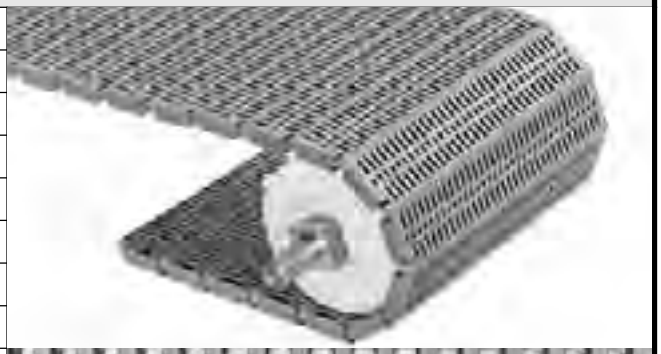
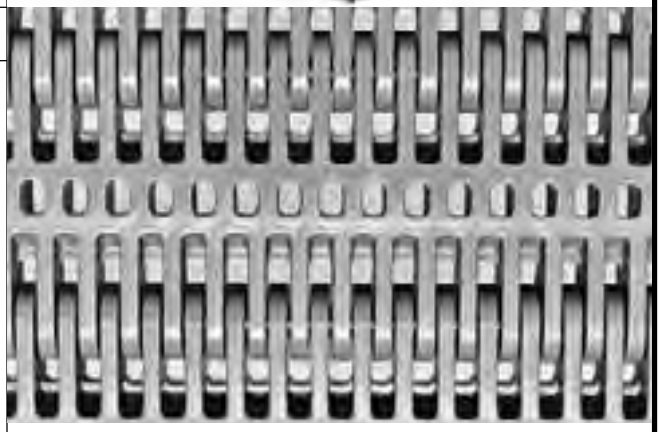
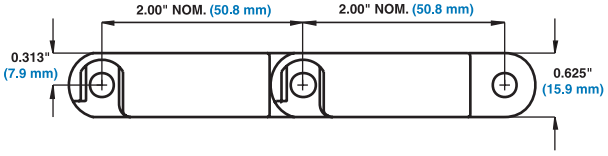
Flush Grid

	in.	mm
Pitch	2.00	50.8
Minimum Width	2	51
Width Increments	0.33	8.4
Opening Size (approximate)	0.25 × 0.18	6.4 × 4.6
Open Area	17%	
Hinge Style	Closed	
Drive Method	Center-driven	







Product Notes

- **Always check with Customer Service for precise belt width measurement and stock status before designing a conveyor or ordering a belt.**
- Smooth upper surface and straightforward design provides free product movement.
- Flights and Sideguards are available.
- Series 400 Flush Grid is available with SLIDELOX® rod retention for belts 6.0 ft. (1829 mm) wide and wider. All Series 400 Flush Grid with Abrasion Resistant rods are available with SLIDELOX® rod retention. All other Series 400 Flush Grid belts use the standard headed rods.
- Series 400 Flush Grid in Acetal and EC Acetal must be used with metal split sprockets only.

Additional Information

- See *"Belt selection process"* (page 5)
- See *"Standard belt materials"* (page 18)
- See *"Special application belt materials"* (page 18)
- See *"Friction factors"* (page 31)

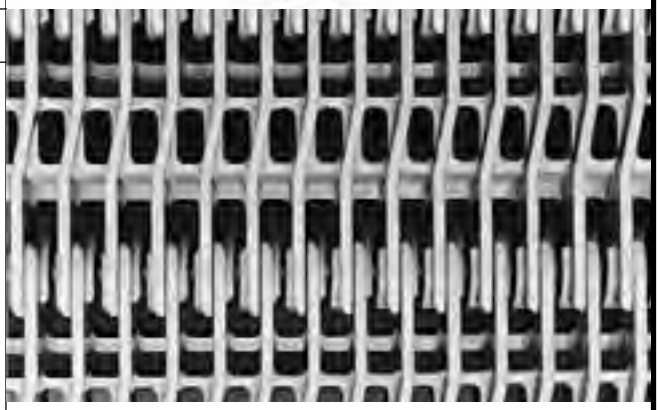
Belt Data

Belt Material	Standard Rod Material Ø 0.24 in. (6.1 mm)	BS Belt Strength lb/ft	BS Belt Strength kg/m	Temperature Range (continuous) °F	Temperature Range (continuous) °C	W Belt Weight lb/ft²	W Belt Weight kg/m²	Agency Acceptability: 1=White, 2=Blue, 3=Natural, 4=Grey FDA (USA)	USDA Dairy[a]	CFA[b]	J[c]	A[d]	Z[e]	EU MC[f]
Polypropylene	Polypropylene	2400	3570	34 to 220	1 to 104	1.82	8.89	•			3			•
Polyethylene	Polyethylene	1800	2680	-100 to 150	-73 to 66	1.90	9.28	•			3			•
Acetal	Polypropylene	3200	4760	34 to 200	1 to 93	2.77	13.51	•			3			•
Acetal[g]	Polyethylene	3000	4460	-50 to 70	-46 to 21	2.77	13.51	•			3			•

a. USDA Dairy acceptance requires the use of a clean-in-place-system.
b. Canada Food Inspection Agency
c. Japan Ministry of Health, Labour, and Welfare
d. Australian Quarantine Inspection Service
e. MAF-New Zealand Ministry of Agriculture and Forestry. MAF acceptance requires the use of a clean-in-place-system.
f. European Migration Certificate providing approval for food contact according to EU Directive 2002/72/EC and all its amendments to date.
g. Polyethylene rods can be used in cold applications when impacts or sudden starts/stops occur. Please note lower rating.

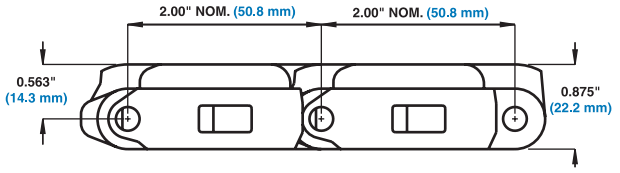
Raised Rib

	in.	mm
Pitch	2.00	50.8
Minimum Width	See below.	
Width Increments		
Opening Size (approximate)	0.25 × 0.24	6.4 × 6.1
Open Area	26%	
Product Contact Area	36%	
Hinge Style	Closed	
Drive Method	Center-driven	



Product Notes

- **Always check with Customer Service for precise belt width measurement and stock status before designing a conveyor or ordering a belt.**
- Raised Ribs extend 0.25 in. (6.4 mm) above basic module.
- Use with Finger Transfer Plates to virtually eliminate tippage at in-feed and discharge.
- Custom-built in widths from 2 in. (51 mm) and up for polyethylene and 3 in. (76 mm) and up for polypropylene, in 0.33 in. (8.4 mm) increments.
- All Series 400 Raised Rib polypropylene belts use the SLIDELOX® rod retention system. Series 400 Raised Rib polyethylene belts use the standard headed rods.
- SLIDELOX® is glass reinforced polypropylene.



Additional Information

- See *"Belt selection process"* (page 5)
- See *"Standard belt materials"* (page 18)
- See *"Special application belt materials"* (page 18)
- See *"Friction factors"* (page 31)

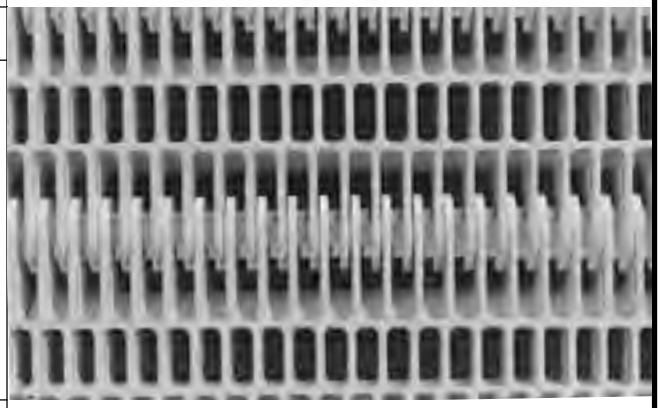
Belt Data

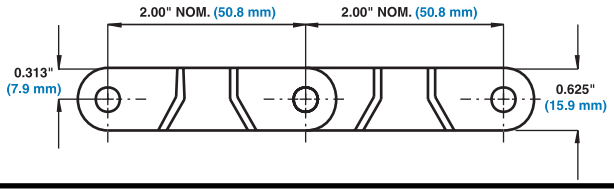
Belt Material	Standard Rod Material Ø 0.24 in. (6.1 mm)	BS Belt Strength lb/ft	BS Belt Strength kg/m	Temperature Range (continuous) °F	Temperature Range (continuous) °C	W Belt Weight lb/ft²	W Belt Weight kg/m²	Agency Acceptability: 1=White, 2=Blue, 3=Natural, 4=Grey FDA (USA)	USDA Dairy[a]	CFA[b]	A[c]	J[d]	Z[e]	EU MC[f]
Polypropylene	Polypropylene	2400	3570	34 to 220	1 to 104	1.95	9.52	•				3		•
Polyethylene	Polyethylene	1800	2680	-100 to 150	-73 to 66	1.98	9.67	•				3		•
Enduralox Polypropylene	Polyethylene	2400	3570	34 to 220	1 to 104	1.95	9.52	•						•

a. USDA Dairy acceptance requires the use of a clean-in-place-system.
b. Canada Food Inspection Agency
c. Australian Quarantine Inspection Service
d. Japan Ministry of Health, Labour, and Welfare
e. MAF-New Zealand Ministry of Agriculture and Forestry. MAF acceptance requires the use of a clean-in-place-system.
f. European Migration Certificate providing approval for food contact according to EU Directive 2002/72/EC and all its amendments to date.

Open Hinge

	in.	mm
Pitch	2.00	50.8
Minimum Width	2	51
Width Increments	0.25	6.4
Opening Size (approximate)	0.47 × 0.18	11.9 × 4.6
Open Area	30%	
Product Contact Area	40%	
Hinge Style	Open	
Drive Method	Center-driven	





Product Notes

- **Always check with Customer Service for precise belt width measurement and stock status before designing a conveyor or ordering a belt.**
- Shares heavy-duty rating with other belts in this series.
- Large, open area improves air flow, drainage and cleanability.
- Flights and Sideguards are available.
- Series 400 Open Hinge has double-headed hinge rods so the belt edge is not fully flush.

