



EC254T R

Modular Radius Belt Series

- **Meat Applications**

Spiral Freezer

- **Poultry Applications**

Spiral Freezer

- **Seafood Applications**

Freezing Lines, Spiral

- **Bakery Applications**

Spiral, Proofing, Cooling, Freezing Lines, Pan Handling

- **Fruits and Vegetables Applications**

Container Conveyance

- **Automotive Applications**

Car Part Manufacturing, Battery Filling

- **Packaging Applications**

Tray Packers, Box Transport Horizontal

- **Postal Applications**

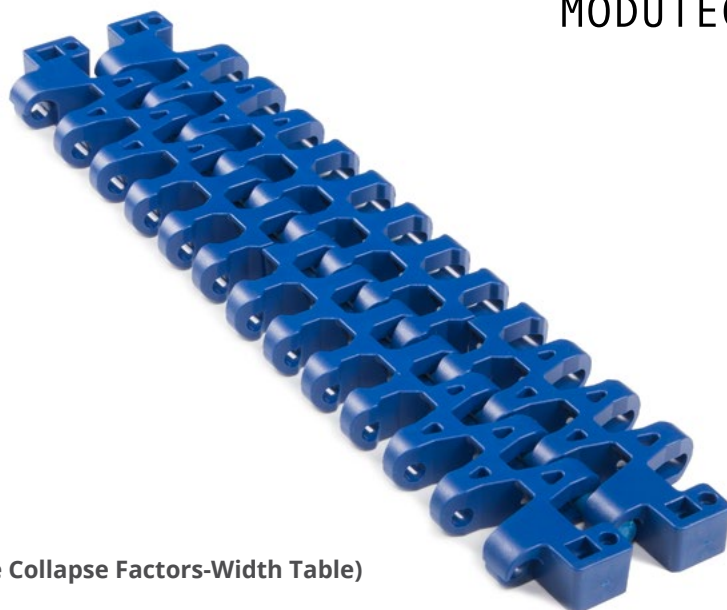
Parcel Handling



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EC254T R (Tight Radius)

Pitch :	26 mm / 1 inch
Belt Surface :	Open, Smooth Surface
Minimum Width :	167 mm / 6.57 inch
Open Area (%) :	38%. (Biggest opening 6,5 x 12 mm)
Flight :	No
Side Wall :	Yes (h=25 mm)
Rod :	Ø5 mm / 0.197 inch - Self Lock
Approved :	FDA and EU
Curve :	Yes
Color :	Additional colors available
Cleanability :	Excellent
Application :	Straight and side flexing
Collapse Factor :	1.4 - 1.6 (Please check page 163 to see Collapse Factors-Width Table)
Belt Thickness:	13 mm / 0.512 inch



Product Features and Functional Benefits

- Belt designed for tight radius applications.
- Available for light and medium load capacity.
- 180 degree high speed side flexing applications.
- High temperature and wear resistance. Unique locking system.
- Belt provides optimal open area for drainage and airflow.

Available Moulded Module Sizes

- 200 mm / **7.87 inch** module
- 162 mm / **6.38 inch** module
- 137 mm / **5.39 inch** module
- 112 mm / **4.41 inch** module
- 100 mm / **3.94 inch** module
- 87 mm / **3.43 inch** module

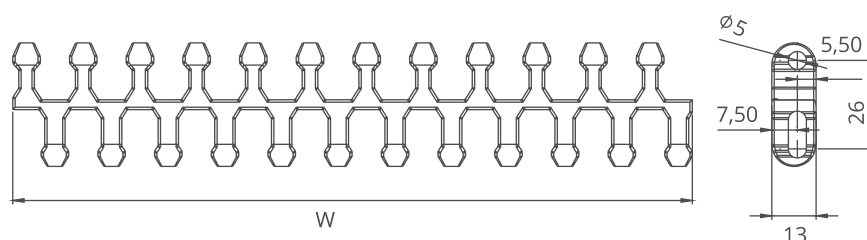
EC254T R / Technical Information

BELT MATERIAL	BELT STRENGTH				TEMPERATURE		BELT WEIGHT
	Straight		Curve		°C (min.) - °F (min.)	°C (max.) - °F (max.)	Kg/m² - lb/ft²
	N/m	lb/ft	N/m	lb/ft			
Polypropylene	15400	1055	660	149	+5 / +42.8	+90 / +194	5,8 - 1.19
Polyethylene	-	-	-	-	-	-	-
Acetal	22000	1507	1210	272	-43 / -45.4	+110 / +230	8,4 - 1.72

- Belt strength and temperature values are maximum on the table.

