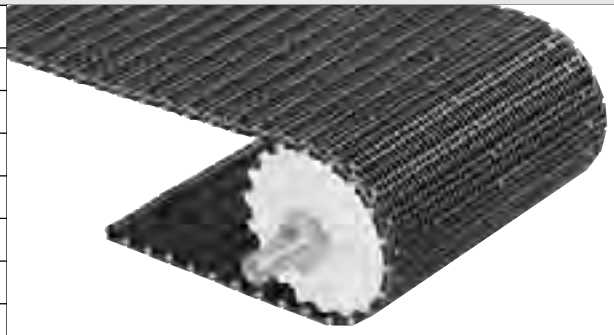
Flush Grid

	in.	mm
Pitch	1.00	25.4
Minimum Width	1.5	38
Width Increments	0.25	6.4
Opening Size (approximate)	0.2 × 0.2	5 × 5
Open Area	31%	
Hinge Style	Open	
Drive Method	Center-driven	

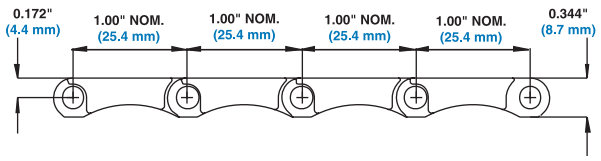


Product Notes

- **Always check with Customer Service for precise belt width measurement and stock status before designing a conveyor or ordering a belt.**
- Lightweight, relatively strong belt with smooth upper surface.
- Smaller pitch reduces chordal action and transfer dead plate gap.
- For more material selections and stronger belt performance, see Series 900 and Series 1100 Flush Grid styles.

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)



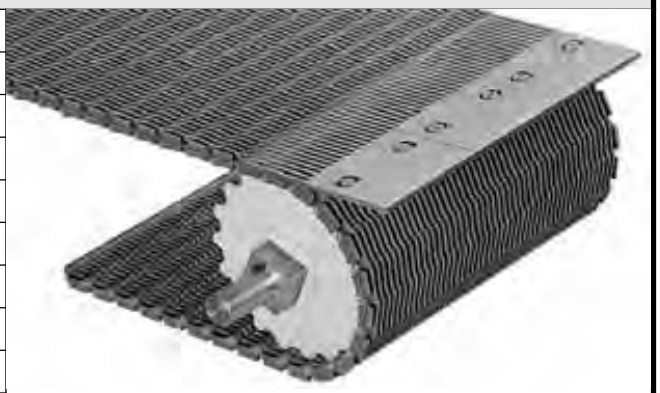
Belt Data

Belt Material	Standard Rod Material Ø 0.18 in. (4.6 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-FSIS - Meat & Poultry	USDA Dairy[a]	CFA[b]	A[c]	J[d]	EU MC[e]
Polypropylene	Polypropylene	300	450	34 to 220	1 to 104	0.54	2.64	•	•		•		3	•
Polyethylene	Polyethylene	200	300	-50 to 150	-46 to 66	0.58	2.83	•	•		•		3	•
Acetal	Polypropylene	600	890	34 to 200	1 to 93	0.78	3.81	•	•		•		3	•
EC Acetal	Polypropylene	400	595	34 to 200	1 to 93	0.78	3.81							
Acetal[f]	Polyethylene	550	820	-50 to 70	-46 to 21	0.78	3.81	•	•		•		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.
f. Polyethylene rods can be used in cold applications when impacts or sudden starts/stops occur. Please note lower rating.

Raised Rib

	in.	mm
Pitch	1.00	25.4
Minimum Width	1.5	38
Width Increments	0.25	6.4
Opening Size (approximate)	0.2 × 0.2	5 × 5
Open Area	31%	
Product Contact Area	28%	
Hinge Style	Open	
Drive Method	Center-driven	

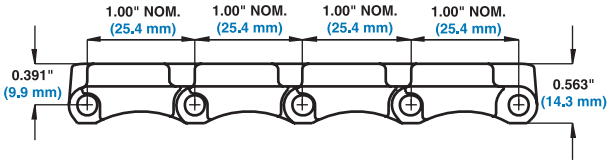


Product Notes

- **Always check with Customer Service for precise belt width measurement and stock status before designing a conveyor or ordering a belt.**
- Smooth upper surface with closely spaced ribs can be used with Finger Transfer Plates, eliminating product tippage and hang-ups.
- For more material selections and stronger belt performance, see Series 900 Raised Rib.