Additional Information

- See *"Belt selection process"* (page 5)
- See *"Standard belt materials"* (page 18)
- See *"Special application belt materials"* (page 18)
- See *"Friction factors"* (page 31)

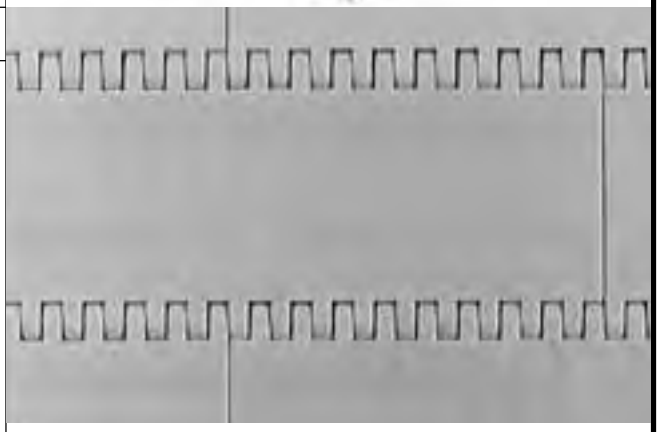
Belt Data

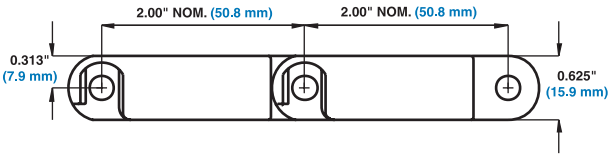
Belt Material	Standard Rod Material Ø 0.24 in. (6.1 mm)	BS Belt Strength		Temperature Range (continuous)		W Belt Weight		Agency Acceptability: 1=White, 2=Blue, 3=Natural, 4=Grey						
		lb/ft	kg/m	°F	°C	lb/ft²	kg/m²	FDA (USA)	USDA-FSIS - Meat & Poultry	USDA Dairy[a]	CFA[b]	A[c]	J[d]	EU MC[e]
Polypropylene	Polypropylene	1550	2300	34 to 220	1 to 104	1.16	5.66	•	•		•		3	•
Polyethylene	Polyethylene	950	1400	-50 to 150	-46 to 66	1.24	6.06	•	•		•		3	•

a. USDA Dairy acceptance requires the use of a clean-in-place-system.
b. Canada Food Inspection Agency
c. Australian Quarantine Inspection Service
d. Japan Ministry of Health, Labour, and Welfare
e. European Migration Certificate providing approval for food contact according to EU Directive 2002/72/EC and all its amendments to date.

Flat Top

	in.	mm
Pitch	2.00	50.8
Minimum Width	2	51
Width Increments	0.33	8.4
Opening Size (approximate)	-	-
Open Area	0%	
Hinge Style	Closed	
Drive Method	Center-driven	





Product Notes

- **Always check with Customer Service for precise belt width measurement and stock status before designing a conveyor or ordering a belt.**
- Smooth upper surface and straightforward design provides free product movement.
- Flights and Sideguards are available.
- It is recommended that Abrasion Resistant Split Sprockets be used with Series 400 Flat Top in Acetal.
- Series 400 Flat Top is available with SLIDELOX® rod retention for belts 6.0 ft. (1829 mm) wide and wider. All Series 400 Flat Top with Abrasion Resistant Rods are available with SLIDELOX® Rod Retention. All other Series 400 Flat Top belts use the standard headed rods.

Additional Information

- See *"Belt selection process"* (page 5)
- See *"Standard belt materials"* (page 18)
- See *"Special application belt materials"* (page 18)
- See *"Friction factors"* (page 31)

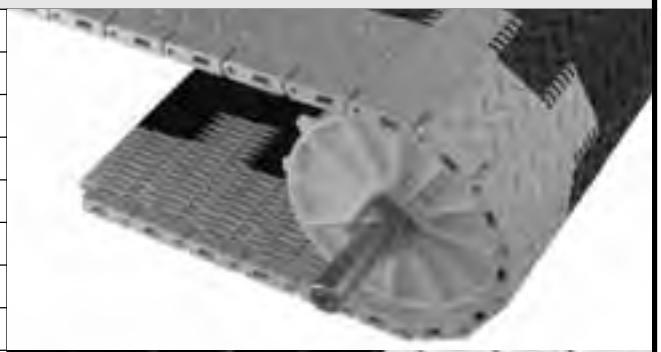
Belt Data

Belt Material	Standard Rod Material Ø 0.24 in. (6.1 mm)	BS Belt Strength lb/ft	BS Belt Strength kg/m	Temperature Range (continuous) °F	Temperature Range (continuous) °C	W Belt Weight lb/ft²	W Belt Weight kg/m²	Agency Acceptability: 1=White, 2=Blue, 3=Natural, 4=Grey FDA (USA)	USDA Dairy[a]	CFA[b]	A[c]	J[d]	Z[e]	EU MC[f]
Polypropylene	Polypropylene	2400	3570	34 to 220	1 to 104	1.81	8.82	•				3		•
Polyethylene	Polyethylene	1800	2680	-100 to 150	-73 to 66	1.90	9.28	•				3		•
Acetal	Polypropylene	3200	4760	34 to 200	1 to 93	2.74	13.38	•				3		•
Acetal[g]	Polyethylene	3000	4460	-50 to 70	-46 to 21	2.74	13.38	•				3		•

a. USDA Dairy acceptance requires the use of a clean-in-place-system.
b. Canada Food Inspection Agency
c. Australian Quarantine Inspection Service
d. Japan Ministry of Health, Labour, and Welfare
e. MAF-New Zealand Ministry of Agriculture and Forestry. MAF acceptance requires the use of a clean-in-place-system.
f. European Migration Certificate providing approval for food contact according to EU Directive 2002/72/EC and all its amendments to date.
g. Polyethylene rods can be used in cold applications when impacts or sudden starts/stops occur. Please note lower rating.

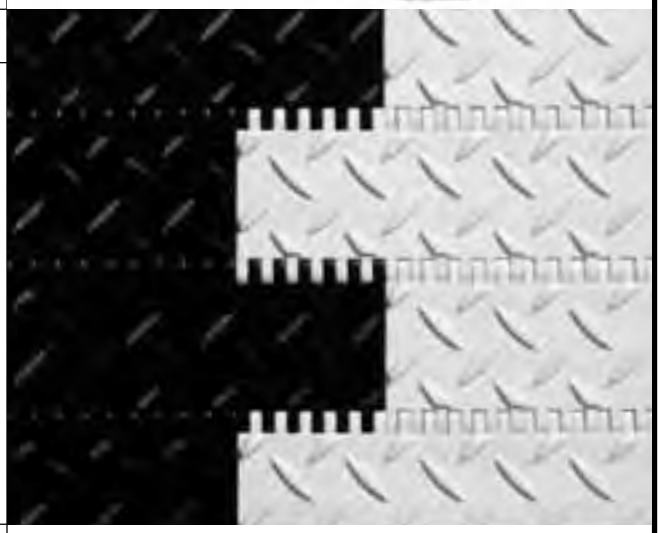
Non Skid

	in.	mm
Pitch	2.00	50.8
Minimum Width	2	51
Width Increments	0.33	8.4
Opening Size (approximate)	-	-
Open Area	0%	
Hinge Style	Closed	
Drive Method	Center-driven	



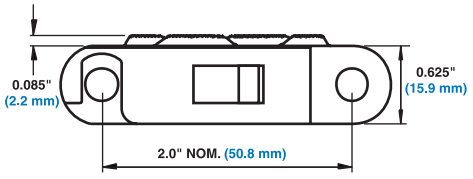
Product Notes

- **Always check with Customer Service for precise belt width measurement and stock status before designing a conveyor or ordering a belt.**
- Among highest strength rating of all Intralox belts.
- Contact Customer Service regarding flight availability.
- All Series 400 Non Skid belts use the SLIDELOX® rod retention system.
- SLIDELOX® is glass reinforced polypropylene.



Additional Information

- See *"Belt selection process"* (page 5)
- See *"Standard belt materials"* (page 18)
- See *"Special application belt materials"* (page 18)
- See *"Friction factors"* (page 31)



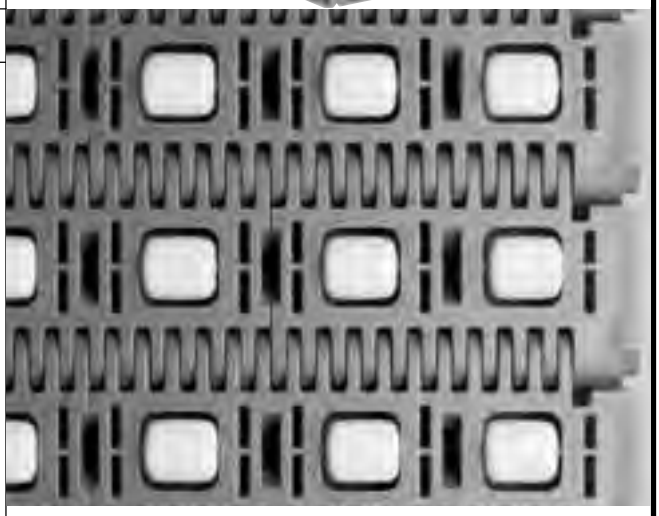
Belt Data

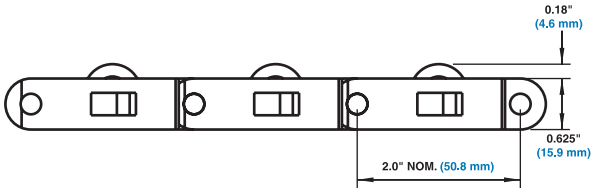
Belt Material	Standard Rod Material Ø 0.24 in. (6.1 mm)	BS Belt Strength lb/ft	BS Belt Strength kg/m	Temperature Range (continuous) °F	Temperature Range (continuous) °C	W Belt Weight lb/ft²	W Belt Weight kg/m²	Agency Acceptability: 1=White, 2=Blue, 3=Natural, 4=Grey FDA (USA)	USDA Dairy[a]	CF A[b]	A[c]	J[d]	Z[e]	EU MC[f]
HS EC Acetal	Nylon	2720	4040	-50 to 200	-46 to 93	2.88	14.09							
Polypropylene	Polypropylene	2400	3571	-34 to 220	1 to 104	1.81	8.84	•				3		•

a. USDA Dairy acceptance requires the use of a clean-in-place-system.
b. Canada Food Inspection Agency
c. Australian Quarantine Inspection Service
d. Japan Ministry of Health, Labour, and Welfare
e. MAF-New Zealand Ministry of Agriculture and Forestry. MAF acceptance requires the use of a clean-in-place-system.
f. European Migration Certificate providing approval for food contact according to EU Directive 2002/72/EC and all its amendments to date.

