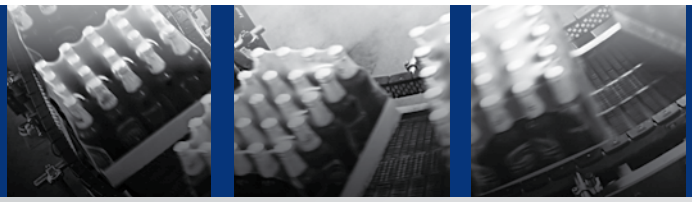
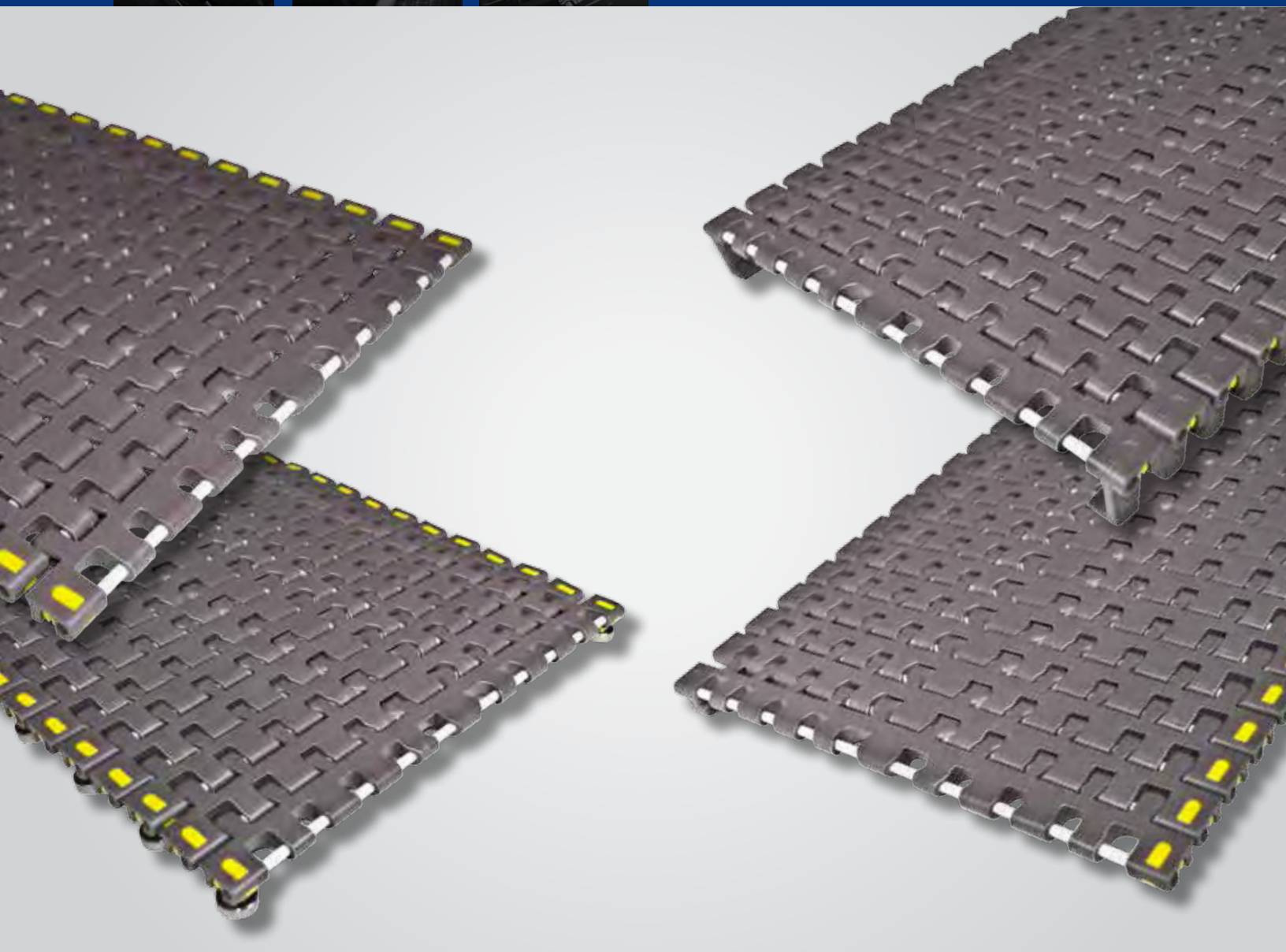
REXNORD

7956 Series MatTop Chains





Contents

Safety Considerations

Product Safety

Products designed and manufactured by Rexnord are to be used in a safe manner—but Rexnord cannot warrant their safety under all circumstances. Purchaser must install and use products in a safe and lawful manner in compliance with applicable health and safety regulations, laws and general standards of reasonable care. If purchaser fails to do so, purchaser shall indemnify Rexnord from any loss, cost or expense resulting directly or indirectly from such failure.

Safety Devices

Products are provided with only safety devices identified herein. It is the responsibility of the purchaser to furnish appropriate guards for machinery parts in compliance with MSHA or OSHA standards, as well as any other safety devices desired by purchaser and/or required by law. If purchaser fails to do so, purchaser shall indemnify Rexnord from any loss, cost or expense resulting directly or indirectly from such failure.

7956 MatTop Chain Introduction

Superior Performance in Case Handling Applications

Rexnord® 7956 Series MatTop® chains are designed for conveying the industry's most demanding applications. These chains provide numerous benefits to the designer, fabricator and the end user including:

- **Reduced total system cost through the ability of longer runs on a single drive**
- **Flexibility in applications and ease of setup based on the retention features of the chain**
- **Excellent product handling and low operational cost based on proven Rexnord MatTop design**

Available in 6-inch (152.4mm), 12-inch (304.8mm), 15-inch (381.0mm), 18-inch (457.2mm), 24-inch (609.6mm) and 30-inch (762.0mm) widths. Rexnord's 7956 Series chains are ideal for case handling applications as a substitute for roller, skate wheel and powered roller conveyors. The 15-inch (381.0mm) wide chain is also a good substitute for dual-lane conveyors currently using 7.5-inch (19.1mm) wide TableTop® Chains. Available sprocket sizes; 16 and 26 tooth.

Rexnord 7956 Series MatTop Chains Retention Types:

7956B

7956GT

7956NT

7956TAB

Each of these retention designs have specific applications appropriate for optimum performance.

This manual outlines criteria for selecting the proper version of chain including; chain dimensions, basic conveyor design considerations and installation recommendations. Following the suggestions outlined in this manual, you will be ensured of proper operation of your conveyor providing optimal product handling and chain life. Information specific to the Rexnord 7956 MatTop chains should be used in conjunction with the Rexnord Engineering manual (8rxEM-en).

Chain Selection

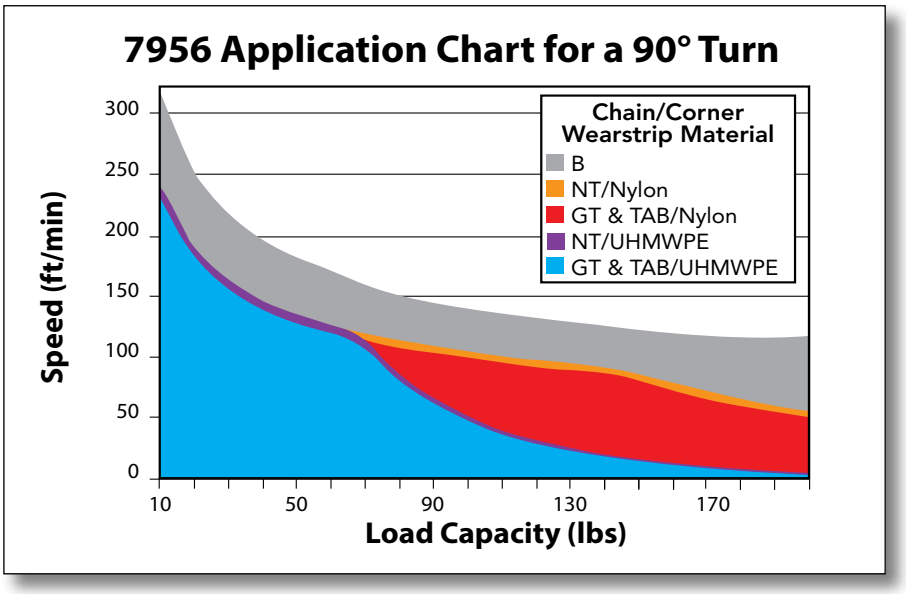
Selection Criteria

The 7956 Series MatTop chains can handle **medium-duty** applications requiring a side-flex chain. Choosing the appropriate chain is based on two criteria:

- The length of pull to be accomplished by the chain, determined by the chain's strength and the type of retention needed — B, GT, NT and TAB.
- Special handling characteristics around the curve

First, determine whether a bearing is required for the length of pull

The table below shows the acceptable range for different chain types. For applications requiring the use of 7956B chain, a carbon steel bearing (requiring no service or lubrication) is standard. Stainless steel bearings are available on a MTO (Made-to-Order) basis for applications subject to high-pressure wash down or soap and water lubrication.