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 0.18 in. (4.6 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-FSIS - Meat & Poultry	USDA Dairy[a]	CFA[b]	A[c]	J[d]	EU MC[e]
Polypropylene	Polypropylene	300	450	34 to 220	1 to 104	0.82	4.00	•	•		•		3	•
Polyethylene	Polyethylene	200	300	-50 to 150	-46 to 66	0.88	4.29	•	•		•		3	•
Acetal	Polypropylene	600	890	34 to 200	1 to 93	1.20	5.86	•	•		•		3	•
Acetal[f]	Polyethylene	550	820	-50 to 70	-46 to 21	1.20	5.86	•	•		•		3	•

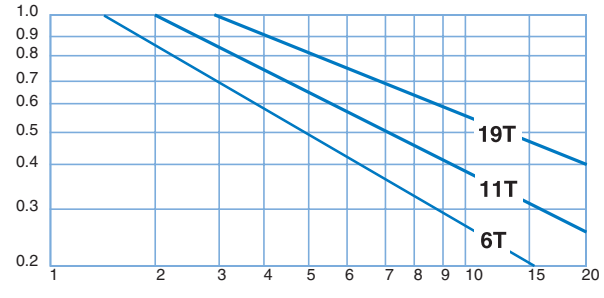
a. USDA Dairy acceptance requires the use of a clean-in-place-system.
b. Canada Food Inspection Agency
c. Australian Quarantine Inspection Service
d. Japan Ministry of Health, Labour, and Welfare
e. European Migration Certificate providing approval for food contact according to EU Directive 2002/72/EC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

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	3	2
8	203	2	3	2
10	254	2	3	2
12	305	3	3	2
14	356	3	4	3
15	381	3	4	3
16	406	3	4	3
18	457	3	4	3
20	508	5	5	3
24	610	5	5	3
30	762	5	6	4
32	813	7	7	4
36	914	7	7	4
42	1067	7	8	5
48	1219	9	9	5
54	1372	9	10	6
60	1524	11	11	6
72	1829	13	13	7
84	2134	15	15	8
96	2438	17	17	9
120	3048	21	21	11
144	3658	25	25	13
For Other Widths, Use Odd Number of Sprockets[c] at Maximum 6 in. (152 mm) ℄ Spacing			Maximum 6 in. (152 mm) ℄ Spacing	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. Belts are available in 0.25 in. (6.4 mm) increments beginning with minimum width of 1.5 in. (38 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.

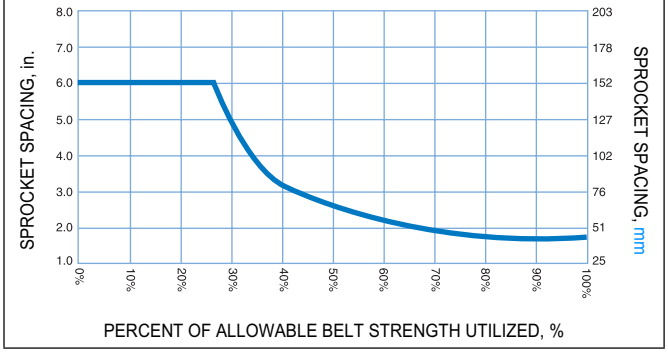
S Strength Factor



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

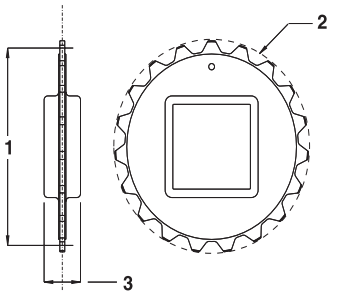
Divide belt speed "V" by the shaft ℄ distance "L". Strength Factor is found at intersection of speed/length ratio and appropriate sprocket line. See page 36 for more information.