Roller Top™

	in.	mm
Pitch	2.00	50.8
Minimum Width	6	152
Width Increments	2.00	50.8
Opening Size (approximate)	-	-
Open Area	18%	
Hinge Style	Closed	
Drive Method	Center-driven	





Product Notes

- **Always check with Customer Service for precise belt width measurement, roller spacing, and stock status before designing a conveyor or ordering a belt.**
- SLIDELOX® flush edges.
- Acetal rollers, stainless steel axles.
- Allows for low back pressure accumulation.
- Roller diameter - 0.70 in. (17.8 mm). Roller length - 0.825 in. (20.9 mm).
- Standard roller indent is 0.90 in. (23 mm)
- Distance to centerline of first roller is 1.3 in. (33 mm), spacing between first and second roller is 1.8 in. (46 mm). Spacing between all other rollers is 2 in. (50.8 mm).
- SLIDELOX® is glass reinforced polypropylene.

Additional Information

- See *"Belt selection process"* (page 5)
- See *"Standard belt materials"* (page 18)
- See *"Special application belt materials"* (page 18)
- See *"Friction factors"* (page 31)

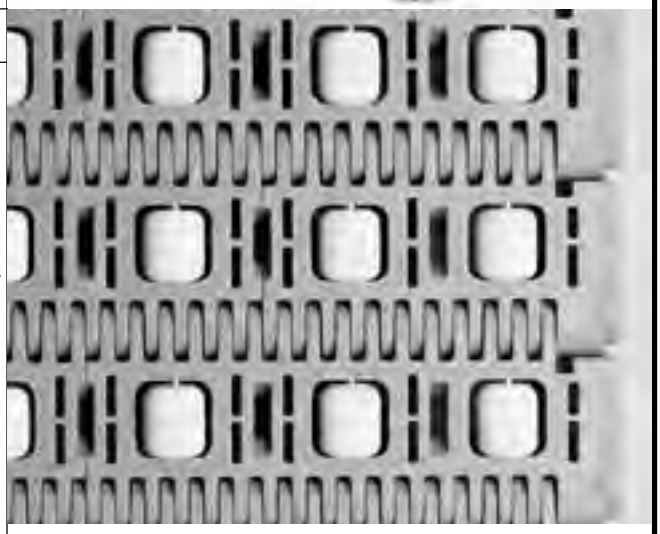
Belt Data

Belt Material	Standard Rod Material Ø 0.24 in. (6.1 mm)	BS Belt Strength lb/ft	BS Belt Strength kg/m	Temperature Range (continuous) °F	Temperature Range (continuous) °C	W Belt Weight lb/ft²	W Belt Weight kg/m²	Agency Acceptability: 1=White, 2=Blue, 3=Natural, 4=Grey FDA (USA)	USDA Dairy[a]	CFA[b]	J[c]	A[d]	Z[e]	EU MC[f]
Polypropylene	Nylon	2200	3270	34 to 200	1 to 93	2.44	11.94	•			3			•

a. USDA Dairy acceptance requires the use of a clean-in-place-system.
b. Canada Food Inspection Agency
c. Japan Ministry of Health, Labour, and Welfare
d. Australian Quarantine Inspection Service
e. MAF-New Zealand Ministry of Agriculture and Forestry. MAF acceptance requires the use of a clean-in-place-system.
f. European Migration Certificate providing approval for food contact according to EU Directive 2002/72/EC and all its amendments to date.

Transverse Roller Top™

	in.	mm
Pitch	2.00	50.8
Minimum Width	6	152
Width Increments	2.00	50.8
Opening Size (approximate)	-	-
Open Area	18%	
Hinge Style	Closed	
Drive Method	Center-driven	

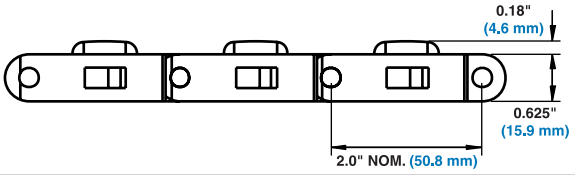


Product Notes

- **Always check with Customer Service for precise belt width measurement, roller spacing, and stock status before designing a conveyor or ordering a belt.**
- SLIDELOX® flush edges.
- Acetal rollers, stainless steel axles.
- Designed for 90° transfers.
- Roller axle pins are stainless steel for durability and long-lasting performance.
- Roller diameter - 0.70 in. (17.8 mm). Roller length - 0.825 in. (20.9 mm).
- Standard roller indent is 0.90 in. (23 mm)
- 2 in. (50.8 mm) roller spacing.
- SLIDELOX® is glass reinforced polypropylene.
- Distance to centerline of first roller is 1.3 in. (33 mm), spacing between first and second roller is 1.8 in. (46 mm). Spacing between all other rollers is 2 in. (50.8 mm).

Additional Information

- See *"Belt selection process"* (page 5)
- See *"Standard belt materials"* (page 18)
- See *"Special application belt materials"* (page 18)
- See *"Friction factors"* (page 31)



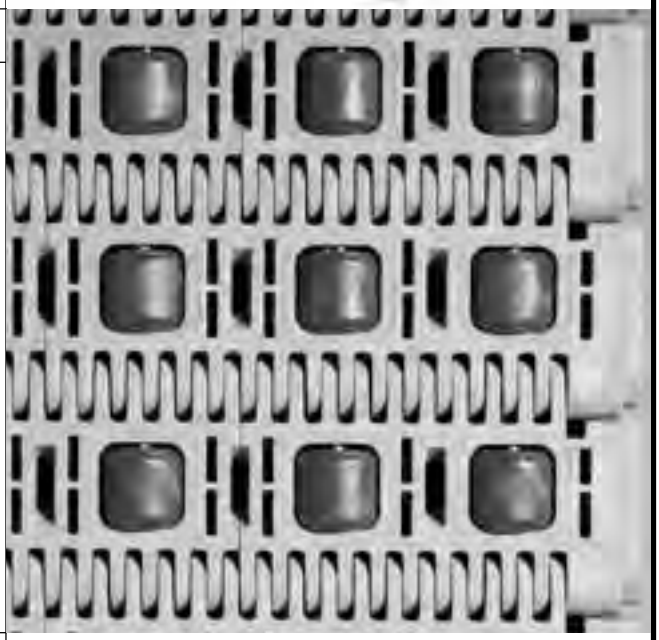
Belt Data

Belt Material	Standard Rod Material Ø 0.24 in. (6.1 mm)	BS Belt Strength lb/ft	BS Belt Strength kg/m	Temperature Range (continuous) °F	Temperature Range (continuous) °C	W Belt Weight lb/ft²	W Belt Weight kg/m²	Agency Acceptability: 1=White, 2=Blue, 3=Natural, 4=Grey FDA (USA)	USDA Dairy[a]	CFA[b]	J[c]	A[d]	Z[e]	EU MC[f]
Polypropylene	Nylon	2200	3270	34 to 200	1 to 93	2.44	11.94	•			3			•

a. USDA Dairy acceptance requires the use of a clean-in-place-system.
b. Canada Food Inspection Agency
c. Japan Ministry of Health, Labour, and Welfare
d. Australian Quarantine Inspection Service
e. MAF-New Zealand Ministry of Agriculture and Forestry. MAF acceptance requires the use of a clean-in-place-system.
f. European Migration Certificate providing approval for food contact according to EU Directive 2002/72/EC and all its amendments to date.

0.85 in. Diameter Transverse Roller Top™

	in.	mm
Pitch	2.00	50.8
Minimum Width	6	152
Width Increments	2.00	50.8
Opening Size (approximate)	-	-
Open Area	18%	
Hinge Style	Closed	
Drive Method	Center-driven	

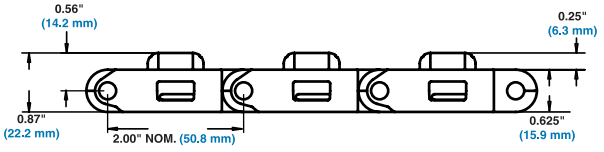


Product Notes

- **Always check with Customer Service for precise belt width measurement, roller spacing, and stock status before designing a conveyor or ordering a belt.**
- SLIDELOX® flush edges.
- Acetal rollers, stainless steel axles.
- Designed for 90° transfers.
- Roller axle pins are stainless steel for durability and long-lasting performance.
- Roller diameter - 0.85 in. (21.6 mm). Roller length - 0.825 in. (20.9 mm).
- Standard roller indent is 0.90 in. (23 mm)
- Distance to centerline of first roller is 1.3 in. (33 mm), spacing between first and second roller is 1.8 in. (46 mm). Spacing between all other rollers is 2 in. (50.8 mm).
- SLIDELOX® is glass reinforced polypropylene.

