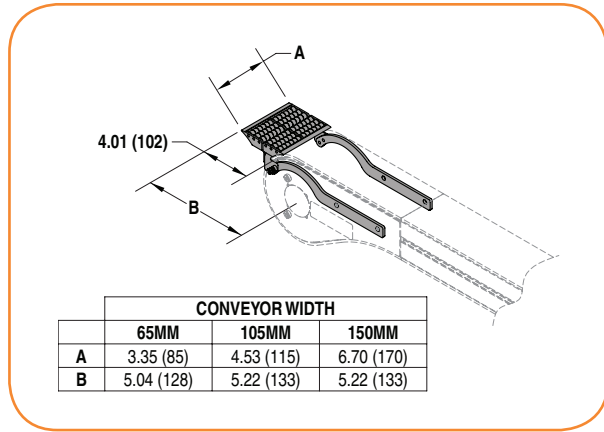
AT = tall adjustable*** QA = quick adjust

— Documentation Language: M = US

— Stand Style: 3 = 2-legged stand

*** Tall Stands are required when the stand width is 3.5 times the stand height.

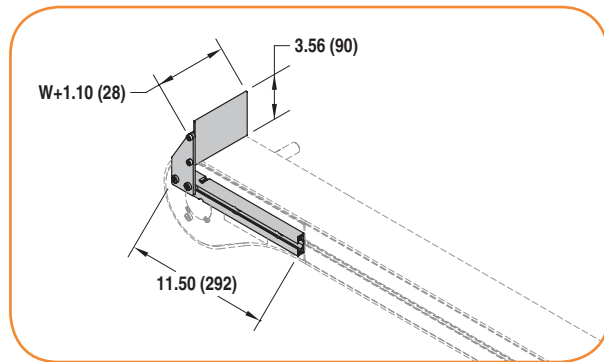
Note: Due to the wide variety of conveyor and stand options along with possible configurations, stability of the final setup is the responsibility of the end user.
Note: Due to the wide variety of drive setups and applications, point of installation guarding is the responsibility of the end user. **Note:**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



Infeed/Exit Roller Transfer Plate

- Fills in space at the end of idler/drive modules for end part transfer
- Provides roller guarding for 90° transfers
- Includes 0.41" diameter transfer rollers
- Not compatible with Friction Insert Chain
- Adjustable mounting for fine tuning small parts transfers

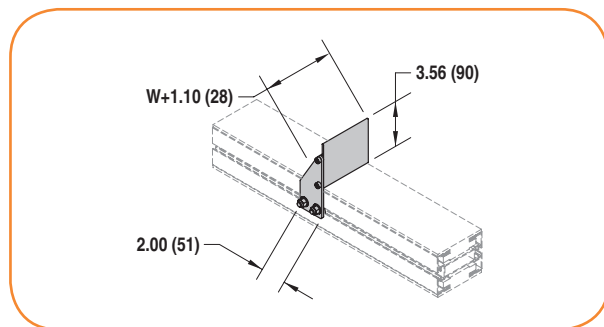
Part Number	202968-WWW <i>WWW = Belt Width: 065, 105, 150</i>
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End Stop

- Product End stop at any location on Drive Module
- Includes T-Slot extenders on one side
- For accumulating product
- Not compatible with Friction Insert Chain
- Not compatible on Drive Modules with Power Transfers

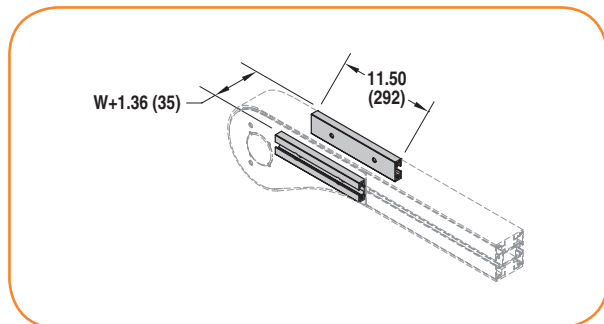
Part Number	223396P-WWW <i>P = Motor Position: A, D WWW = Conveyor Width: 065, 105, 150</i>
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Adjustable Stop

- Product End stop at any location on conveyor rail
- For accumulating product
- Not compatible with Friction Insert Chain