EC254T R / Standard Belt Widths

BELT SERIES	WIDTH (W)				Belt With Tolerance (max.)
	PP		POM		
	mm	inch	mm	inch	
EC254T R	167,0	6.57	167,0	6.57	± 0,5 mm
EC254T R	200,0	8.0	200,0	8.0	± 2 mm
EC254T R	250,0	10.0	250,0	10.0	± 2 mm
EC254T R	300,0	12.0	300,0	12.0	± 3 mm
EC254T R	350,0	14.0	350,0	14.0	± 3 mm
EC254T R	400,0	16.0	400,0	16.0	± 3 mm
EC254T R	450,0	18.0	450,0	18.0	± 3 mm
EC254T R	500,0	20.0	500,0	20.0	± 4 mm
EC254T R	550,0	22.0	550,0	22.0	± 4 mm
EC254T R	600,0	24.0	600,0	24.0	± 4 mm
EC254T R	650,0	26.0	650,0	26.0	± 4 mm
EC254T R	700,0	28.0	700,0	28.0	± 4 mm
EC254T R	750,0	30.0	750,0	30.0	± 4 mm
EC254T R	800,0	32.0	800,0	32.0	± 4 mm



- Standard belt increments 50 mm.
- Non-standard increments 16,6 mm
- Please contact with customer service for precise belt measurements.
- For bigger sizes, please contact with customer service.

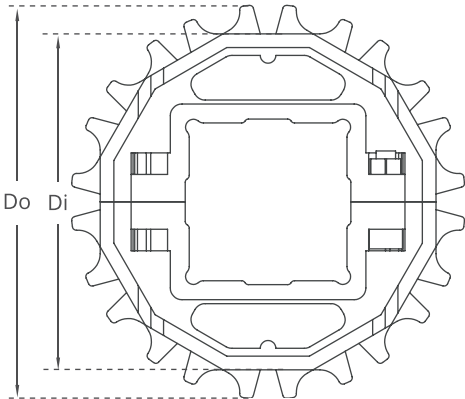
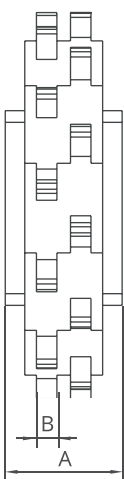
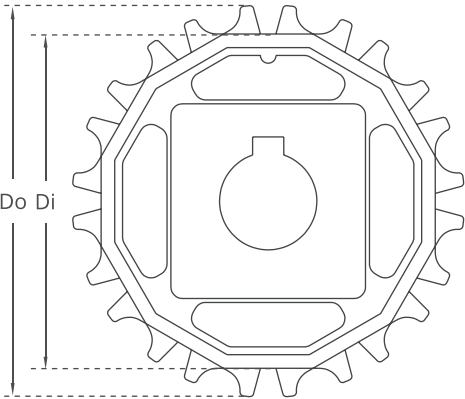
EC254T R Series *Sprockets and Technical Specifications*



Z15



Z8



Split moulded sprockets are available.