Additional Information

- See *"Belt selection process"* (page 5)
- See *"Standard belt materials"* (page 18)
- See *"Special application belt materials"* (page 18)
- See *"Friction factors"* (page 31)



Belt Data

Belt Material	Standard Rod Material Ø 0.24 in. (6.1 mm)	BS Belt Strength lb/ft	BS Belt Strength kg/m	Temperature Range (continuous) °F	Temperature Range (continuous) °C	W Belt Weight lb/ft²	W Belt Weight kg/m²	Agency Acceptability: 1=White, 2=Blue, 3=Natural, 4=Grey FDA (USA)	USDA Dairy[a]	CFA[b]	A[c]	J[d]	Z[e]	EU MC[f]
Polypropylene	Nylon	2200	3270	34 to 200	1 to 93	2.81	13.71	•				3		•

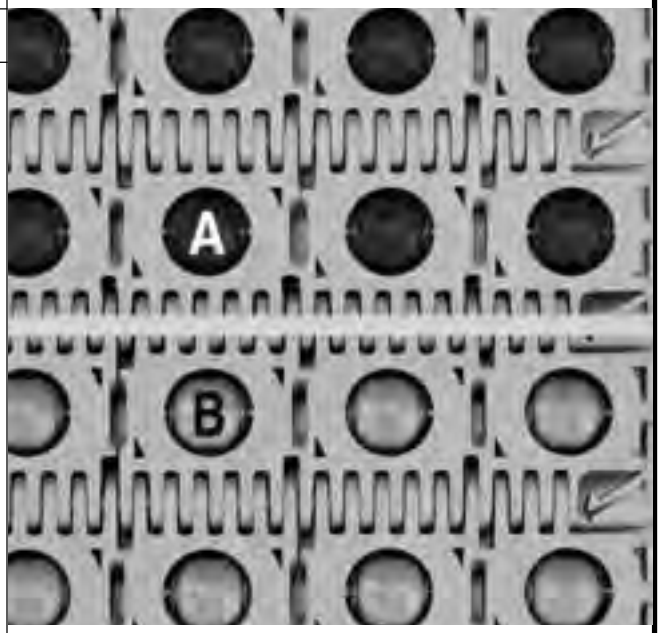
a. USDA Dairy acceptance requires the use of a clean-in-place-system.
b. Canada Food Inspection Agency
c. Australian Quarantine Inspection Service
d. Japan Ministry of Health, Labour, and Welfare
e. MAF-New Zealand Ministry of Agriculture and Forestry. MAF acceptance requires the use of a clean-in-place system.
f. European Migration Certificate providing approval for food contact according to EU Directive 2002/72/EC and all its amendments to date.

0° Angled Roller™

	in.	mm
Pitch	2.00	50.8
Minimum Width	6	152
Width Increments	2.00	50.8
Opening Size (approximate)	-	-
Open Area	11%	
Hinge Style	Closed	
Drive Method	Center-driven	

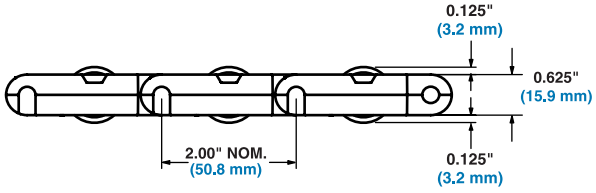
Product Notes

- Always check with Customer Service for precise belt width measurement, roller spacing, and stock status before designing a conveyor or ordering a belt.
- This belt uses Activated Roller Belt™ technology.
- Black or grey polyurethane rollers are available. All rollers have an acetal core. Axles are stainless steel.
- Rollers are in-line with the direction of belt travel.
- In-line rollers can run on a standard flat continuous carryway. A chevron carryway is not recommended.
- Black Polyurethane Rollers are not recommended for back up conditions.
- 2.0 in. (50.8 mm) roller spacing.
- When belt rollers are in motion, product will move faster than the speed of the belt. When belt rollers do not rotate, product will travel at belt speed.
- Product behavior varies depending on shape and weight of product, conveyor design, and belt speed.
- Intralox can help you reach a more accurate estimate of product behavior based on product and conveyor characterisitics. Contact Customer Service for details.
- Custom belts consisting of any combination of 0°, 30°, 45°, or 60° are available. Custom belts can also include rollers oriented in different directions. Contact Intralox Customer Service for additional information.
- Angled Roller Belt will not work with the 4.0 in. (102 mm) pitch diameter Split Sprocket and all 5.2 in. (132 mm) pitch diameter sprockets with 2.5 in. and 60 mm square bores.



A - Black Polyurethane rollers

B - Grey Polyurethane rollers



Additional Information

- See *"Belt selection process"* (page 5)
- See *"Standard belt materials"* (page 18)
- See *"Special application belt materials"* (page 18)
- See *"Friction factors"* (page 31)

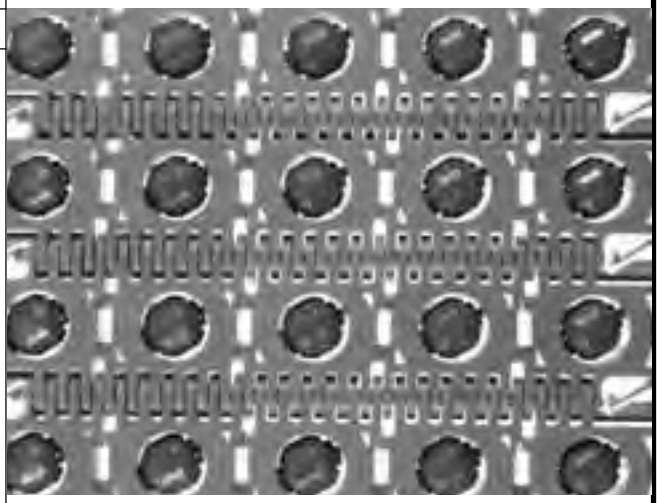
Belt Data

Belt Material	Standard Rod Material Ø 0.24 in. (6.1 mm)	BS Belt Strength		Temperature Range (continuous)		W Belt Weight		Agency Acceptability: 1=White, 2=Blue, 3=Natural, 4=Grey	
		lb/ft	kg/m	°F	°C	lb/ft²	kg/m²	FDA (USA)	EU MC[a]
Polypropylene/Black Polyurethane	Nylon	1600	2381	34 to 200	1 to 93	2.65	12.94	•	
Polypropylene/Grey Polyurethane	Nylon	1600	2381	34 to 120	1 to 49	2.73	13.33	•	

a. European Migration Certificate providing approval for food contact according to EU Directive 2002/72/EC and all its amendments to date.

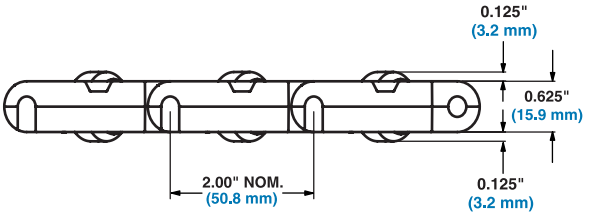
30° Angled Roller™

	in.	mm
Pitch	2.00	50.8
Minimum Width	6	152
Width Increments	2.00	50.8
Opening Size (approximate)	-	-
Open Area	11%	
Hinge Style	Closed	
Drive Method	Center-driven	



Product Notes

- Always check with Customer Service for precise belt width measurement, roller spacing, and stock status before designing a conveyor or ordering a belt.
- This belt uses Activated Roller Belt™ technology.
- Grey polyurethane rollers with an acetal core are available. Axles are stainless steel.
- Rollers are skewed 30° from the direction of belt travel.
- Grey polyurethane rollers can run on a standard flat continuous carryway. A chevron carryway is not recommended.
- Belt can be supported using parallel wearstrips placed in between belt rollers. Contact Customer Service for details.
- 2 in. (50.8 mm) roller spacing.
- When belt rollers are in motion, product will move faster than the speed of the belt. When belt rollers do not rotate, product will travel at belt speed.
- Product behavior will vary depending on shape and weight of product, conveyor design, and belt speed. Intralox can help you reach a more accurate estimate of product behavior based on product and conveyor characteristics. Contact Customer Service for details.
- Centering configuration is possible using two belts with rollers oriented towards the center of the conveyor.
- Alignment belts on a flat continuous carryway require a side wear strip and the belt should be installed to run flush along this wearstrips.
- Custom belts consisting of any combination of 0°, 30°, 45°, or 60° are available. Custom belts can also include rollers oriented in different directions. Contact Intralox Customer Service for additional information.
- Angled Roller Belt will not work with the 4.0 in. (102 mm) pitch diameter Split Sprocket and all 5.2 in. (132 mm) pitch diameter sprockets with 2.5 in. and 60 mm square bores.
- Minimum belt width for Polyethylene is 8 in. (203 mm). Polyethylene belts between 8 in. (203 mm) to 10 in. (254 mm) wide should be de-rated to 450 lb/ft. (670 kg/m).
- If any moisture is present, then the low temperature limit of the Polyethylene belt is 34° F (1° C).
- Polyethylene belts require Ultra Abrasion Resistant Polyurethane sprocket on the drive shaft. Any sprocket can be used on the idle shaft with the exception of sprockets with low back tension teeth.



Additional Information

- See *"Belt selection process"* (page 5)
- See *"Standard belt materials"* (page 18)
- See *"Special application belt materials"* (page 18)
- See *"Friction factors"* (page 31)

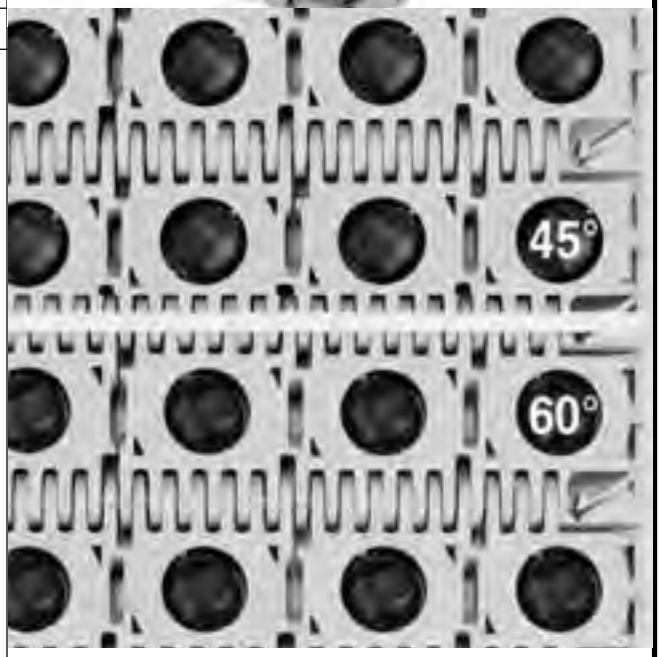
Belt Data

Belt Material	Standard Rod Material Ø 0.24 in. (6.1 mm)	BS Belt Strength lb/ft	BS Belt Strength kg/m	Temperature Range (continuous) °F	Temperature Range (continuous) °C	W Belt Weight lb/ft²	W Belt Weight kg/m²	Agency Acceptability: 1=White, 2=Blue, 3=Natural, 4=Grey FDA (USA)	Agency Acceptability: 1=White, 2=Blue, 3=Natural, 4=Grey EU MC[a]
Polypropylene/Grey Polyurethane	Nylon	1600	2381	34 to 120	1 to 49	2.64	12.89	•	•
Polyethylene/Grey Polyurethane	Nylon	500	744	17 to 150	-8 to 65	2.93	14.31	•	

a. European Migration Certificate providing approval for food contact according to EU Directive 2002/72/EC and all its amendments to date.