Secondly, review the application to determine if any of the following special requirements apply:

Rexnord 7956B MatTop Chain:

- Increase conveyor length and speed
- Bearing placement on outside edge of chain translates sliding friction to rolling fiction eliminating PV limits

Rexnord 7956GT MatTop Chain:

- Sliding packages on/off the chain from the side is needed
- Cleaning under the chain in the corner is required

Rexnord 7956NT MatTop Chain:

- Capturing the chain on both the inside and outside is needed
- The configuration of the wear surface restricts the use of hold down TABs or interference with TABs or bearings
- The size or configuration of the support structure will not allow for the bearing or TAB

Rexnord 7956TAB MatTop Chain:

- Balanced eye design delivers the same strength rating in curves at recommended side-flex radius in the straights
- Ideal for medium-duty case conveying applications

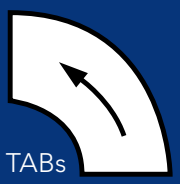
Chain Selection

Specifying and Part Number Nomenclature

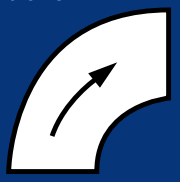
HP7956B-15-CCW

STANDARD Chain Material:	CHAIN STYLE:	CHAIN WIDTHS:	TURN DIRECTION:
HP™- (High Performance Material)	**7956B** – Bearing	6 in(152.4mm)	Bearings (B) or TABs are always on the outside of the curve
MTO (Made-to-Order) Chain Material:	**7956GT** – Guide TAB	12 in(304.8mm)	
BWR-(Black Wear Resistant)	**7956NT** – No TAB	15 in(381.0mm)	
WX -(Green Abrasion Resistant Polyamide)	**7956TAB** – TAB	18 in(457.2mm)	
PS® -(Platinum Series® Silver)		24 in(609.6mm)	
		30 in(762.0mm)	

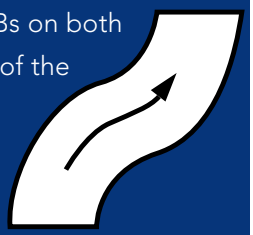
Counter-Clockwise (CCW) – Bearings or TABs on the right side of the chain, viewing in the direction of travel



Clockwise (CW) – Bearings or TABs on the left side of the chain, viewing in the direction of travel



S-Turn – Bearings or TABs on both sides of the chain



Carry Section Wearstrips

General Recommendation for Corners and Straights

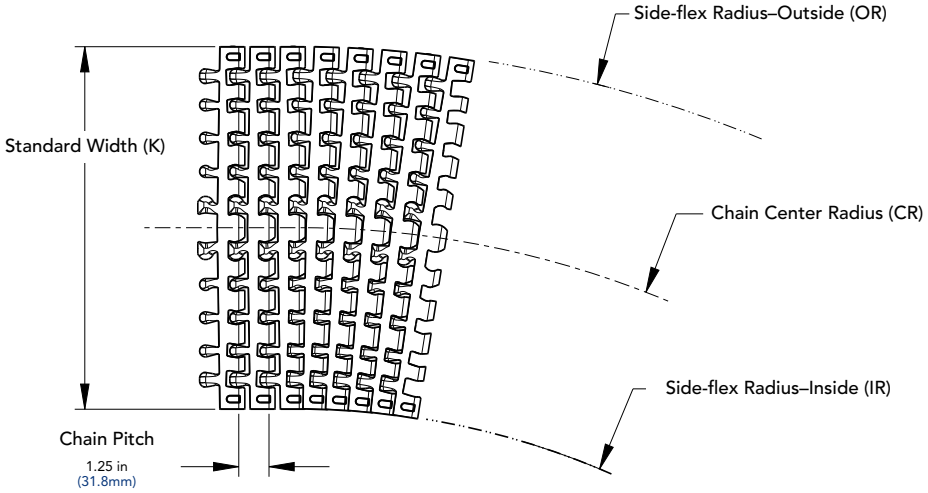
- UHMWPE (Ultra High Molecular Weight Polyethylene) wearstrips are recommended
- Nylatron® wearstrips may be used in the corners for improved performance if required
- Recommended wearstrip thickness is 0.75-inch (19.05mm) minimum (thicker wearstrips can be used where applicable) (see page 8)
- All sharp edges of wearstrips, including corner tracks, should be chamfered to ensure smooth chain movement. Recommended contact surface finish of wearstrips is 32 to 125 µ-in Ra (0.8 to 3.2 µ-m Ra) for best wear performance
- Contact surfaces of straight and corner sections should contain a lead-in or chamfer for a smooth transition
- If additional center wearstrips are required due to product loading, they should be staggered or offset to minimize chain wear

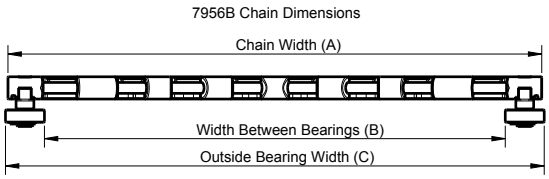
Refer to the Engineering Manual (8rxem-en-MT-20, MT-82) for more details on carry and return ways

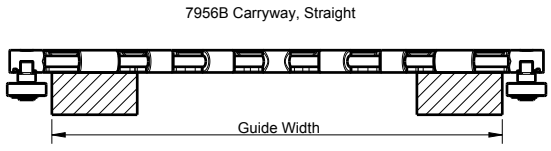
Chain Selection

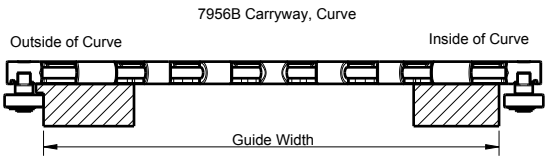
Basic Chain Dimensions

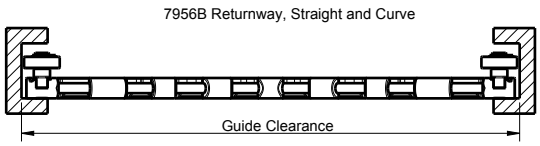
7956B, 7956GT, 7956NT and 7956TAB MatTop Chain Minimum Side-Flex Radii							
Standard Width (K)		Side-flex Radius Inside (IR)		Chain Center Radius (CR)		Side-flex Radius Outside (OR)	
inch	mm	inch	mm	inch	mm	inch	mm
6	152	12	305	15.0	381	18	457
12	305	24	610	30.0	762	36	914
15	381	30	762	37.5	953	45	1143
18	457	36	914	45.0	1143	54	1372
24	610	48	1219	60.0	1524	72	1829
30	762	60	1524	75.0	1905	90	2286