EC254T R Series / Standard Sprockets Dimensions

NO. TEETH	Di mm/inch	Do mm/inch	B mm/inch	A mm/inch	Square Bore (Q) mm/inch	Round Bore (R) mm/inch	PRODUCT CODE	
							Square Type (Q)	Round Type (R)
Z8	52,0 / 2.05	67,0 / 2.64	6 / 0.24	30 / 1.18	25 / 1	25 / 1	MD-TR254SQ25Z8*POM	MD-TR254SRZ8*POM
Z10	69,0 / 2.72	84,0 / 3.31	6 / 0.24	30 / 1.18	40 / 1.5	25-30 / 1-1.25	MD-TR254SQZ10*POM	MD-TR254SRZ10*POM
Z12	85,84 / 3.38	100,84 / 3.97	6 / 0.24	30 / 1.18	40 / 1.5	25-30 / 1-1.25	MD-TR254SQZ12*POM	MD-TR254SRZ12*POM
Z15	110,8 / 4.36	125,8 / 4.95	6 / 0.24	30 / 1.18	40 / 1.5	25-30 / 1-1.25	MD-TR254SQZ15*POM	MD-TR254SRZ15*POM
Z16	119,1 / 4.69	134,1 / 5.28	6 / 0.24	30 / 1.18	40 / 1.5	25-30 / 1-1.25	MD-TR254SQZ16*POM	MD-TR254SRZ16*POM
Z18	135,63 / 5.34	150,58 / 5.93	6 / 0.24	30 / 1.18	40 / 1.5	25-30 / 1-1.25	MD-TR254SQZ18*POM	MD-TR254SRZ18*POM

*Other sprockets and hub sizes are manufactured up to request. *PA (Polyamide) and PP (Polypropylene) sprockets raw material is available on request.

***Machined Sprockets are available for each size.**



Clamp



Machined Split Sprocket



Moulded Sprocket



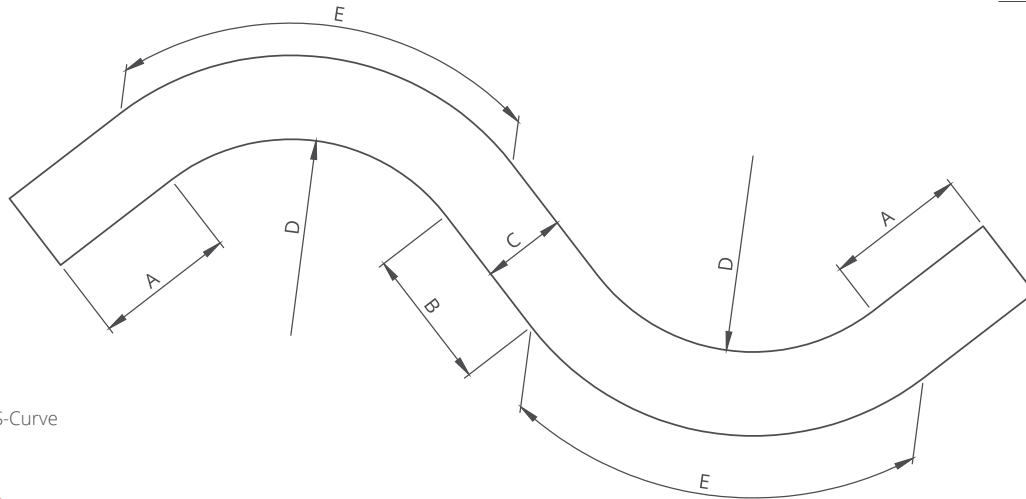
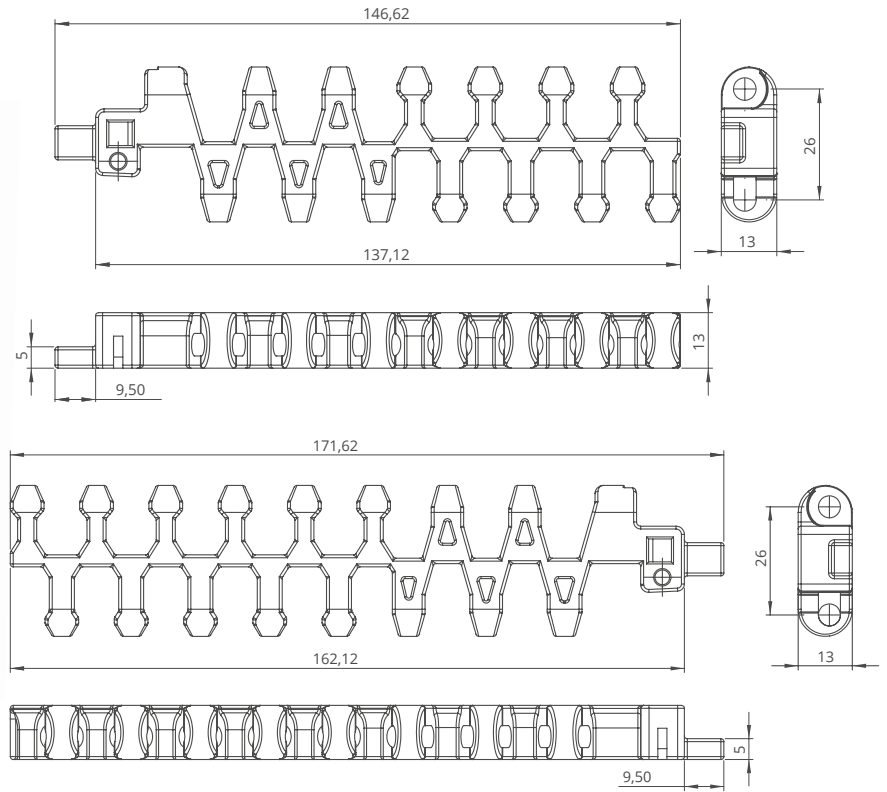
Machined Sprocket