Part Number	203395-WWW <i>WWW = Conveyor Width: 065, 105, 150</i>
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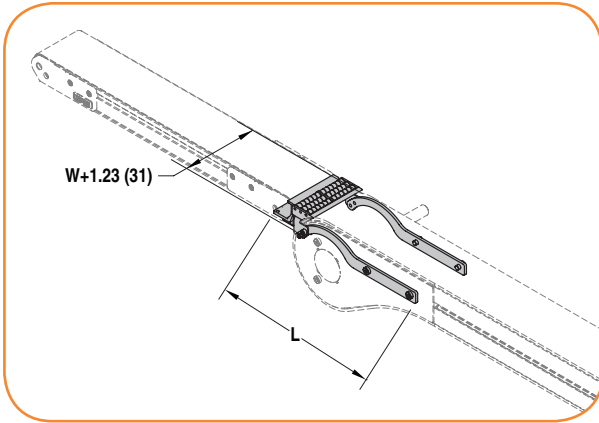
Drive and Idler Tail T-Slot Extenders

- Provides T-Slot on the drive and idler tails for mounting of accessories
- Compatible with M8 T-Bolt hardware
- Not compatible with Profiles 04 & 05, and End Stop

Part Number	203368
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Note: Due to the wide variety of conveyor set ups and applications, point of installation guarding is the responsibility of the end user.

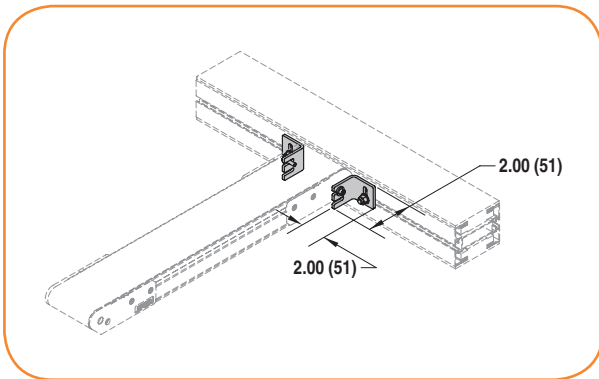
Note: Dimensions = in (mm)



2200 Series Belted Conveyor Inline Transfer Bracket

- Provides mounting bracket and transfer plate for inline product transfers
- Provides solid conveyor alignment for trouble free transfers
- Compatible with Idler and Drive Modules
- Not compatible with Friction Insert Chain
- Not compatible on Drive or Idler Modules with Power Transfers
- Compatible widths:
 - 65mm = 3" 2200 Series belted
 - 105mm = 4" 2200 Series belted
 - 150mm = 6" 2200 Series belted

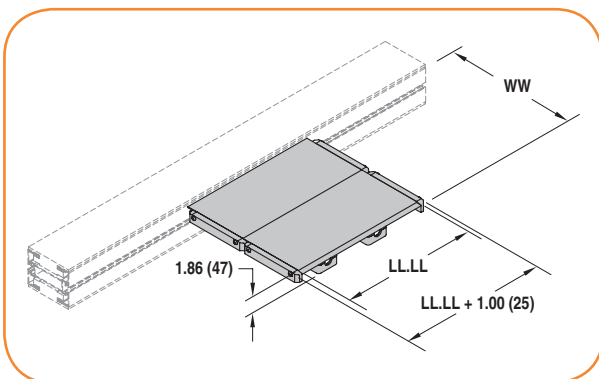
Part Number	204139- WWW <i>WWW = Conveyor Width: 065, 105, 150</i>
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2200 Series Belted Conveyor 90° Transfer Bracket

- Provides mounting bracket and transfer plate for 90° product transfers
- Provides solid conveyor alignment for trouble free transfers
- Compatible with all widths of SmartFlex and 2200 Belted Conveyors

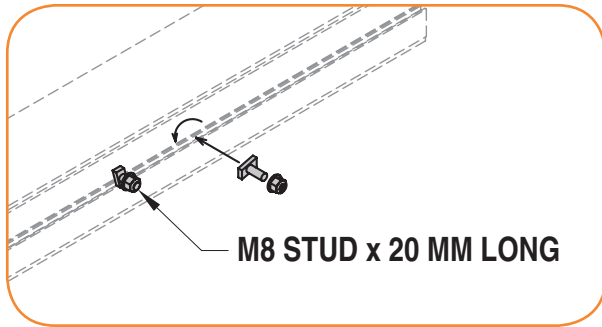
Part Number	203399
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Side Tables