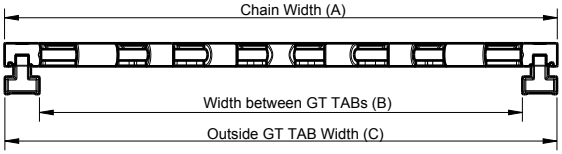
7956B

Chain Width "A"				Carryway wearstrip quantities and locations			Width between bearings "B"		Outside bearing width "C"		Recommended Guide width, carryway, straights and curves		Recommended Guide clearance, returnway, straights and curves	
Nominal		Actual		Inside	Middle	Outside	inch	mm	inch	mm	inch	mm	inch	mm
inch	mm	inch	mm											
6	152	6.00	152.4	1	0	0	4.41	112.0	6.16	156.5	4.22	107.2	6.34	161.0
12	305	11.98	304.3	1	1	1	10.35	262.9	12.10	307.3	10.16	258.1	12.28	311.9
15	381	14.92	379.0	1	1	1	13.22	335.8	14.97	380.2	13.03	331.0	15.16	385.1
18	457	17.99	456.9	1	2	1	16.27	413.3	18.02	457.7	16.09	408.7	18.22	462.8
24	610	23.97	608.8	1	3	1	22.26	565.4	24.01	609.9	22.06	560.3	24.19	614.4
30	762	29.96	761.0	1	3	1	28.36	720.3	30.11	764.8	28.16	715.3	30.28	769.1

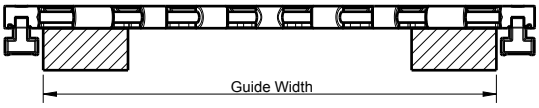
Chain Selection

Basic Chain Dimensions

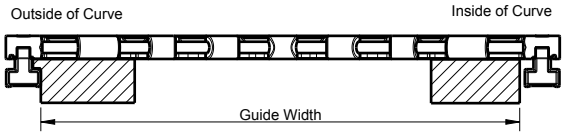
7956GT Chain Dimensions



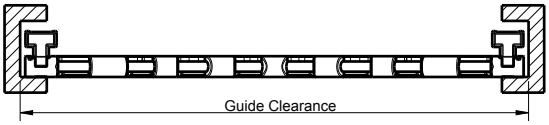
7956GT Carryway, Straight



7956GT Carryway, Curve



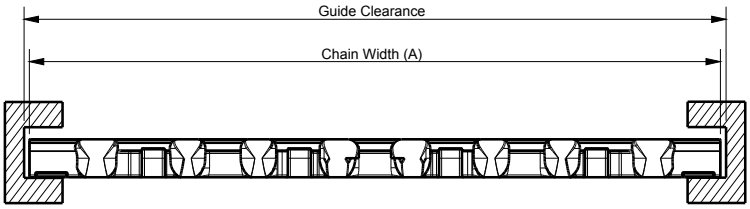
7956GT Returnway, Straight and Curve



7956GT

Chain Width "A"				Carryway wearstrip quantities and locations			Width between GT TABs "B"		Outside GT TAB width "C"		Recommended Guide width, carryway, straights and curves		Recommended Guide clearance, returnway, straights and curves	
Nominal		Actual		Inside	Middle	Outside	inch	mm	inch	mm	inch	mm	inch	mm
inch	mm	inch	mm											
6	152	5.99	152.1	1	0	0	4.53	115.1	6.04	153.4	4.34	110.2	6.22	158.0
12	305	11.99	304.5	1	1	1	10.48	266.2	11.99	304.5	10.28	261.1	12.19	309.6
15	381	14.92	379.0	1	1	1	13.32	338.3	14.83	376.7	13.13	333.5	15.13	384.3
18	457	18.00	457.2	1	2	1	16.39	416.3	17.90	454.7	16.19	411.2	18.19	462.0
24	610	23.97	608.8	1	3	1	22.36	567.9	23.86	606.0	22.16	562.9	24.16	613.7
30	762	29.96	761.0	1	3	1	28.49	723.6	30.00	762.0	28.28	718.3	30.19	766.8

7956NT - Carryway and Returnway, straights and curves



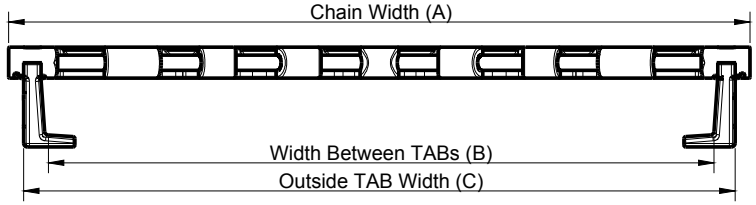
7956NT

Chain Width "A"				Carryway wearstrip qauntities and locations			Recommended Guide clearance, carryway and returnway, straights and curves	
Nominal		Actual		Inside	Middle	Outside	inch	mm
inch	mm	inch	mm					
6	152	5.99	152.1	1	0	0	6.19	157.2
12	305	11.99	304.5	1	1	1	12.16	308.9
15	381	14.92	379.0	1	1	1	15.09	383.3
18	457	17.99	456.9	1	2	1	18.19	462.0
24	610	23.97	608.8	1	3	1	24.16	613.7
30	762	29.96	761.0	1	3	1	30.16	766.1

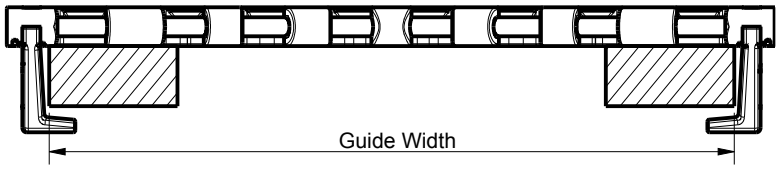
Chain Selection

Basic Chain Dimensions

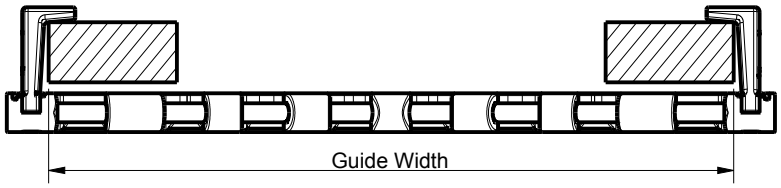
7956TAB Chain Dimensions



7956TAB - Carryway, straight and curve



7956TAB - Returnway, Straight and Curve



7956TAB

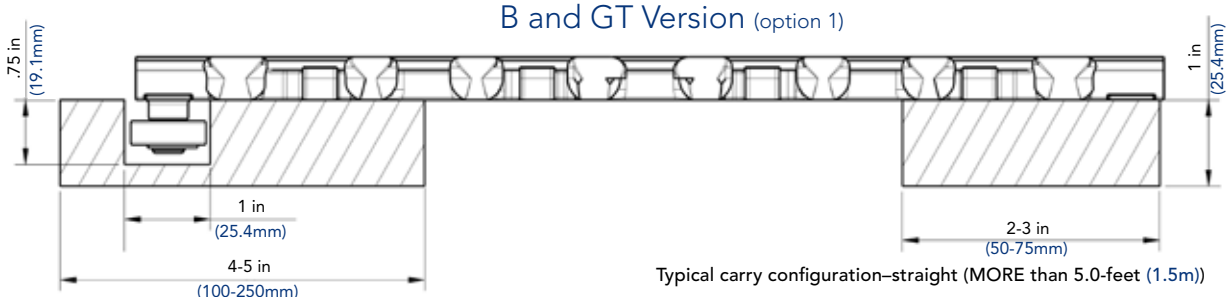
Chain Width "A"				Carryway wearstrip quantities and locations			Width between TABs"B"		Outside TAB width "C"		Recommended Guide width, carryway and returnway, straights and curves	
Nominal		Actual		Inside	Middle	Outside	inch	mm	inch	mm	inch	mm
inch	mm	inch	mm									
6	152	5.99	152.1	1	0	0	4.90	124.5	5.58	141.8	4.72	119.9
12	305	11.98	304.3	1	1	1	10.85	275.6	11.53	292.9	10.66	270.8
15	381	14.92	379.0	1	1	1	13.69	347.7	14.37	365.0	13.50	342.9
18	457	18.00	457.2	1	2	1	16.76	425.7	17.44	443.0	16.56	420.6
24	610	23.98	609.1	1	3	1	22.74	577.6	23.42	594.9	22.53	572.3
30	762	29.97	761.2	1	3	1	28.81	731.8	29.49	749.1	28.63	727.2