EC254T R Series *Accessories and Technical Specifications*



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EC254T R Series / TAB - Technical Specification



Radius Belt Example 90° S-Curve

EC254T R Series / Radius Belt Calculation

- A: Straight run pull and n = Belt width
- B: Straight run between 2 curves = min. 2 x belt width
- C: Belt width
- D: Minimum inner radius
- E: Curve length

$$\text{Collapse Factor} = \frac{\text{Min. inner radius}}{\text{Belt width}}$$

$$\text{Minimum inner radius} = \text{Collapse Factor} \times \text{Belt width}$$

CALCULATION EXAMPLE

Belt width: 500 mm Radius Belt
Collapse Factor: 1.55

$$D: 500 \text{ mm} \times 1.55 = 775 \text{ mm}$$

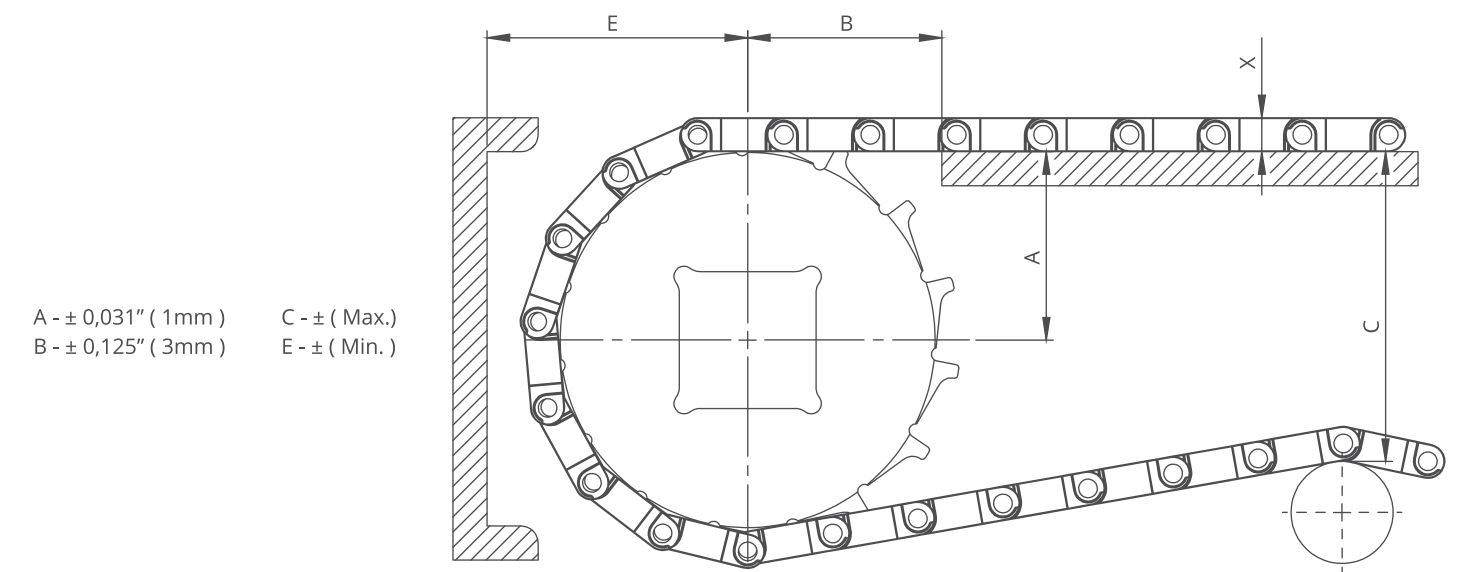
$$A: 500 \text{ mm}$$

$$B: 2 \times 500 \text{ mm} = 1000 \text{ mm (min.)}$$

$$E: \frac{2 \times (C+D) \times 3.14}{4} = 2016 \text{ mm}$$

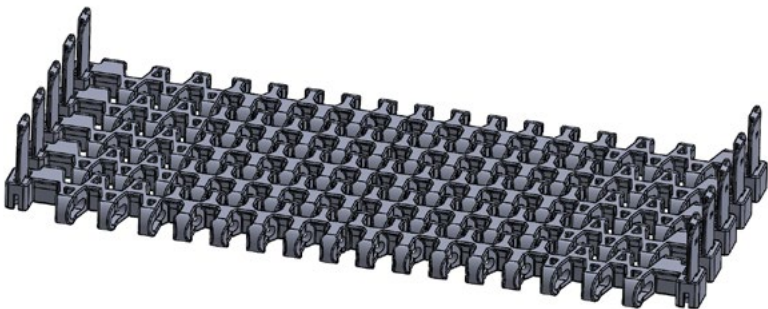
$$\text{Total length} = (2 \times A) + B + (2 \times E)$$