- Provides a 6" (152mm) or 12" (305mm) wide working surface
- Adjusts in/out and up/down 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' (305mm) increments from 1' (305mm) to 99' (30,175mm)

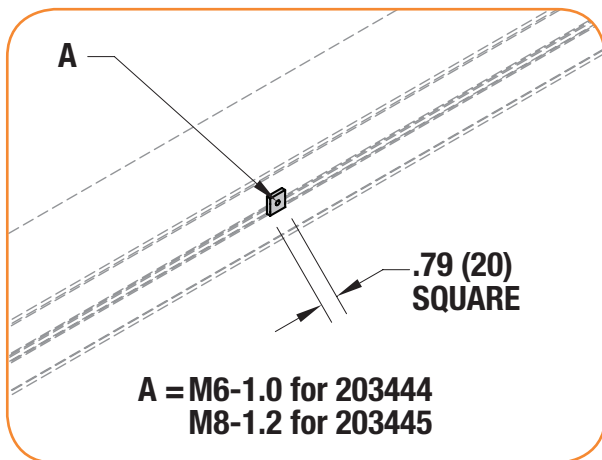
Part Number	27MSFN- WWWLLLL <i>N = Number of sides: 1 = one side, 2 = both sides WW = Table Width: 06 = 6", 12 = 12" LLLL = Table Length in L.L.L.L Feet (ex. 0250 = 2.5 feet)</i>
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T-Bolt Hardware

- Twist in T-Bolt for mounting accessories to the SmartFlex conveyor rail and Support Post beam
- M8-1.25 male threaded post
- (2) lengths available; 20mm long and 35mm long
- 20mm long used to mount up to 0.25" plate thickness
- 35mm long used to mount up to 0.85" plate thickness
- Provided in a package of 5 T-Bolts and flanged locknuts

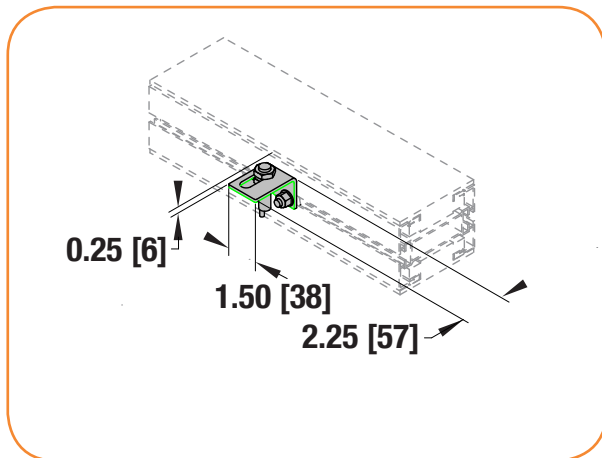
Part Number	203446 (20mm long)
	203447 (35mm long)



Slide In Square Nuts

- Must be slid in at section break
- (2) thread sizes available: M6-1.0 or M8-1.25
- Provided in a package of 5 nuts

Part Number	203444 (M6-1.0)
	203445 (M8-1.25)



Pallet Sensor Bracket

- Provides mounting bracket for proximity sensor of pallet
- Compatible with 12mm diameter proximity sensors
- Proximity sensor faces upward
- Adjustable mounts along conveyor T-slot

Part Number	204398
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Note: Due to the wide variety of conveyor set ups and applications, point of installation guarding is the responsibility of the end user.
Note: Dimensions = in (mm)

Conveyor Load Capacity

There are several factor that effect the overall conveyor load of the SmartFlex 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.

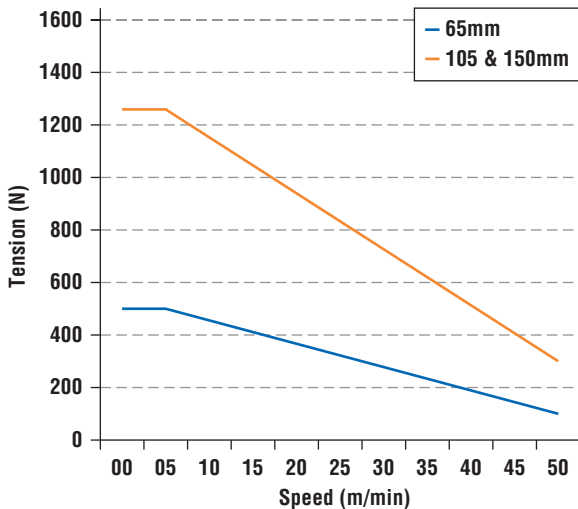
Maximum Load = (Load from DTools) (Temperature Factor) (Start/Stop Factor)

See following pages for factors.