Carry Section Wearstrips

Edge Guide Dimensions in Straights

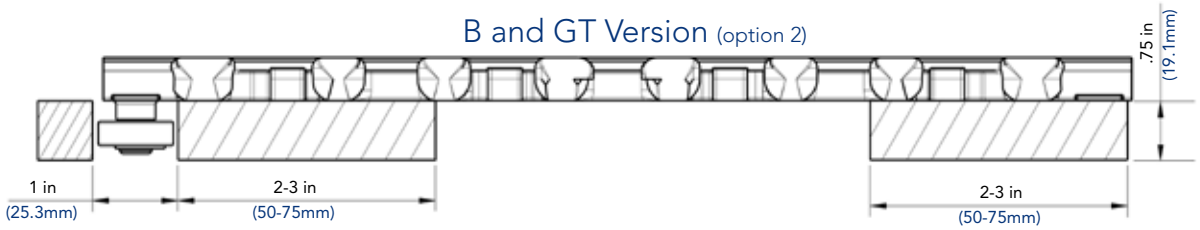
7956 MatTop Series chains must be retained in the straight as shown if the section is more than 5-feet (1.5m) long. Chain guides are needed to stop the chain from moving side-to-side. If the distance in the straight is less than 5-feet (1.5m), the tension in the chain will keep it straight.

B and GT Version (option 1)

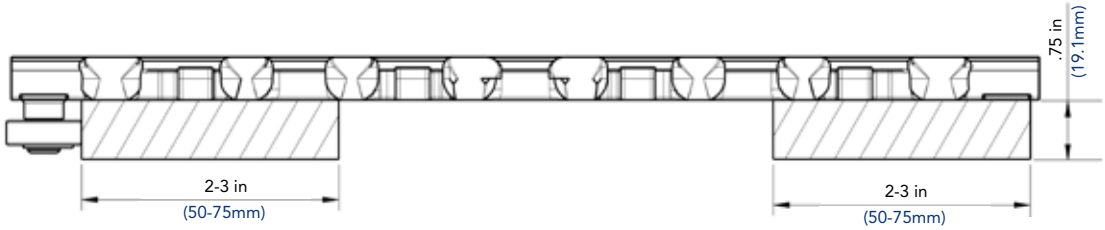


Typical carry configuration–straight (MORE than 5.0-feet (1.5m))

B and GT Version (option 2)

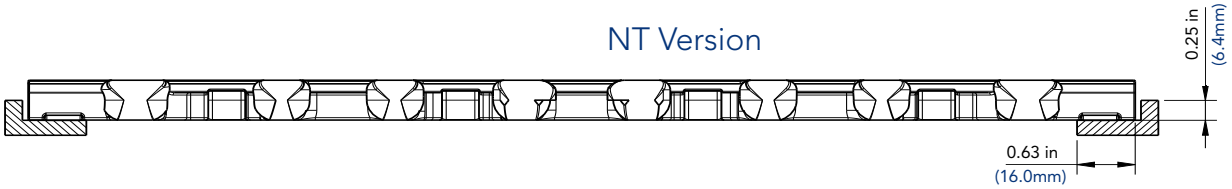


Typical carry configuration–straight (MORE than 5.0-feet (1.5m))



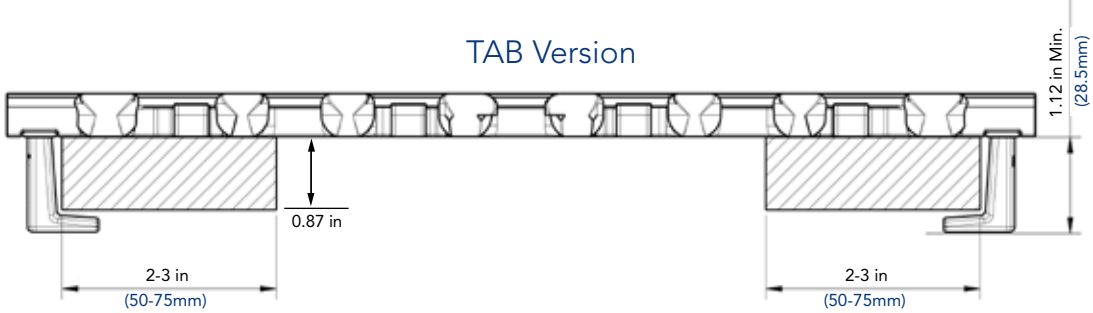
Typical carry configuration–straight (LESS than 5.0-feet (1.5m))

NT Version



7956NT MatTop chain must be retained with edge guide through the entire straight as shown

TAB Version

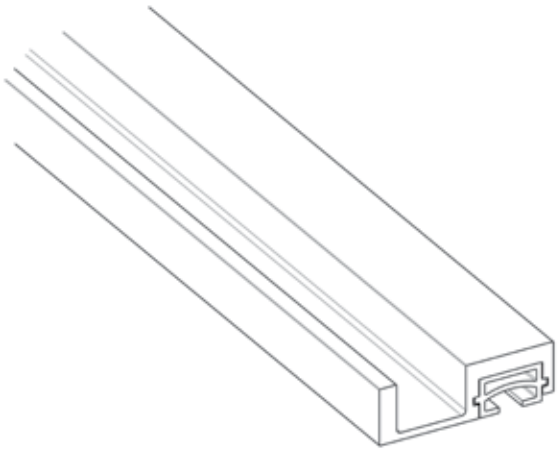


Typical carry configuration–straight (MORE than 5.0-feet (1.5m))

Carry Section Wearstrips

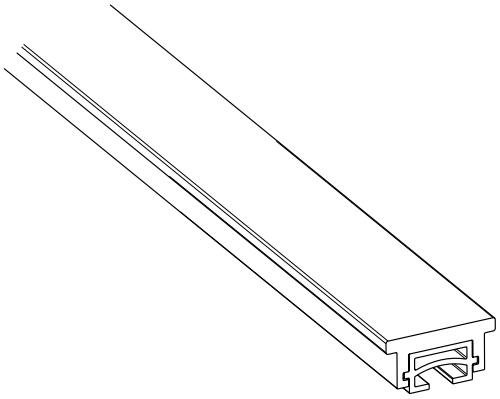
Straight Running Styles

7956B, 7956GT, 7956NT and 7956TAB MatTop chain styles must be retained in the straights and curves with either a Rexnord Edge Guide (shown below) or an edge guide manufactured as shown below.



Extruded 7956 Straight Guide

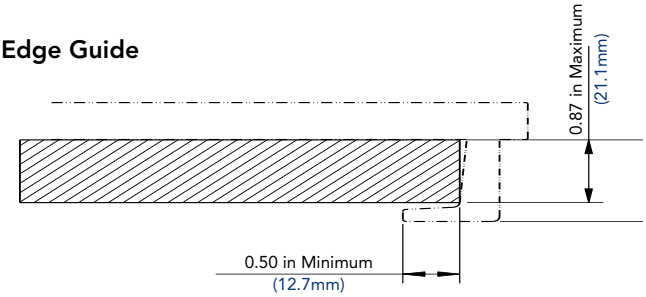
- For use with 7956B and 7956GT chains
- Extruded anodized aluminum rail for strength
- Extruded UHMWPE strips for improved friction
- Mounts with standard carriage bolts
- Designed for smooth and quiet operation
- Sold in 10-feet (3.05m) sections



Extruded 7956 Curve Guide/Wearstrip

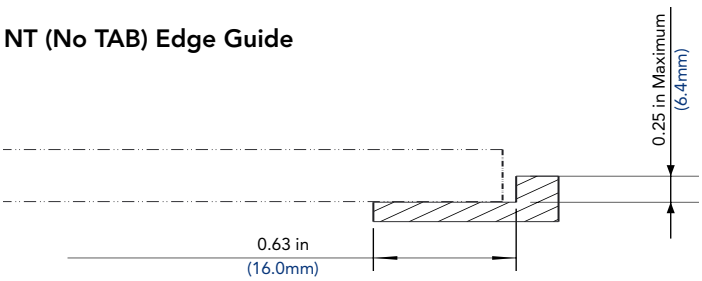
- For use with 7956B and 7956GT MatTop chains
- Extruded anodized aluminum rail for strength
- Extruded UHMWPE strips for improved wear
- Mounts with standard carriage bolts
- Designed for smooth and quiet operation
- Sold in 10-feet (3.05m) sections
- Note: Curve guides are bent to match specific radius
- Contact Application Engineering for information needed to order curve sections

TAB Edge Guide



7956TAB MatTop chain must be retained in straights and corners under the wearstrip as shown.