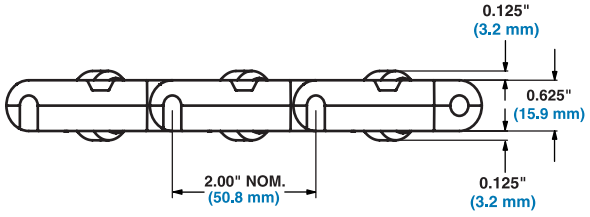
45° and 60° Angled Roller™

	in.	mm
Pitch	2.00	50.8
Minimum Width	6	152
Width Increments	2.00	50.8
Opening Size (approximate)	-	-
Open Area	11%	
Hinge Style	Closed	
Drive Method	Center-driven	



Product Notes

- Always check with Customer Service for precise belt width measurement, roller spacing, and stock status before designing a conveyor or ordering a belt.
- This belt uses Activated Roller Belt™ technology.
- Black polyurethane rollers with an acetal core are available. Axles are stainless steel.
- Rollers are skewed either 45° or 60° degrees from direction of belt travel.
- Skewed black polyurethane rollers are designed for use with a patented carryway system for optimal product movement. Black polyurethane rollers should not be allowed to contact a flat continuous or chevron carryway. Belt can be supported using parallel wearstrips placed in between belt rollers. Contact Customer Service for details.
- Black polyurethane rollers are not recommended for back up conditions.
- 2.0 in. (50.8 mm) roller spacing.
- When belt rollers are in motion, product will move faster than the speed of the belt. When belt rollers do not rotate, product will travel at belt speed.
- Product behavior will vary depending on shape and weight of product, conveyor design, and belt speed. Intralox can help you reach a more accurate estimate of product behavior based on product and conveyor characterisitics. Contact Customer Service for details.
- Custom belts consisting of any combination of 0°, 30°, 45°, or 60° are available. Custom belts can also include rollers oriented in different directions. Contact Intralox Customer Service for additional information.
- Angled Roller Belt will not work with the 4.0 in. (102 mm) pitch diameter Split Sprocket and all 5.2 in. (132 mm) pitch diameter sprockets with 2.5 in. and 60 mm square bores.
- Minimum belt width for Polyethylene is 8 in. (203 mm) and only available in 45°. Polyethylene belts between 8 in. (203 mm) to 10 in. (254 mm) wide should be de-rated to 450 lb/ft. (670 kg/m).
- If any moisture is present, then the low temperature limit of the Polyethylene belt is 34° F (1° C).
- Polyethylene belts require Ultra Abrasion Resistant Polyurethane sprocket on the drive shaft. Any sprocket can be used on the idle shaft with the exception of sprockets with low back tension teeth.



Additional Information

- See *"Belt selection process"* (page 5)
- See *"Standard belt materials"* (page 18)
- See *"Special application belt materials"* (page 18)
- See *"Friction factors"* (page 31)

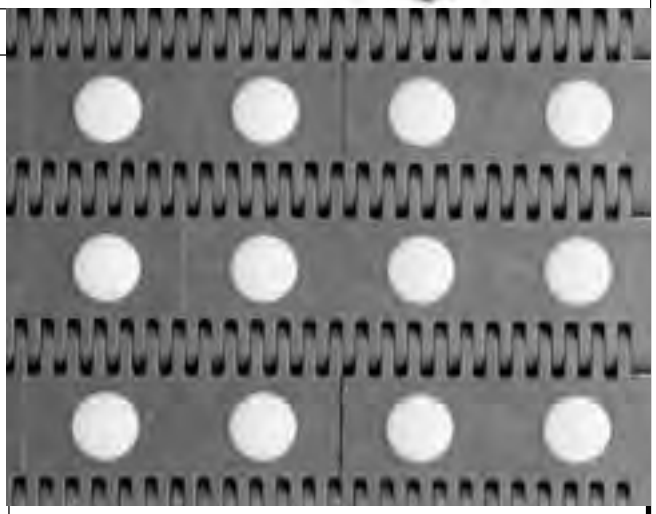
Belt Data

Belt Material	Standard Rod Material Ø 0.24 in. (6.1 mm)	BS Belt Strength		Temperature Range (continuous)		W Belt Weight		Agency Acceptability: 1=White, 2=Blue, 3=Natural, 4=Grey	
		lb/ft	kg/m	°F	°C	lb/ft²	kg/m²	FDA (USA)	EU MC[a]
Polypropylene/Black polyurethane	Nylon	1600	2381	34 to 200	1 to 93	2.65	12.94	•	
Polyethylene/Black polyurethane	Nylon	500	744	17 to 150	-8 to 65	2.93	14.31	•	

a. European Migration Certificate providing approval for food contact according to EU Directive 2002/72/EC and all its amendments to date.

Ball Belt

	in.	mm
Pitch	2.00	50.8
Minimum Width	10	254
Width Increments	2.00	50.8
Opening Size (approximate)	-	-
Open Area	0%	
Hinge Style	Closed	
Drive Method	Center-driven	

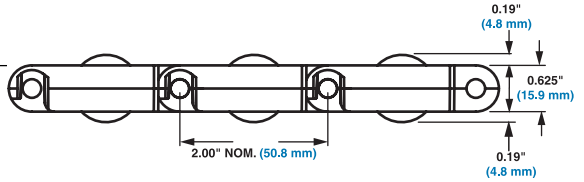


Product Notes

- **Always check with Customer Service for precise belt width measurement and stock status before designing a conveyor or ordering a belt.**
- Fully flush edges with standard headed rods.
- Acetal balls.
- Designed for applications requiring product redirection, alignment, transfer, diverting, palletizing, orientation, accumulation or justification. Product movement is controlled by driving balls with a perpendicular secondary conveyor underneath main belt.
- Balls protrude beyond top and bottom of belt. Module does not contact carryway.
- Product on top of the balls will move faster than belt speed. Product speed will vary depending on shape and weight of product.
- Ball diameter is 1.0 in. (25.4 mm)
- 2 in. (50.8 mm) space between balls.
- Standard ball indent is 1.1 in (27.9 mm).
- Rod centerline to top or bottom of module is 0.313 in (7.9 mm).
- Rod centerline to top or bottom of ball is 0.50 in (12.7 mm).
- Alignment configurations should be installed to run flush along the side wearstrip.
- A flat continuous carry way is required.
- Self-set retaining rings for locking sprockets are not recommended.

Additional Information

- See *"Belt selection process"* (page 5)
- See *"Standard belt materials"* (page 18)
- See *"Special application belt materials"* (page 18)
- See *"Friction factors"* (page 31)



Belt Data

Belt Material	Standard Rod Material Ø 0.24 in. (6.1 mm)	BS Belt Strength[a]		Temperature Range (continuous)		W Belt Weight		Agency Acceptability: 1=White, 2=Blue, 3=Natural, 4=Grey						
		lb/ft	kg/m	°F	°C	lb/ft²	kg/m²	FDA (USA)	USDA Dairy[b]	CFA[c]	A[d]	J[e]	Z[f]	EU MC[g]
Acetal	Polypropylene	2400	3571	34 to 200	1 to 93	3.71	18.11	•				3		•

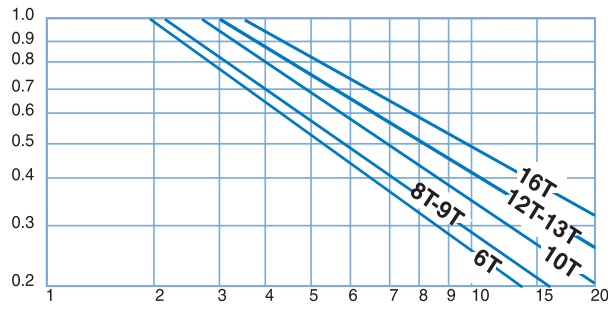
a. When using steel sprockets, the belt strength for polyethylene is 240 lb/ft (360 kg/m).
b. USDA Dairy acceptance requires the use of a clean-in-place-system.
c. Canada Food Inspection Agency
d. Australian Quarantine Inspection Service
e. Japan Ministry of Health, Labour, and Welfare
f. MAF-New Zealand Ministry of Agriculture and Forestry. MAF acceptance requires the use of a clean-in-place system.
g. European Migration Certificate providing approval for food contact according to EU Directive 2002/72/EC and all its amendments to date.

Sprocket and Support Quantity Reference

Belt Width Range[a]		**Minimum** Number of Sprockets Per Shaft[b]	Wearstrips	
in.	mm		Carryway	Returnway
2	51	1	2	2
4	102	1	2	2
6	152	2	2	2
7	178	2	2	2
8	203	2	2	2
10	254	2	3	2
12	305	3	3	2
14	356	3	3	3
15	381	3	3	3
16	406	3	3	3
18	457	3	3	3
20	508	5	4	3
24	610	5	4	3
30	762	5	5	4
32	813	7	5	4
36	914	7	5	4
42	1067	7	6	5
48	1219	9	7	5
54	1372	9	7	6
60	1524	11	8	6
72	1829	13	9	7
84	2134	15	11	8
96	2438	17	12	9
120	3048	21	15	11
144	3658	25	17	13
For Other Widths, Use Odd Number of Sprockets[c] at Maximum 6 in. (152 mm) ℄ Spacing			Maximum 9 in. (229 mm) ℄ Spacing[d]	Maximum 12 in. (305 mm) ℄ Spacing

a. If your belt width exceeds a number listed in the table, please refer to the sprocket and support material minimums for the next larger width range listed. Flat Top, Flush Grid, and Raised Rib belts are available in 0.33 in. (8.4 mm) increments beginning with a minimum width of 2 in. (51 mm). The increment for Open Hinge belts is 0.25 in. (6 mm). **If the actual width is critical, consult Customer Service.**
b. These are the minimum number of sprockets. Additional sprockets may be required for heavily loaded applications.
c. The center sprocket should be locked down. With only two sprockets, fix the sprocket on the drive journal side only. See Retainer Rings/Center Sprocket Offset chart on page 304 for lock down location.
d. Ball Belt and some Angled Roller Belts require a flat continuous carryway.