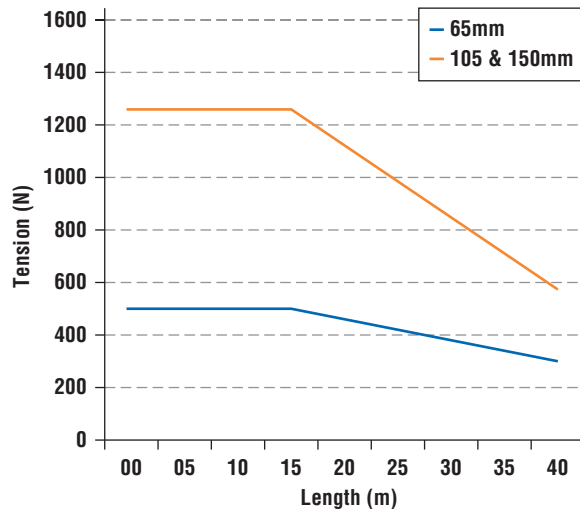
Nominal Maximum Load

A Nominal Maximum Load may be calculated without the use of DTools to determine if the conveyor can generally carry the application load. The following process can be used to calculate Nominal Maximum Load. It **does not** take into account the conveyor configuration. Please confirm your maximum load per application with the Dorner DTools program at www.dornerconveyors.com.

Basic Tension Limit – Tension vs. Speed:



Basic Tension Limit – Tension vs. Length:



dornerconveyors.com.

To calculate the Nominal Maximum Load:

Note: This does not include conveyor configuration. Please confirm load with Dorner online DTools configurator.

1. Determine your Basic Tension Limit from the above two graphs. The Basic Tension Limit is the lesser number of the two.
2. Tension Limit = (Basic Tension Limit) (Temperature Factor) (Start/Stop Factor) (Accumulation Factor) (0.7)
See following pages for factors.
3. Nominal Maximum Load (kg) = (Tension Limit / Chain Coefficient of Friction) - (Conveyor length) (2) (Chain weight)

Nominal Maximum Load (lbs) = (Nominal Maximum Load (kg)) (2.2)

See following pages for Chain Coefficient of Friction. Nominal Maximum load may also be limited by available gearmotors. Conformation of gearmotor torque is required. See pages 19-23 for gearmotors available. Nominal Maximum load cannot exceed overall conveyor load limit of 300 lbs (136kg) for 65mm wide and 600 lbs (273kg) for 105 and 150mm wide.

Nominal Maximum Load *(continued)*

Example:

105mm SmartFlex by 20 meters total length running at 15 Meters/min. Accumulated load with dry metal parts running in a 40°C environment. Continuous running.

- Basic Tension Limit – Tension vs. Speed = 1050N
- Basic Tension Limit – Tension vs. Length = 1100N
- Therefore Basic Tension Limit = 1050N
- Tension Limit = (Basic Tension Limit) (Temperature Factor) (Start/Stop Factor) (Accumulation Factor) (0.7)
- Tension Limit = (1050) (0.9) (1.0) (0.5) (0.7) = 330N
- Nominal Maximum Load (kg) = (Tension Limit / Chain Coefficient of Friction) - (Conveyor length) (2) (Chain weight)
- Nominal Maximum Load (kg) = (330 / 0.3) - (20) (2) (16.4) = 1100 - 984 = 116 kg
- Nominal Maximum Load (lbs) = 116*2.2 = 256 lbs

Chain Weight	
Width	Weight (Kg/M)
65mm	7.4
105mm	16.4
150mm	18.4

Temperature Factor		
Ambient temperature can negatively affect the tension capacity of the conveyor chain.		
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 tension capacity of the conveyor chain. 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	1.00
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

Accumulation Factor		
Product accumulation greatly reduces the conveyor load capacity. Product accumulation may only be done with the plain chain. Based on the product being accumulated apply the below Accumulation Factor in determining your Nominal Maximum Load. All factors below are assuming dry conditions.		
Product Being Accumulated	Typical Coefficient of Friction	Accumulation Factor
Steel	0.25	0.50
Glass	0.20	0.60
Aluminum	0.25	0.50
Plastic	0.25	0.50
Wood	0.30	0.40
Paper and Cardboard	0.30	0.40