NT (No TAB) Edge Guide

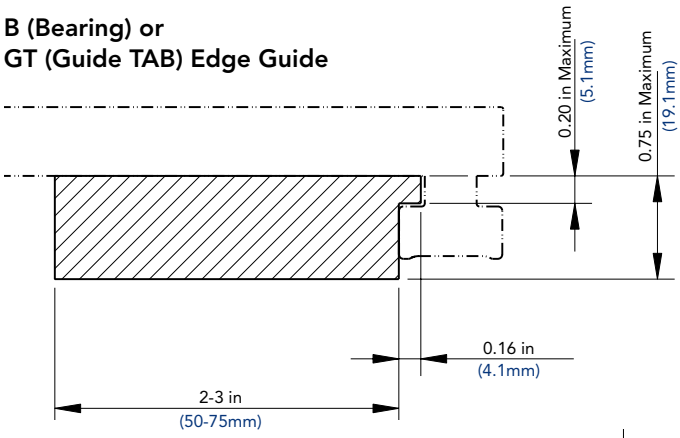


7956NT chain straights must be retained in the straight sections using the wearstrip as shown

Carry Section Wearstrips

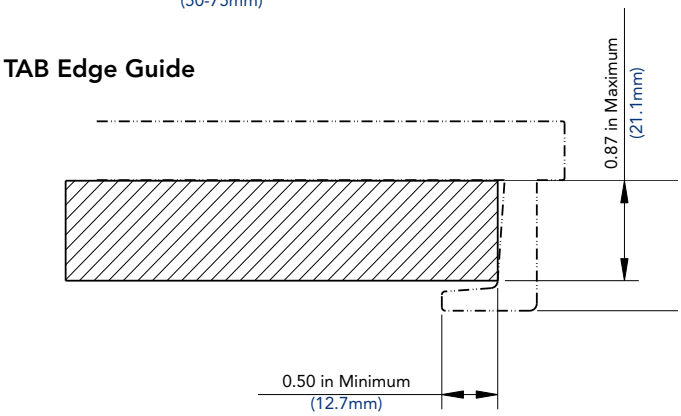
Corner Wearstrip Style Options

B (Bearing) or GT (Guide TAB) Edge Guide



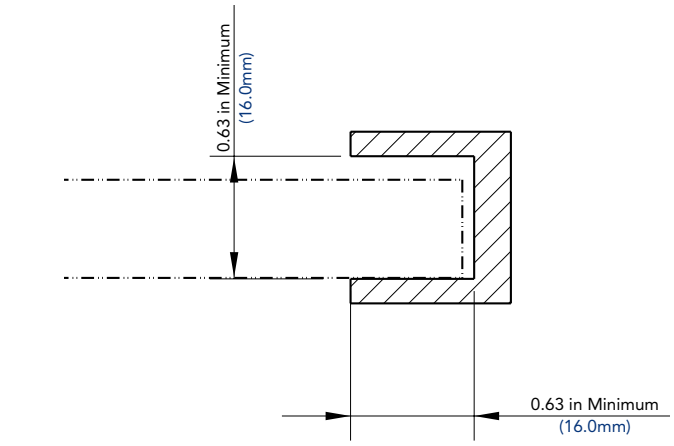
7956B and 7956GT MatTop chain styles must be retained in the corner with the edge guide as shown. The 7956B or 7956GT attachment is retained under the lip during operation.

TAB Edge Guide



7956TAB MatTop chain must be retained in straights and corners under the wearstrip as shown.

NT (No TAB) or C (Channel) Edge Guide

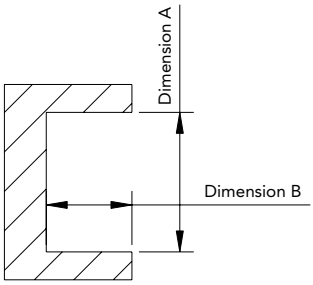


7956NT MatTop chain must be retained in the corner with a pair of edge guides as shown.

Return Section Wearstrips

Curves and Straights

C-Channel Return Profile 7956B, 7956GT, and 7956NT

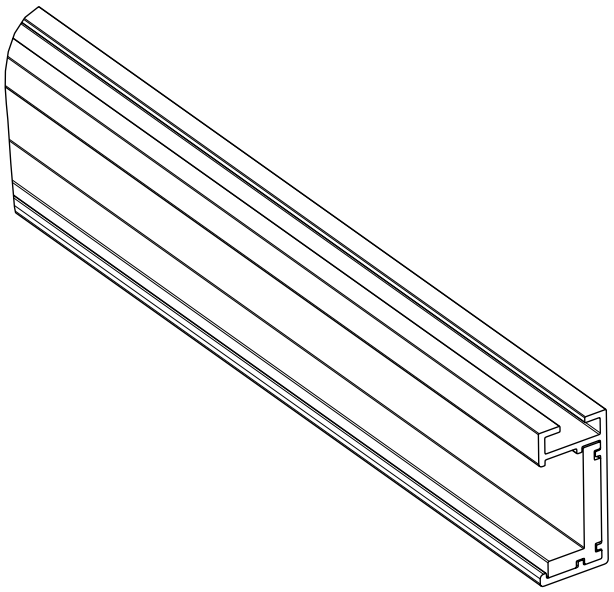


Chain Number	C-Channel Return Wearstrip Dimensions			
	Dimension A (in)	Dimension A (mm)	Dimension B (in)	Dimension B (mm)
7956B, 7956GT	1.25+/-0.03	31.8+/-0.8	0.63+/-0.13	16.0+/-3.30
7956NT	0.63+/-0.03	16.0+/-0.8	0.63+/-0.13	16.0+/-3.30

Note: For 7956NT, this C-Channel profile can be used in carry & return.

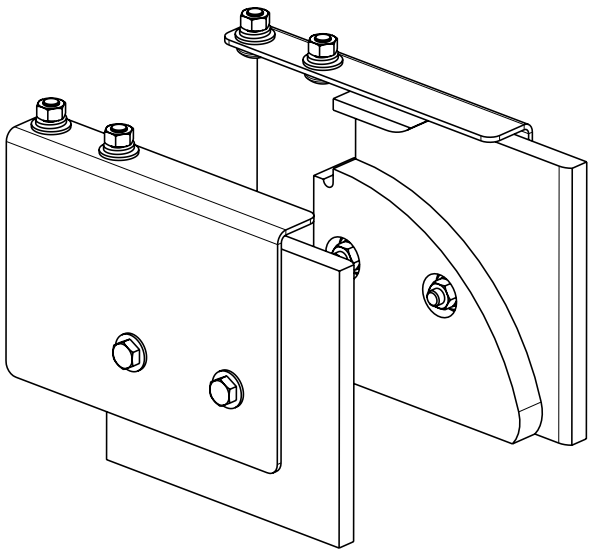
Return Section Wearstrips

Curves and Straights



Extruded Rexnord 7956 Return Guide

- For use with all Rexnord MatTop chains
- Extruded anodized aluminum rail for strength
- Extruded UHMWPE strips for improved wear
- Mounts with standard carriage bolts
- Designed for smooth and quiet operation
- Sold in 10-feet (3.05m) sections
- Note: Curve guides are bent to match specific radius
- Contact Application Engineering for information needed to order curve sections