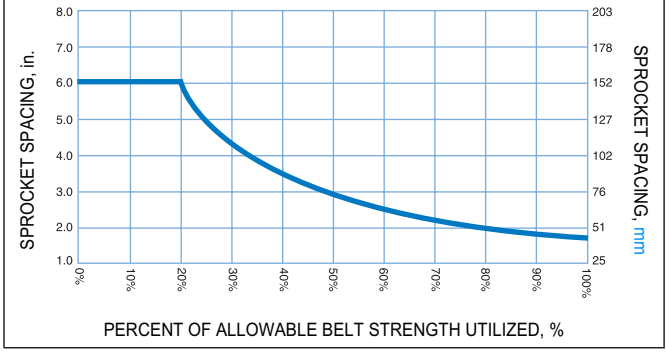
S Strength Factor



V = ft/min (m/min)
L = ft (m)
T = number of teeth

Divide belt speed "V" by the shaft ℄ distance "L". Strength Factor is found at intersection of speed/length ratio and appropriate sprocket line. See page 36 for more information.

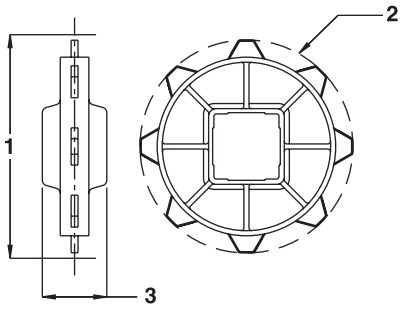
Sprocket Spacing as a Function of Belt Strength Utilized



Sprocket Data[a]

For all belts except Flush Grid Acetal

No. of Teeth (Chordal Action)	Nom. Pitch Dia. in.	Nom. Pitch Dia. mm	Nom. Outer Dia. in.	Nom. Outer Dia. mm	Nom. Hub Width in.	Nom. Hub Width mm	Available Bore Sizes			
							U.S. Sizes		Metric Sizes	
							Round in.[b]	Square in.	Round mm[b]	Square mm
6 (13.40%)	4.0	102	3.6	91	1.5	38		1.5		40
8 (7.61%)	5.2	132	5.0	127	1.5	38		1.5		40
								2.5		60
10 (4.89%)	6.4	163	6.3	160	1.5	38	2.0	1.5		40
								2.5		60
										70
12 (3.41%)	7.8	198	7.7	196	1.5	38		1.5		40
								2.5		60
16 (1.92%)	10.1	257	10.2	259	1.5	38		1.5		40
								2.5		60
								3.5		90



1 - Pitch diameter
2 - Outer diameter
3 - Hub width

a. Contact Customer Service for lead times.
b. Round bore molded and split sprockets are frequently furnished with two keyways. Use of two keys is NOT REQUIRED nor recommended. Round bore sprockets do not have set screws for locking the sprockets in place. As with square bore sprockets, only the center-most sprocket needs to be locked down. Imperial key sizes on round bore sprockets conform to ANSI standard B17.1-1967(R1989) and metric key sizes conform to DIN standard 6885.

Low Back Tension Ultra Abrasion Resistant Polyurethane Split Sprocket[a]

For all belts except Open Hinge and Roller Belts

No. of Teeth (Chordal Action)	Nom. Pitch Dia. in.	Nom. Pitch Dia. mm	Nom. Outer Dia. in.	Nom. Outer Dia. mm	Nom. Hub Width in.	Nom. Hub Width mm	Available Bore Sizes			
							U.S. Sizes		Metric Sizes	
							Round in.	Square in.	Round mm	Square mm
10 (4.89%)	6.4	163	6.3	160	1.5	38		1.5		40
								2.5		
12 (3.41%)	7.8	198	7.7	196	1.5	38		2.5		
16 (1.92%)	10.1	257	10.2	259	1.5	38		2.5		

a. **Contact Customer Service for lead times.** When using Low Back Tension Ultra Abrasion Resistant Polyurethane Split Sprockets, the maximum Belt Strength for all styles and materials is 1000 lb/ft (1490 kg/m), and the temperature range for the sprocket is -40 °F (-40 °C) to 160 °F (71 °C).

Ultra Abrasion Resistant Polyurethane Split Sprocket[a]

For all belts except Open Hinge and Roller Belts

No. of Teeth (Chordal Action)	Nom. Pitch Dia. in.	Nom. Pitch Dia. mm	Nom. Outer Dia. in.	Nom. Outer Dia. mm	Nom. Hub Width in.	Nom. Hub Width mm	Available Bore Sizes			
							U.S. Sizes		Metric Sizes	
							Round in.	Square in.	Round mm	Square mm
10 (4.89%)	6.4	163	6.3	160	1.5	38		1.5		40
								2.5		

a. **Contact Customer Service for lead times.** When using Ultra Abrasion Resistant Polyurethane Split Sprockets, the maximum Belt Strength for all styles and materials is 1000 lb/ft (1490 kg/m), and the temperature range for the sprocket is -40 °F (-40 °C) to 160 °F (71 °C).

Low Back Tension High Strength Polyurethane Composite Split Sprocket[a]

For all belts except Flush Grid Acetal, Open Hinge and Roller Belts

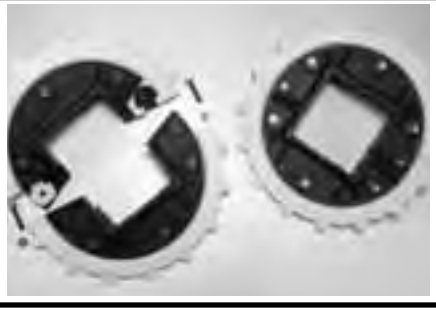
No. of Teeth (Chordal Action)	Nom. Pitch Dia. in.	Nom. Pitch Dia. mm	Nom. Outer Dia. in.	Nom. Outer Dia. mm	Nom. Hub Width in.	Nom. Hub Width mm	Available Bore Sizes			
							U.S. Sizes		Metric Sizes	
							Round in.	Square in.	Round mm	Square mm
10 (4.89%)	6.4	163	6.3	160	1.70	43		1.5		40
								2.5		60
12 (3.41%)	7.8	198	7.7	196	1.5	38		1.5		40
								2.5		60
16 (1.92%)	10.1	257	10.2	259	1.5	38	3.5	1.5		
								2.5		
								3.5		90

a. **Contact Customer Service for lead times.** Recommended for Drive Shaft only. There is very little belt tension when a belt engages the idle sprockets. In some applications, the belt may not have enough tension to engage the added Low Back Tension teeth, causing the belt to disengage on the idle sprockets.

High Strength Polyurethane Composite Split Sprocket[a]

For all belts except Flush Grid Acetal, Open Hinge and Roller Belts

No. of Teeth (Chordal Action)	Nom. Pitch Dia. in.	Nom. Pitch Dia. mm	Nom. Outer Dia. in.	Nom. Outer Dia. mm	Nom. Hub Width in.	Nom. Hub Width mm	Available Bore Sizes			
							U.S. Sizes		Metric Sizes	
							Round in.	Square in.	Round mm	Square mm
16 (1.92%)	10.1	257	10.2	259	1.5	38	4.0	3.5		90



a. **Contact Customer Service for lead times.** Recommended for Idle Shaft only.

Split Sprocket Data[a]

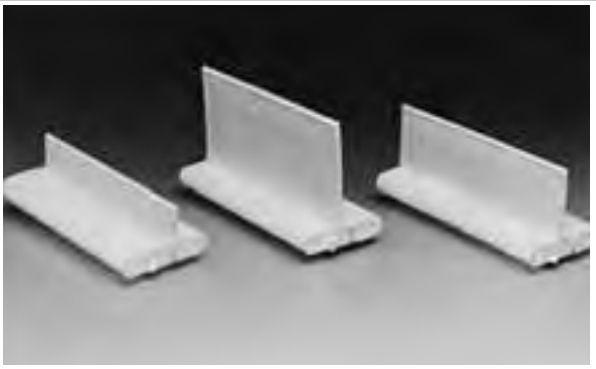
No. of Teeth (Chordal Action)	Nom. Pitch Dia. in.	Nom. Pitch Dia. mm	Nom. Outer Dia. in.	Nom. Outer Dia. mm	Nom. Hub Width in.	Nom. Hub Width mm	Available Bore Sizes			
							U.S. Sizes		Metric Sizes	
							Round in.[b]	Square in.	Round mm[b]	Square mm
6 (13.40%)	4.0	102	3.6	91	1.5	38		1.5		40
8 (7.61%)	5.2	132	5.0	127	1.5	38	1, 1-3/16, 1-1/4, 1-7/16	1.5	20 30 40	40 60
10 (4.89%)	6.4	163	6.3	160	1.5	38	1, 1-3/16, 1-1/4, 1-3/8, 1-7/16, 1-1/2, 1-15/16	1.5 2.5	20 40	40 60
12 (3.41%)	7.8	198	7.7	196	1.5	38	1-7/16, 1-15/16	1.5 2.5	40	40 60
16 (1.92%)	10.1	257	10.2	259	1.5	38	1-7/16, 1-15/16	1.5 2.5 3.5		40 60 90

a. **Contact Customer Service for lead times.**
b. Round bore molded and split sprockets are frequently furnished with two keyways. Use of two keys is NOT REQUIRED nor recommended. Round bore sprockets do not have set screws for locking the sprockets in place. As with square bore sprockets, only the center-most sprocket needs to be locked down. Imperial key sizes on round bore sprockets conform to ANSI standard B17.1-1967(R1989) and metric key sizes conform to DIN standard 6885.

Flush Grid Base Flights (Streamline/No-Cling)

Available Flight Height		Available Materials
in.	mm	
1	25	Polypropylene, Polyethylene
2	51	
3	76	

Note: Flights can be cut down to any height required for a particular application.
Note: Each flight rises out of the center of its supporting module, molded as an integral part. No fasteners are required.
Note: One side of the Flush Grid flight is smooth (Streamline) while the other is ribbed vertically (No-Cling).
Note: The minimum indent (without sideguards) is 0.8 in. (20 mm) and the minimum indent for a SLIDELOX® edge (without sideguards) is 1.4 in. (36 mm).
Note: An extension can be welded at a 45° angle for a bent flight.