Chain Coefficient of Friction	
The following table provides the coefficient of friction between the standard UHMW wearstrips and the Acetal chain. Coefficient of friction as shown may be reduced by addition of a lubricant.	
Application Condition	Coefficient of Friction
Dry	0.30
Water Lubrication	0.27
Coolant Lubrication	0.20
Oil Lubrication	0.20

Chemical Resistance

The following is a list of base materials used in the SmartFlex conveyor:

Material	Conveyor Component
Acetal Copolymer, POM	Conveyor Chain
Polyamide, PA	Chain Pivot, Corner Wheels, Drive and Idler Guides, Adjustable Guide Support Bracket
Polyamide with glass fiber	Drive Sprocket, Idler Wheel
UHMW-PE	Chain Slide Rail, Adjustable Guide Face
Thermoplastic Elastomer, TPE	Chain Friction Insert
Aluminum, anodized <i>(Note: cut ends of aluminum is not anodized)</i>	Conveyor Frame, Support Legs, High Side Guiding, Adjustable Guide Horizontal Post, Adjustable Guide Rail

The materials used in the SmartFlex 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

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	Polyamide PA	UHMW-PE	Aluminum
Acetic acid	3	4	1	2
Benzoic acid	3	4	1	4
Boric acid	3	2	1	2
Citric acid	3	2	1	2
Chromic acid	4	4	1	3
Hydrofluoric acid	4	4	1	4
Hydrochloric acid	4	4	1	3
Hydro cyanic acid	4	4	1	1
Nitric acid	4	4	1	3
Oleic acid	3	2	1	1
Oxalic acid	4	2	1	1
Phosphoric acid	4	4	1	3
Sulphuric acid	4	4	1	3
Tartaric acid	3	2	1	1
Basic Compounds	Acetal POM	Polyamide PA	UHMW-PE	Aluminum
Ammonia	1	2	1	2
Calcium hydroxide	1	2	1	4
Caustic soda	1	2	1	3
Potassium hydroxide	1	2	1	4
Salts	Acetal POM	Polyamide PA	UHMW-PE	Aluminum
Potassium bicarbonate	2	2	1	1
Potassium permanganate	2	4	1	1
Sodium cyanic	2	2	1	4
Sodium hydrochloride	3	4	1	4
Acid salt	2	3	1	X
Basic salt	1	2	1	X
Neutral salt	1	2	1	X
Organic Compounds	Acetal POM	Polyamide PA	UHMW-PE	Aluminum
Acetone	1	1	1	1
Aniline	2	3	1	1
Benzene	1	2	4	1
Benzine	2	2	3	1
Butyl alcohol	2	2	1	1
Carbon disulphide	1	2	3	1
Carbon tetrachloride	1	1	3	2
Chloroform	1	3	4	X
Ethyl acetate	1	2	1	1
Ethyl alcohol	1	2	1	1
Heptane	2	1	2	X
Methyl alcohol	1	2	1	2
Methyl ethyl ketone	1	1	2	2
Nitrobenzene	2	2	1	1
Phenol	3	4	1	1

Resistance to Materials <i>(continued)</i>				
Legend: 1 = Very good resistance 2 = Good resistance 3 = Moderate resistance 4 = Not recommended X = no data available				
Material - Gases	Acetal POM	Polyamide PA	UHMW-PE	Aluminum
Carbon dioxide	3	1	1	1
Carbon monoxide	2	1	1	1
Chlorine	2	4	3	1
Hydrogen Sulfide	3	1	1	1
Sulphur dioxide	2	3	1	1
Material - Other	Acetal POM	Polyamide PA	UHMW-PE	Aluminum
Beer	1	2	1	1
Fruit juice	1	2	1	2
Gasoline	1	2	1	1
Milk	1	1	1	1
Oil	1	1	1	1
Vinegar	1	2	1	1