EC254T R Series *Engineering Information*



EC254T R Series / Conveyor Frame Dimensions

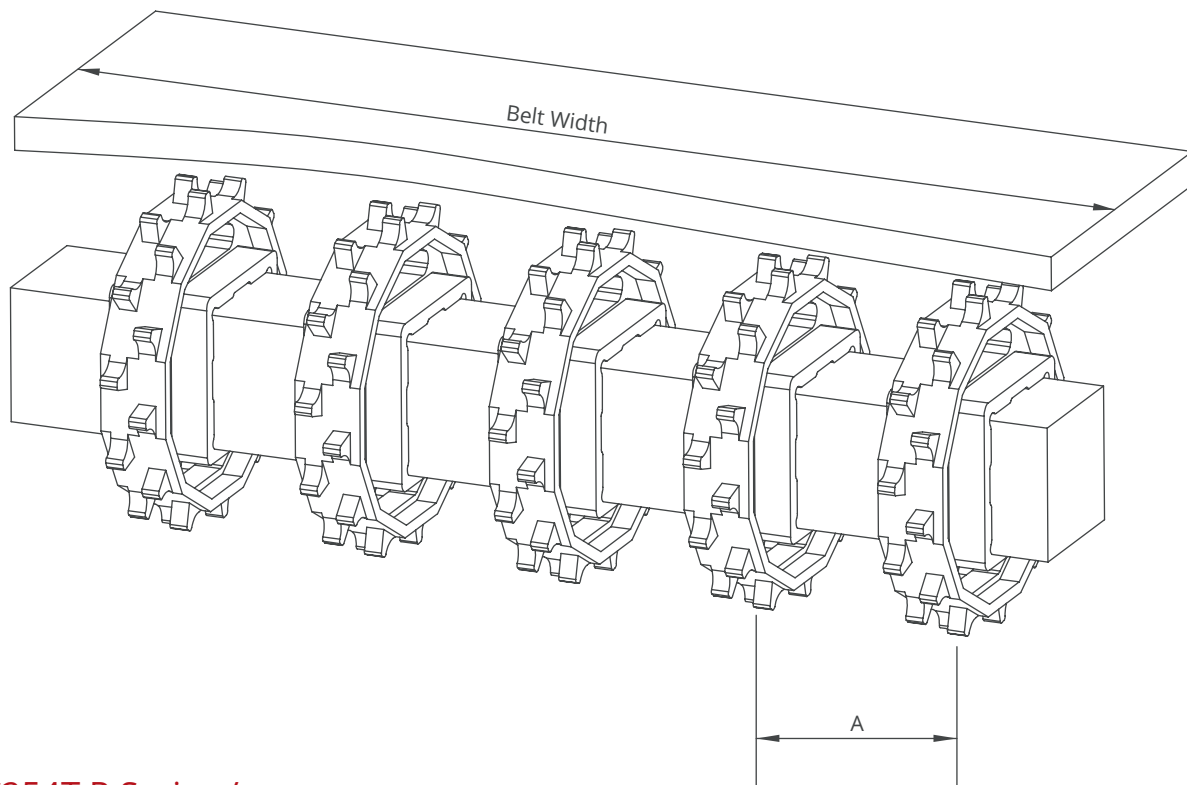
Sprockets Description			A		B		C		E		X	
Pitch Diameter		No.Teeth	Range (Bottom to Top)		inch	mm	inch	mm	inch	mm	inch	mm
inch	mm		inch	mm								
EC254T R												
2.38	60,5	8	1.15	29,2	1.55	39,4	1.95	49,5	1.94	49,2	0.43	11,0
3.07	78,0	10	1.46	37,1	1.77	45,0	2.60	66,1	2.25	57,1	0.43	11,0
3.74	95,0	12	1.76	44,8	1.97	50,1	3.24	82,3	2.55	64,8	0.43	11,0
4.70	119,5	15	2.22	56,4	2.23	56,7	4.18	106,1	3.01	76,4	0.43	11,0
5.02	127,5	16	2.37	60,2	2.38	60,5	4.46	113,2	3.21	81,5	0.43	11,0
5.71	145,0	18	2.73	69,3	2.45	62,3	5.19	131,8	3.51	89,3	0.43	11,0



EC254T R Series / Sidewall Technical Specifications

Possible Sidewall Indents	-	
	mm	inch
Standard, no module cutting	-	-

EC254T R Series *Engineering Information*



EC254T R Series / Sprockets Arrangement

Standard Belt Width		Number of sprockets per shaft		A (mm/inch)	