Flush Grid Base Flights (Double No-Cling)

Available Flight Height		Available Materials
in.	mm	
6	152	Polypropylene, Polyethylene

Note: Flights can be cut down to any height required for a particular application.
Note: Each flight rises out of the center of its supporting module, molded as an integral part. No fasteners are required.
Note: The minimum indent (without sideguards) is 0.8 in. (20 mm) and the minimum indent for a SLIDELOX® edge (without sideguards) is 1.4 in. (36 mm)
Note: 45 degree bent flights are available in polypropylene with a 3 in (76 mm) tall base and with a 1 in. (25 mm) or 2 in. (51 mm) extension.

Open Hinge Base Flights (Streamline/No-Cling)

Available Flight Height		Available Materials
in.	mm	
1	25	Polypropylene, Polyethylene
2	51	
3	76	

Note: Flights can be cut down to any height required for a particular application.
Note: Each flight rises out of the center of its supporting module, molded as an integral part. No fasteners are required.
Note: One side of the Open Hinge flight is smooth (Streamline) while the other is ribbed vertically (No-Cling).
Note: The minimum indent (without sideguards) is 0.6 in. (15 mm).
Note: Series 400 Open Hinge flights can be extended to 6 in. (152 mm) high (welded extension). The extension can also be welded at a 45° angle for a bent flight.

Flat Top Base Flights (Streamline)

Available Flight Height		Available Materials
in.	mm	
4	102	Polypropylene, Polyethylene, Acetal
6	152	

Note: Flights can be cut down to any height required for a particular application.
Note: Flat Top flight is smooth (Streamline) on both sides.
Note: Each flight rises out of the center of its supporting module, molded as an integral part. No fasteners are required.
Note: The minimum indent (without sideguards) is 0.8 in. (20 mm) and the minimum indent for a SLIDELOX® edge (without sideguards) is 1.4 in. (36 mm).
Note: Flat Top-based flights cannot be used with Flush Grid belts.

Sideguards

Available Sizes		Available Materials
in.	mm	
2	51	Polypropylene, Polyethylene
3	76	
4	102	

Note: Sideguards have a standard overlapping design and are an integral part of the belt, with no fasteners required.
Note: The minimum indent is 0.8 in. (20 mm).
Note: The normal gap between the sideguards and the edge of a flight is 0.4 in. (10 mm).
Note: When going around the 6 and 8 tooth sprockets, the sideguards will fan out, opening a gap at the top of the sideguard which might allow small products to fall out. The sideguards stay completely closed when going around the 10, 12 and 16 tooth sprockets.

Hold Down Tabs

Note: The strength rating for each Hold Down Tab is 100 lbs (45.4 kg) of force perpendicular to the hold-down surface.
Note: Tabs can be spaced along the length of the belt at either4 inches (101.6 mm) or 6 inches (152.4 mm). Tab spacings greater than 6 inches (152.4 mm) should be avoided due to the potential of mistracking.
Note: Carryway wearstrip or rollers that engage the tabs are only required at the transition between the horizontal sections and angled sections. This reduces initial system cost, as well as ongoing maintenance cost and effort.
Note: Care should be taken to ensure that adequate lead-in radii and/or angles are used to prevent the possibility of snagging the tab on the frame.
Note: A carryway radius should be designed at the transition between horizontal sections and angled sections. This radius must be at least 48 inches (1.22 m) for belts that will be loaded near the belt's strength rating. This radius is one of the most important factors to take into consideration when designing highly loaded conveyors that utilize Hold Down Tabs.
Note: Available on Non Skid and Flat Top belts

Insert Nuts

Available Base Belt Style - Material			Available Insert Nut Sizes	
Series 400 Flat Top - Acetal, Polypropylene			5/16" - 18 (8 mm - 1.25 mm)	
Belt Material	Maximum Fixture Weight		Fastener Torque Specification	
	lbs/nut[a]	kg/nut[a]	in.-lbs	N-m
Acetal	200	91	120	13.5
Polypropylene	175	79	65	7.3

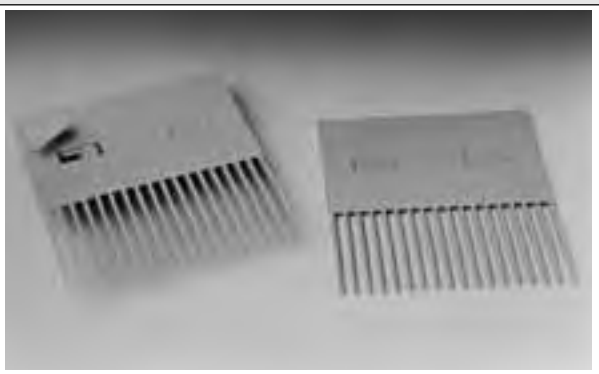
Note: Insert Nuts easily allow the attachment of fixtures to the belt.
Note: Nut placement constraints are as follows; 2" (50 mm) minimal indent from the edge of the belt, 1-1/3" (34 mm) minimal distance between nuts across the width of the belt and spacing along the length of the belt is in2" (50 mm) increments.
Note: All nut placement dimensions are referenced from the edge of the belt when placing an order. Contact Intralox Customer Service for nut location options available for your individual belt specifications.
Note: Attachments that are connected to more than one row must not prohibit the rotation of the belt around the sprockets.
Note: Sprockets cannot be located in-line with the locations of the insert nuts in the belt.
Note: For attachment bases that extend across multiple rows, considerations should be made to accommodate for reduced backbend.

a. This is fixture weight only. Product weight need not be included.

Finger Transfer Plates

Available Widths		Number of Fingers	Available Materials
in.	mm		
6	152	18	Polypropylene

Note: Eliminates product transfer and tipping problems. The 18 fingers extend between the belt's ribs allowing a smooth continuation of the product flow as the belt engages its sprockets.
Note: Easily installed on the conveyor frame with the shoulder bolts supplied. Caps snap easily into place over the bolts, keeping foreign materials out of the slots.
Note: The Finger Transfer Plates for Series 400 are the same for Series 1200.



Two-Material Finger Transfer Plates

Available Widths		Number of Fingers	Available Materials
in.	mm		
6	152	18	Glass-Filled Thermoplastic Fingers, Acetal Backplate

Note: Plates provide high strength fingers combined with a low friction back plate.
Note: Low-friction back plate is permanently attached to the two high-strength finger inserts.
Note: Eliminates product transfer and tipping problems. The 18 fingers extend between the belt's ribs allowing a smooth continuation of the product flow as the belt engages its sprockets.
Note: Easily installed on the conveyor frame with the shoulder bolts supplied. Caps snap easily into place over the bolts, keeping foreign materials out of the slots.
Note: The Finger Transfer Plates for Series 400 are the same for Series 1200.

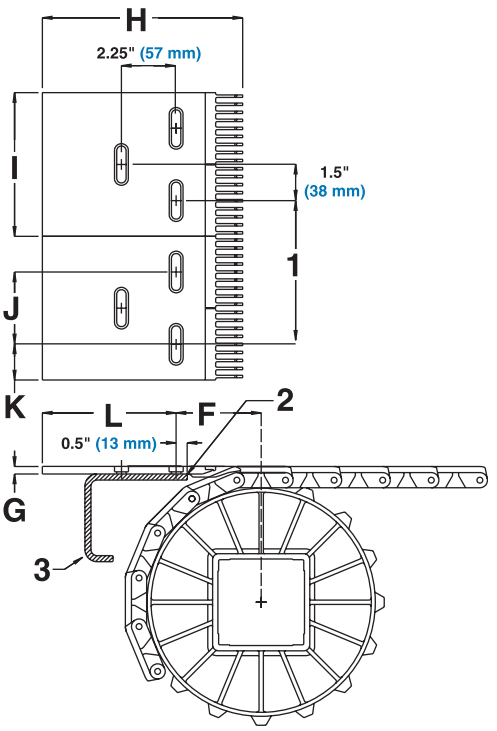
Note: Available in three different configurations:
Standard - long fingers with a short back plate.
Standard Extended Back - long fingers with an extended back plate
Glass Handling -
- Short fingers with extended back plate
- Short fingers/short back (Contact Customer Service for lead times.)
- Mid-Length Fingers/short back
- Mid-Length Fingers/extended back

The long fingers provide good support for unstable products like PET containers and cans. The short fingers are sturdy enough for even the harshest broken glass applications. These fingers are designed to resist breaking, but if confronted with deeply embedded glass, the individual fingers will yield and break off, preventing costly belt or frame damage. The short back plate has two attachment slots and the extended back plate has three attachment slots. Mounting hardware for the two standard two-material FTP's includes plastic shoulder bolts and bolt covers. Mounting hardware for the Glass Handling two-material FTP's includes stainless steel oval washers and bolts which gives more secure fastening for the tough glass applications (Glass Handling hardware is sold separately). Plastic bolt covers are also included. The 10.1 in. (257 mm) PD, 16 tooth sprockets are recommended to be used with the Glass Handling finger transfer plates for best product transfer.
Note: Intralox also offers a single-material polypropylene standard finger transfer plate for better chemical resistance. Mounting hardware for this FTP includes plastic shoulder bolts and snap-cap bolt covers.

Dimensional Requirements for Finger Transfer Plate Installations

	Two-Material							
	Standard Long Fingers - Short Back		Standard Long Fingers - Extended Back		Glass Handling Short Fingers - Extended Back		Glass Handling Mid-Length Fingers - Extended Back	
	in.	mm	in.	mm	in.	mm	in.	mm
F	3.50	89	3.50	89	3.50	89	3.50	89
G	0.31	8	0.31	8	0.31	8	0.31	8
H	7.25	184	10.75	273	8.26	210	9.04	230
I	5.91	150	5.91	150	5.91	150	5.91	150
J	3.00	76	3.00	76	3.00	76	3.00	76
K	1.45	37	1.45	37	1.45	37	1.45	37
L	2.00	51	5.50	140	5.50	140	5.50	140

Spacing at ambient temperature			
PP	5.952 in.	151.2 mm	
PE	5.933 in.	150.7 mm	



TWO-MATERIAL FINGER TRANSFER PLATES

Two-material glass handling finger transfer plate shown

1 - Spacing

2 - 0.5” (13 mm) Radius (leading edge of frame member)

3 - Frame member

Self-Clearing Finger Transfer Plates

Available Width		Number of Fingers	Available Materials
in.	mm		
6	152	18	Polyurethane

Note: The Self-Clearing Finger Transfer System consists of a finger transfer plate and a transfer edge belt that are designed to work together. This system eliminates the need for a sweeper bar, a pusher arm, or wide transfer plates. Transfers are smooth and 100% self-clearing, making right angle transfers possible for all container types. The Self-Clearing Finger Transfer System is ideal for warmer/cooler applications with frequent product changeovers and is compatible with any series and style of Intralox belt on the discharge and infeed conveyors. This system is bi-directional allowing the same transfer belt to be used for both left-hand and right-hand transfers.