Conveyor Noise Level

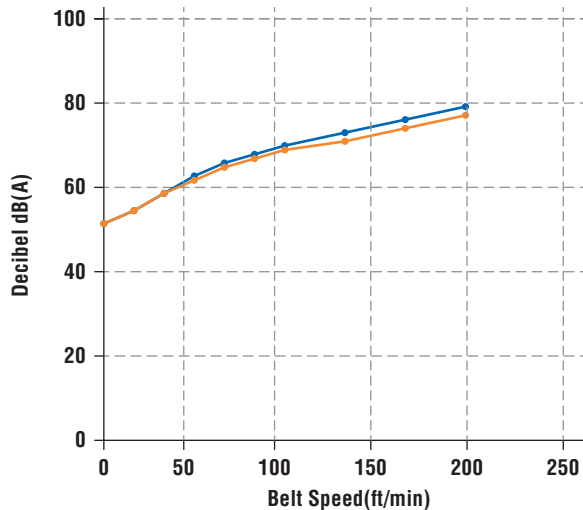
The actual noise level generated by the conveyor depends on several factors; the installation configuration, the product running on the conveyor, the surrounding equipment, the conveyor options and chain speed. The noise level generated by the conveyor is typically less than the general noise level of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

Generally a higher speed chain will result in a higher noise level. In addition, 65mm conveyors will run slightly quieter, and power transfer tails will add a few decibel points as well. The following charts provide basic decibel ratings for typical conveyor arrangements, such as wheeled and plain bend corners, and power transfers.

Conveyor Sample:

- 65mm Conveyor with 180° wheel corner
- 65mm Conveyor with 180° wheel corner and power transfer

Decibel ratings are taken approximately 3 feet away from the conveyor modules.

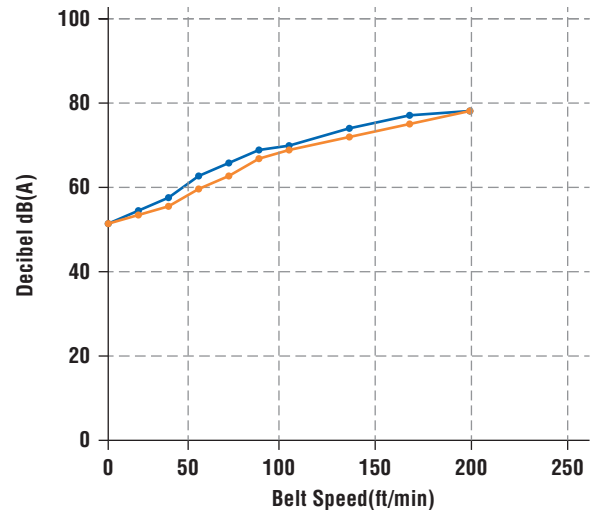


— 65mm with Power Transfer
— 65mm without Power Transfer

Conveyor Sample:

- 105mm Conveyor with 90° plain bend corner
- 150mm Conveyor with 90° wheel corner and weighted take-up drive

Decibel ratings are taken approximately 3 feet away from the conveyor modules.



— 105mm with Plain Bend
— 105mm with Wheel Corner

At Dorner we make it our mission to provide you with a system that you can depend on to move your product from point A to point B with precision and speed. It's that commitment and history of proven excellence that has made the Dorner Brand a recognized leader in precision conveyors for nearly 50 years. With our complete line of customizable conveyor systems we have the perfect solution for you!



1X Series

The 1X Series Line is designed for small part handling and transfers where space is a premium.

1X Series Family:

- Flat Belt
- Aluminum Frame
- Widths to 10"
- Loads to 15 lbs
- Speeds up to 80 fpm



2X Series

The 2X Series Line is engineered for small to medium sized parts, precision applications and flexible layouts.

2X Series Family:

- Flat Belt
- Cleated Belt
- Modular Belt
- Precision Move - Timing Belt
- SmartFlex® - Flexible Chain
- Aluminum Frame
- Widths to 24"
- Loads to 200 lbs
- Speeds up to 400 fpm
- Curves
- Inclines & Declines



3X Series

The 3X Series Line is designed for medium to heavy sized parts, precision applications, bulk handling and flexible layouts.

3X Series Family:

- Flat Belt
- Cleated Belt
- Modular Belt
- Flexible Chain
- Precision Move - Timing Belt
- Aluminum Frame
- Widths to 60"
- Loads to 1000 lbs
- Speeds up to 600 fpm
- Curves
- Z-Frame Elevators



7X Series

The 7X Series Stainless Steel Line is engineered for small to heavy product requiring various levels of sanitary design and flexible layouts.

7X Series Family:

AquaPruf® + AquaGuard®

- Flat Belt
- Cleated Belt
- Modular Belt
- Flexible Chain
- Stainless Steel Frame
- Widths to 60"
- Loads to 750 lbs
- Speeds up to 400 fpm
- Curves
- Z-Frame Elevators

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