Sprocket Spacing as a Function of Belt Strength Utilized



Sprocket Data

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
6 (13.40%)	2.0	51	2.1	53	0.75	19		1.0		
11 (4.05%)	3.5	89	3.7	94	0.75	19		1.0		40
								1.5		
19 (1.36%)	6.1	155	6.3	160	1.25	32		1.5		40
								2.5		60



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

Split Sprockets

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
11 (4.05%)	3.5	89	3.7	94	1.5	38		1.5		40
19 (1.36%)	6.1	155	6.3	160	1.5	38		1.5		40
								2.5		60
										65

Streamline/No-Cling Flights

Available Flight Height		Available Materials
in.	mm	
1.5	38	Polypropylene, Polyethylene, Acetal

Note: Flights can be cut down to any height required for a particular application.
Note: No fasteners are required.
Note: One side of the flight is smooth (Streamline) while the other is ribbed vertically (No-Cling).
Note: Flights can be provided in linear increments of 1 in. (25 mm).
Note: The minimum indent (without sideguards) is 0.5 in. (13 mm).

Sideguards

Available Sizes		Available Materials
in.	mm	
2	51	Polypropylene, Polyethylene, Acetal

Note: Sideguards are used with Flush Grid belts to assure product containment, they are of the standard overlapping design, and are an integral part of the belt, fastened by the hinge rods.
Note: The minimum indent is 0.75 in. (19 mm).
Note: The standard gap between the sideguards and the edge of a flight is 0.06 in. (2 mm).
Note: When going around the 6 and 11 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 wrapping around the 19 tooth sprocket.

Finger Transfer Plates

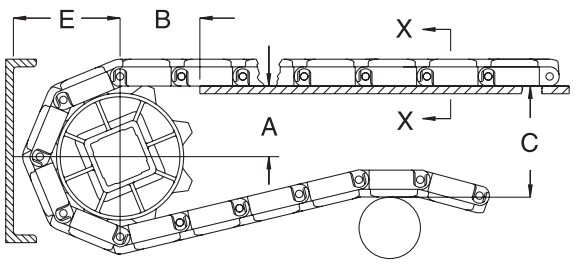
Available Widths		Number of Fingers	Available Materials
in.	mm		
4	102	16	Acetal

Note: Designed to be used with Series 100 Raised Rib belts to eliminate product transfer and tipping problems.
Note: The fingers extend between the belt's ribs allowing a smooth continuation of the product flow as the belt engages its sprockets.
Note: Finger Transfer Plates are installed easily on the conveyor frame with conventional fasteners.

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)

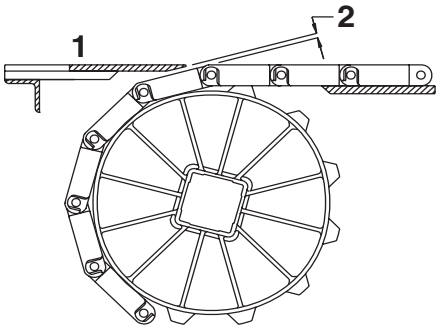
Complete descriptions of the dimensions are listed on page 317.

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 100 FLUSH GRID										
2.0	51	6	0.69-0.83	18-21	1.30	33	2.10	53	1.24	31
3.5	89	11	1.53-1.60	39-41	1.70	43	3.60	91	2.01	51
6.1	155	19	2.82-2.87	72-73	2.20	56	6.20	157	3.30	84
SERIES 100 RAISED RIB										
2.0	51	6	0.69-0.83	18-21	1.30	33	2.10	53	1.45	37
3.5	89	11	1.53-1.60	39-41	1.70	43	3.60	91	2.23	57
6.1	155	19	2.82-2.87	72-73	2.20	56	6.20	157	3.52	89

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			
2.0	51	6	0.134	3.4
3.5	89	11	0.073	1.9
6.1	155	19	0.041	1.0