Note: Self-Clearing Finger Transfer System is capable of transferring product to and from Intralox Series 400, Series 1200 and Series 1900 Raised Rib belts.

Note: Smooth, flat top surface provides excellent lateral movement of containers.

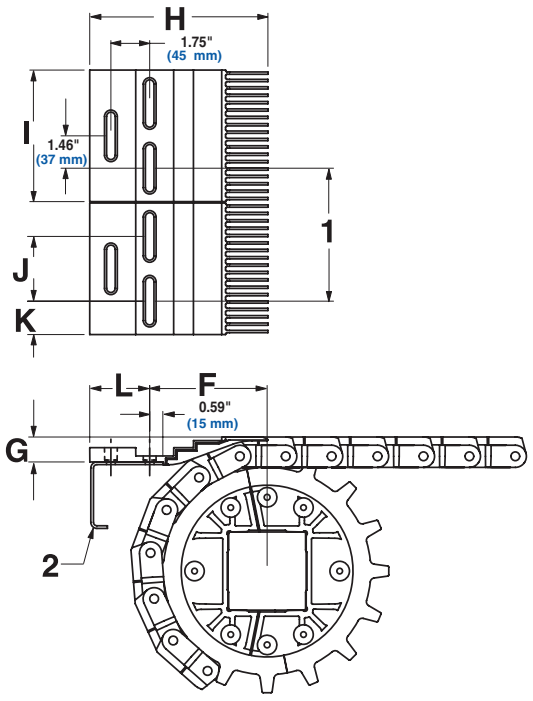
Note: Robust design for durability in tough glass applications.

Note: Finger Transfer Plates are easily installed and secured to mounting plates of any thickness with supplied stainless steel bolts and oval washers that allow movement with the belt’s expansion and contraction.

Note: Self-Clearing Transfer Edge Belt is molded with robust tracking tabs for belt support in heavy side-loading conditions. It has fully flush edges, headed rod retention system and nylon rods for superior wear resistance.

Dimensional Requirements for Self-Clearing Finger Transfer Plate Installations

	Self-Clearing	
	in.	**mm**
F	5.25	133
G	5.15	29
H	8.05	204
I	5.95	151
J	2.92	74
K	1.51	38
L	2.71	69
Spacing at ambient temperature		
PP	5.952 in.	151.2 mm
PE	5.933 in.	150.7 mm



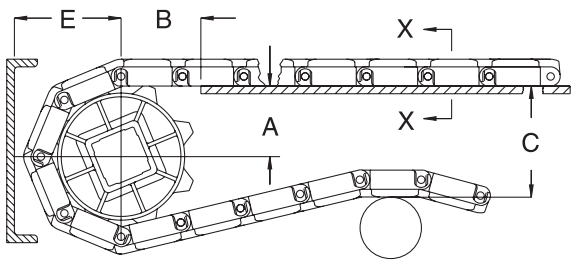
1 - Spacing

2 - Frame Member

Conveyor Frame Dimensions

Regardless of type or configuration, all conveyors using Intralox belts have some basic dimensional requirements. Specifically, dimensions "A", "B", "C" and "E" listed below should be implemented in any design.

For general applications and applications where end transfer of tip-sensitive product is not critical, use the "A" dimension at the bottom of the range.



A - ±0.031" (1 mm)
C - ± (Max)
B - ±0.125" (3 mm)
E - ± (Min)

Complete descriptions of the dimensions are listed on page 317.

Sprocket Description			A		B		C		E	
Pitch Diameter		No. Teeth	Range (Bottom to Top)		in.	mm	in.	mm	in.	mm
in.	mm		in.	mm						
SERIES 400 FLUSH GRID, FLAT TOP, OPEN HINGE										
4.0	102	6	1.42-1.69	36-43	2.20	56	4.10	104	2.38	60
5.2	132	8	2.10-2.30	53-58	2.60	66	5.30	135	2.99	76
5.8	147	9[a]	2.44-2.61	62-66	2.70	69	5.95	151	3.49	89
6.4	163	10	2.77-2.92	70-74	2.77	70	6.50	165	3.61	92
7.8	198	12	3.42-3.55	87-90	3.00	76	7.90	201	4.24	108
8.4	213	13[b]	3.75-3.87	95-98	3.22	82	8.46	215	4.74	120
10.1	257	16	4.72-4.81	120-122	3.20	81	10.20	259	5.50	140
SERIES 400 RAISED RIB										
4.0	102	6	1.42-1.69	36-43	2.20	56	4.10	104	2.75	70
5.2	132	8	2.10-2.30	53-58	2.60	66	5.30	135	3.24	82
6.4	163	10	2.77-2.92	70-74	2.77	70	6.50	165	3.99	101
7.8	198	12	3.42-3.55	87-90	3.00	76	7.90	201	4.49	114
10.1	257	16	4.72-4.81	120-122	3.20	81	10.20	259	5.88	149
SERIES 400 NON-SKID										
4.0	102	6	1.42-1.69	36-43	1.60	41	4.09	104	2.46	62
5.2	132	8	2.10-2.30	53-58	1.98	50	5.31	135	3.07	78
5.8	147	9	2.43-2.61	62-66	2.31	59	5.93	151	3.38	86
6.4	163	10	2.77-2.92	70-74	2.26	57	6.56	167	3.70	94
7.8	198	12	3.42-3.55	87-90	2.60	66	7.81	198	4.32	110
8.4	213	13	3.74-3.87	95-98	2.84	72	8.44	214	4.64	118
10.1	257	16	4.71-4.81	120-122	2.97	75	10.34	263	5.59	142
SERIES 400 ROLLER TOP, TRANSVERSE ROLLER TOP										
4.0	102	6	1.42-1.69	36-43	2.20	56	4.10	104	2.56	65
5.2	132	8	2.10-2.30	53-58	2.60	66	5.30	135	3.17	81
6.4	163	10	2.77-2.92	70-74	2.77	70	6.50	165	3.79	96
7.8	198	12	3.42-3.55	87-90	3.00	76	7.90	201	4.42	112
10.1	257	16	4.72-4.81	120-122	3.20	81	10.20	259	5.68	144
SERIES 400 0.85 IN. DIAMETER TRANSVERSE ROLLER TOP										
4.0	102	6	1.27-1.54	32-39	1.72	44	3.96	101	2.48	63
5.2	132	8	1.95-2.15	50-55	2.13	54	5.18	132	3.09	78

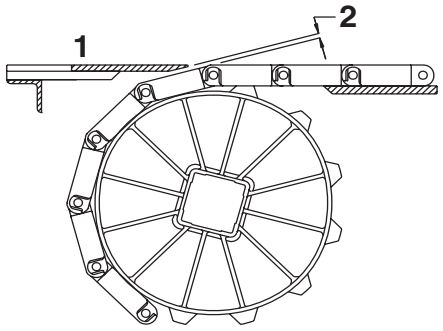
Sprocket Description			A		B		C		E	
Pitch Diameter		No. Teeth	Range (Bottom to Top)		in.	mm	in.	mm	in.	mm
in.	mm		in.	mm						
6.4	163	10	2.62-2.77	67-70	2.43	62	6.42	163	3.71	94
7.8	198	12	3.27-3.40	83-86	2.78	71	7.68	195	4.34	110
10.1	257	16	4.56-4.66	116-118	3.20	81	10.20	259	5.60	142
SERIES 400 ANGLED ROLLER (0°, 30°, 45° AND 60°)[b]										
4.0	102	6	1.29-1.56	33-40	1.70	43	4.00	102	2.50	64
5.2	132	8	1.98-2.18	50-55	2.11	53	5.23	133	3.11	79
6.4	163	10	2.64-2.80	67-71	2.40	61	6.47	164	3.74	95
7.8	198	12	3.29-3.43	84-87	2.75	70	7.73	196	4.36	111
10.1	257	16	4.59-4.69	117-119	3.16	80	10.25	260	5.63	143
SERIES 400 BALL BELT[b]										
4.0	102	6	1.23-1.50	31-38	1.75	44	4.00	102	2.56	65
5.2	132	8	1.91-2.11	49-54	2.16	55	5.23	133	3.18	81
6.4	163	10	2.58-2.74	65-69	2.47	63	6.47	164	3.80	96
7.8	198	12	3.23-3.36	82-85	2.82	72	7.73	196	4.43	112
10.1	257	16	4.53-4.63	115-117	3.25	82	10.25	260	5.69	144

a. Flush Grid Acetal only.
b. Dimensions are established using the top of the roller as the top of the belt and the bottom of the roller as the bottom of the belt.

Dead Plate Gap

Where there is a transfer point from a belt without finger transfer plates to a dead plate, there should be a gap between the surfaces to allow for the chordal action of the belt. As the belt engages its sprockets, chordal action causes the modules to move past a *fixed* point (the tip of the dead plate) with *varying* clearances. The table below shows the minimum amount of gap which occurs at the "low point" of the modules if the tip of the dead plate just comes in contact with the "high point" as the modules pass.

In some installations it may be desirable to keep the tip of the dead plate in contact with the belt, rather than allow a gap to occur. This can be done by hinging the mounting bracket for the dead plate. This allows the dead plate to move as the modules pass, but results in a small oscillating motion which may present tippage problems for sensitive containers or products.



1 - Top surface of dead plate **2 -** Dead plate gap

Note: The top surface of the dead plate is typically 0.031 in. (0.8 mm) above the belt surface for product transfer onto the belt, and 0.031 in. (0.8 mm) below the belt surface for product transfer off the belt.

Sprocket Description			Gap	
Pitch Diameter		No. Teeth	in.	mm
in.	mm			
4.0	102	6	0.268	6.8
5.2	132	8	0.200	5.1
5.8	147	9 (Flush Grid Acetal)	0.178	4.5
6.4	163	10	0.160	4.1
7.8	198	12	0.130	3.3
8.4	213	13 (Flush Grid Acetal)	0.121	3.1
10.1	257	16	0.100	2.5