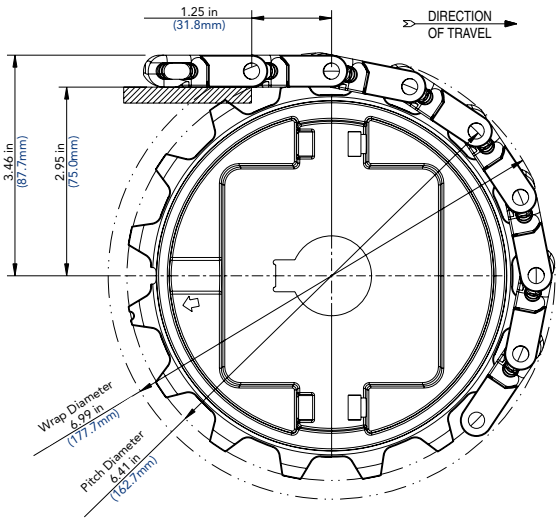
Return Shoe Assembly

- For use with most Rexnord MatTop Chains
- Guides chain into extruded return guides
- UHMWPE shoe for smooth and quiet operation
- Includes mounting hardware for easy mounting to end of return guides
- Sold in pairs

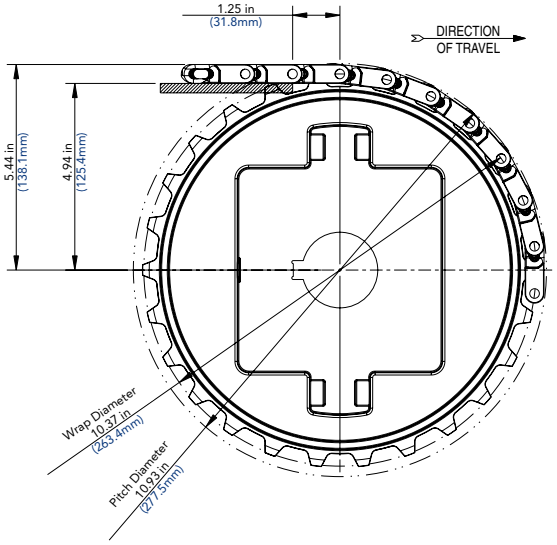
Drive and Idler

Sprocket Dimensions and Installation Notes

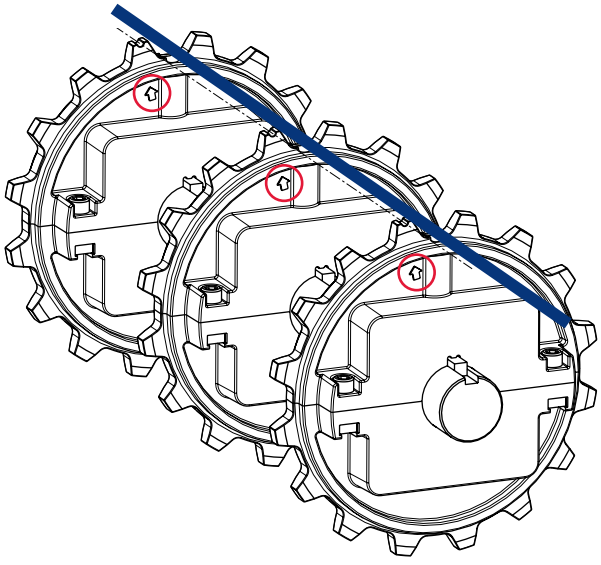
Sprocket to wearstrip dimensions are shown below



7956 on NS7956-16T Sprocket

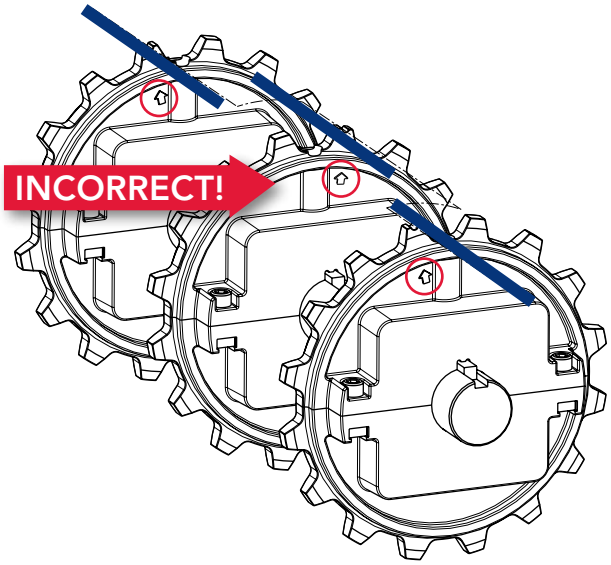


7956 on NS7956-26T Sprocket



Sprockets Installed CORRECTLY!

"Alignment timing notches are in line."



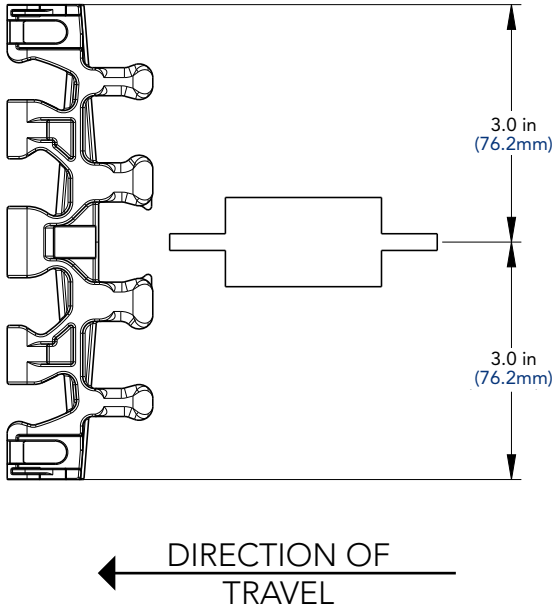
Sprockets Installed INCORRECTLY!

Drive and Idler Sprocket Location

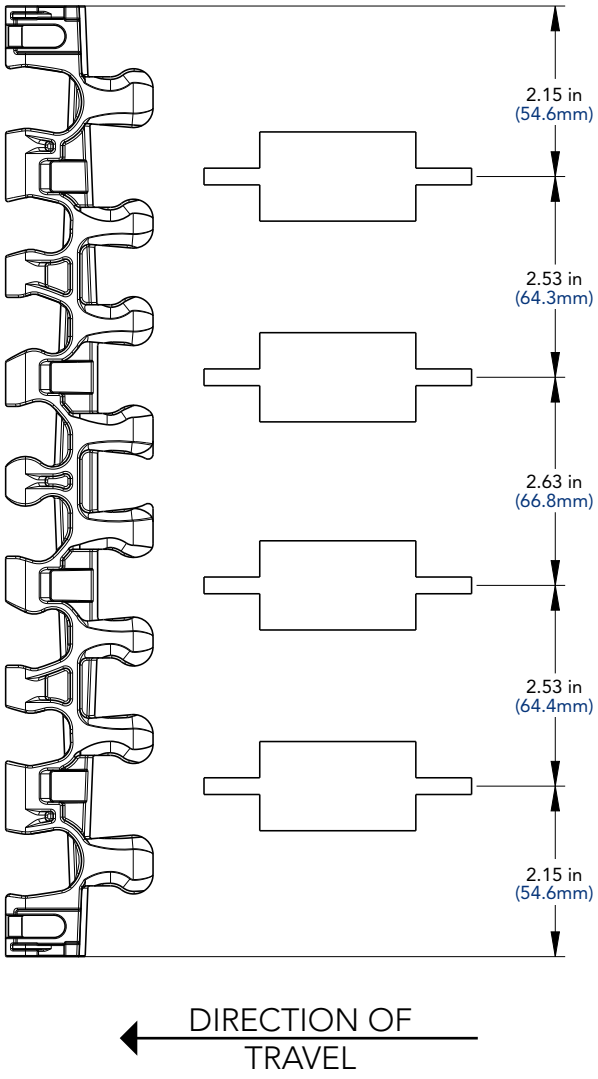
7956B, 7956GT, 7956NT and 7956TAB

The proper direction of travel can be determined in multiple ways:

- Most eyes forward
- End eyes forward
- By the arrow molded into the GT or TAB attachment
- Using the drawings that follow

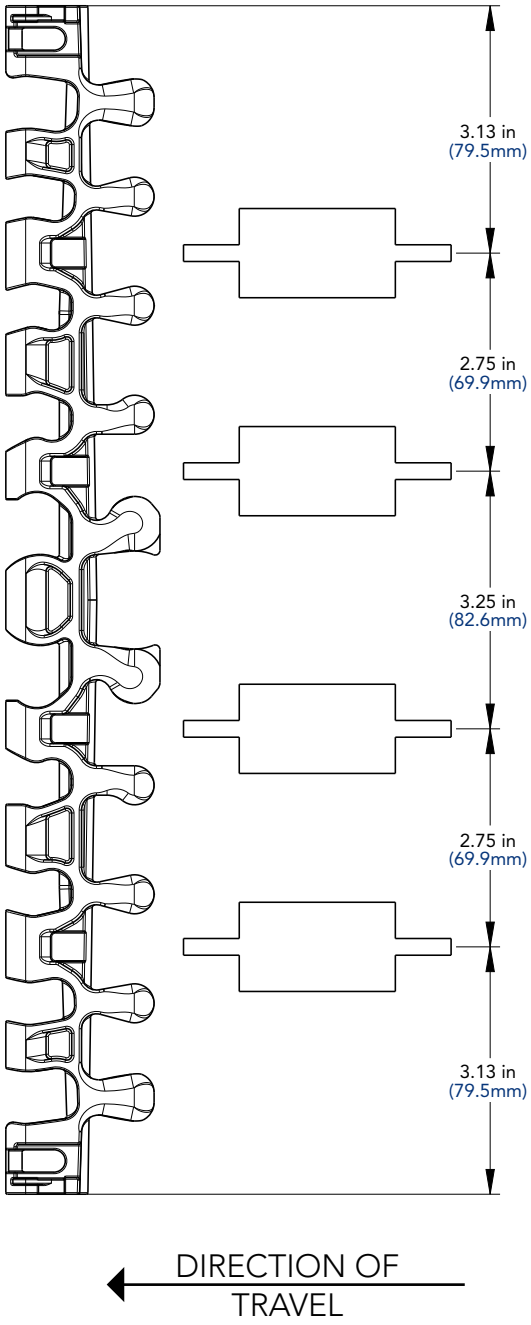


Sprocket Pocket Location for 7956-6 inch Chain–USE 1 SPROCKET PER SHAFT

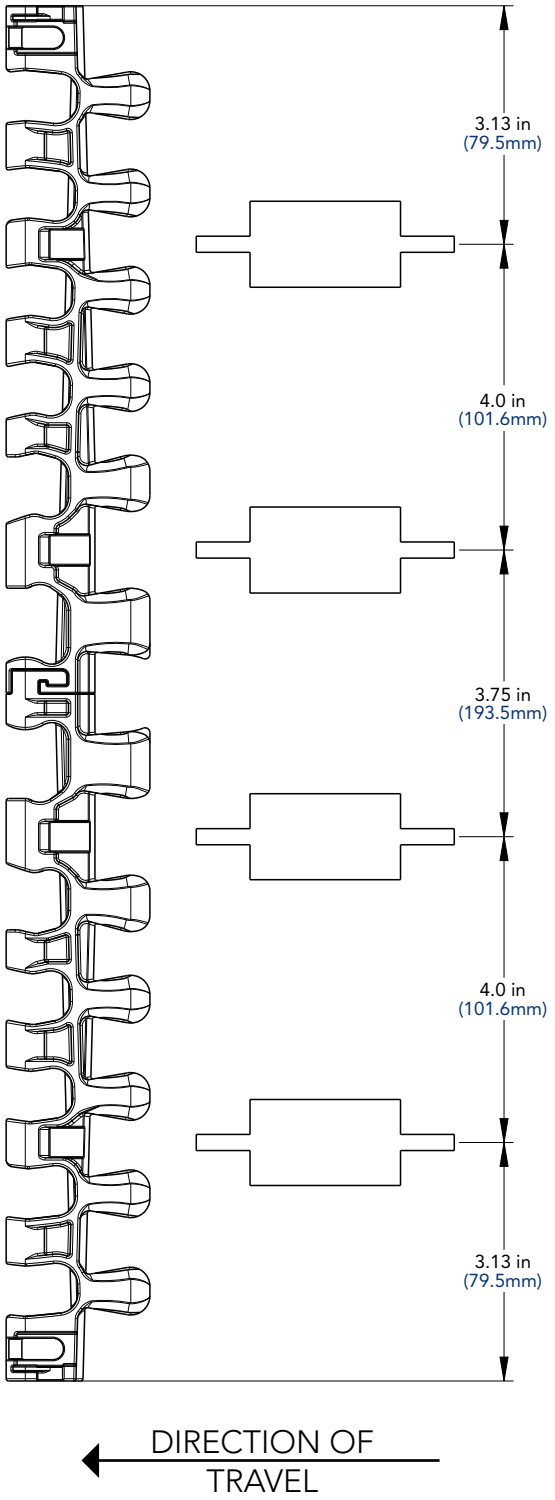


Sprocket Pocket Location for 7956-12 inch Chain–USE 4 SPROCKETS PER SHAFT

Drive and Idler Sprocket Location

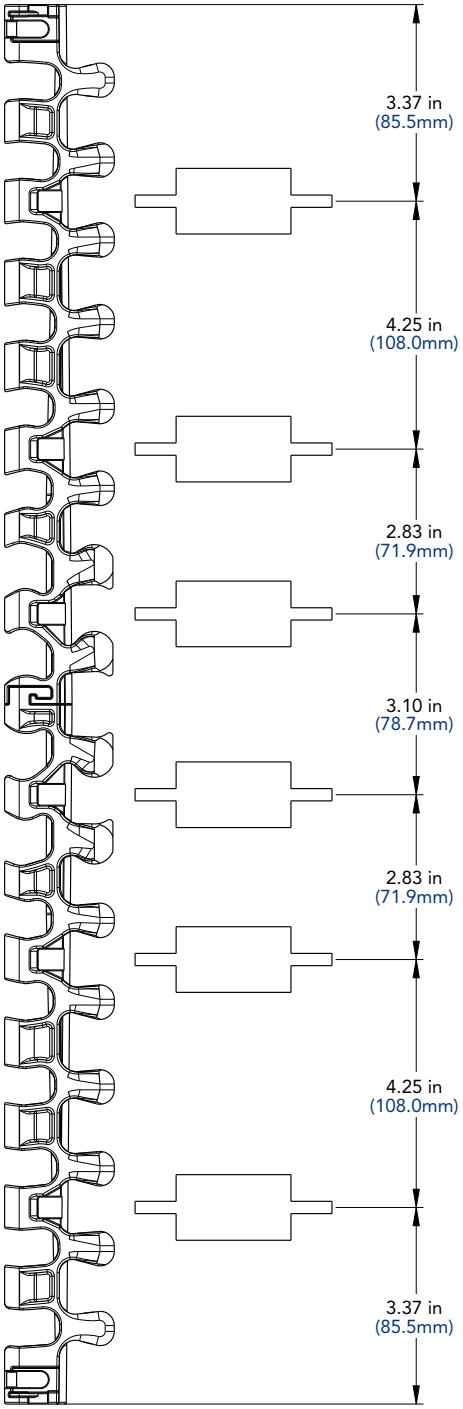


Sprocket Pocket Location for 7956-15 inch Chain–USE 4 SPROCKET PER SHAFT

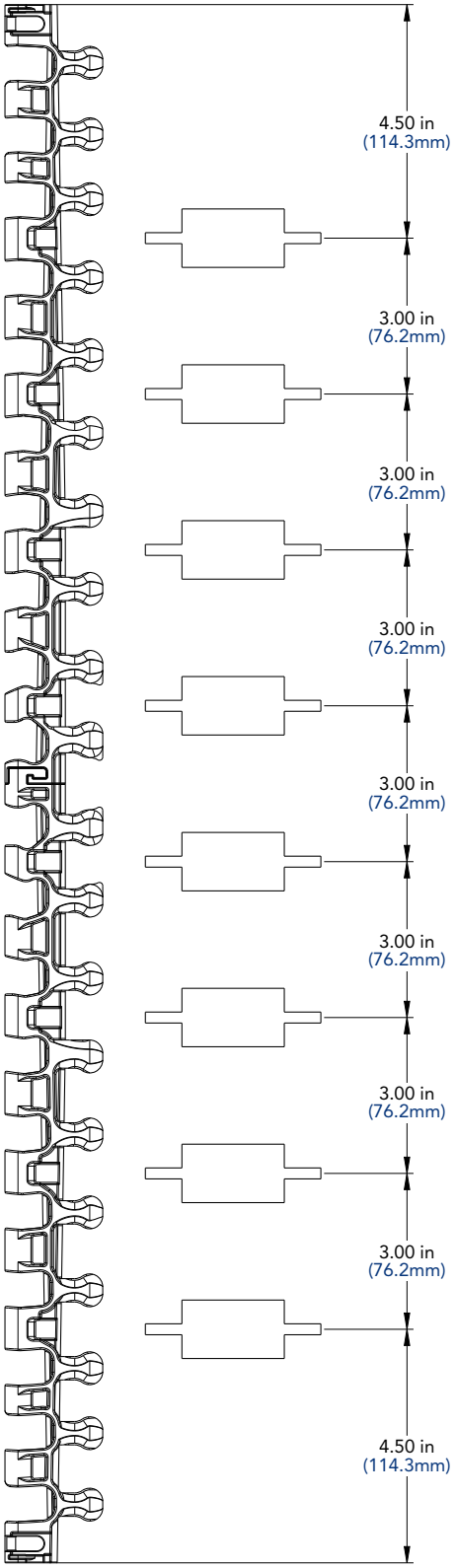


Sprocket Pocket Location for 7956-18 inch Chain–USE 4 SPROCKETS PER SHAFT

Drive and Idler Sprocket Location



Sprocket Pocket Location for 7956-24 inch Chain–USE 6 SPROCKETS PER SHAFT

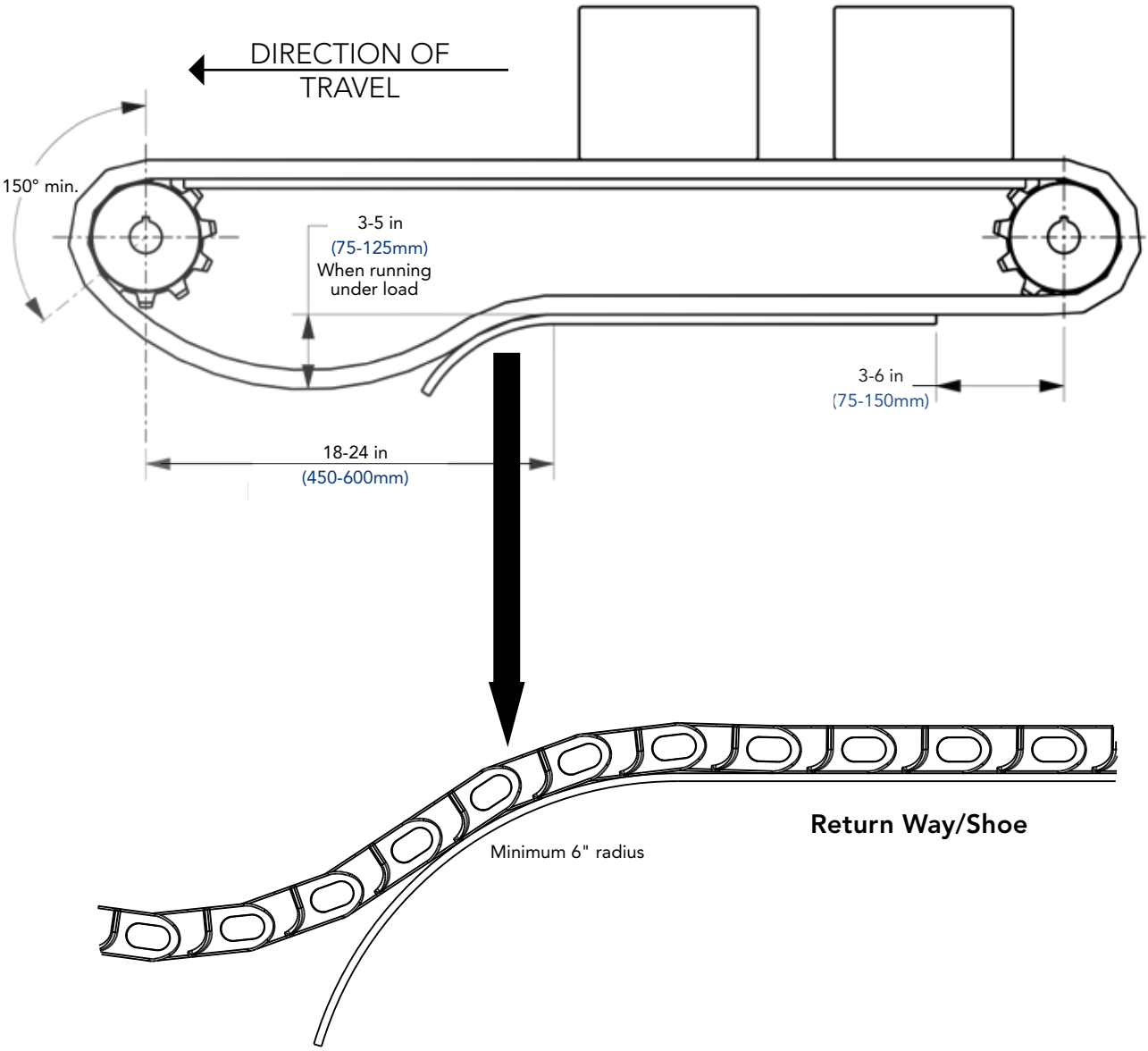


Sprocket Pocket Location for 7956-30 inch Chain–USE 8 SPROCKETS PER SHAFT

Catenary and Other Setup Notes

The design criteria that applies to standard Rexnord TableTop or MatTop chains also applies to Rexnord 7956 Series MatTop chains. Criteria such as wearstrip selection, lubrication and catenary are consistent with information found in the Rexnord Engineering Manual (8rxEM-en).

- Minimum recommended straight section between the last corner and the drive shaft is 30-inches (750mm)
- Minimum recommended straight section between the corner and the idler shaft is 9-inches (225mm)
- Carry wearstrips should end 1.50-inches (38mm) from the center of the drive or tail shaft (see drawing on page 10)
- The proper catenary is critical for performance, therefore a catenary of 18 to 24-inches (450 to 600mm) in length is strongly recommended
- Return wearstrips should end 3 to 6-inches (75 to 150mm) from bottom and tail sprockets
- Chain must be oriented to direction of travel (see pages 14-16)
- Install chain hand-tight. After break-in period, remove links as recommended.



Chain Assembly and Disassembly

7956B

7956GT

7956NT

7956TAB

Disassembly:

- Rotate TwistLock™ counterclockwise
- Insert thread-puller into pin
- Remove pin
- Remove TwistLock plug
- Separate attachment from chain link by hand or with flat-blade screwdriver

Assembly:

- Reverse order

For technical assistance please contact Rexnord FlatTop Application Engineering at 262-376-4800.

866-REXNORD/866-739-6673 (Within the U.S.)
414-643-2366 (Outside the U.S.)
www.rexnord.com

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