mm	inch	Drive Shaft	Return Shaft	Min.	Max.
167,0	6.57	2	2	50/2	120/4.7
200,0	8.0	2	2	50/2	120/4.7
250,0	10.0	3	2	50/2	120/4.7
300,0	12.0	3	2	50/2	120/4.7
350,0	14.0	3	3	50/2	120/4.7
400,0	16.0	4	3	50/2	120/4.7
450,0	18.0	4	3	50/2	120/4.7
500,0	20.0	5	4	50/2	120/4.7
550,0	22.0	5	4	50/2	120/4.7
600,0	24.0	6	5	50/2	120/4.7
700,0	26.0	7	5	50/2	120/4.7
800,0	28.0	8	6	50/2	120/4.7
900,0	30.0	9	7	50/2	120/4.7
1000,0	32.0	10	7	50/2	120/4.7

Note: Number of sprockets depends on the belt load.

EC254T R Series / Collapse Factors per width for EC254T R Serie

Nom. Belt Width (mm)	250,0	300,0	350,0	400,0	450,0	500,0	550,0	600,0	650,0	700,0	750,0	800,0	850,0	900,0	950,0	1000,0	1050,0	1100,0	1150,0	1200,0
Nom. Belt Width (inch)	10.0	12.0	14.0	16.0	18.0	20.0	22.0	24.0	26.0	28.0	30.0	32.0	34.0	36.0	38.0	40.0	42.0	44.0	46.0	48.0
Collapse Factor	1,43	1,47	1,50	1,52	1,54	1,55	1,56	1,57	1,58	1,58	1,59	1,61	1,62	1,63	1,64	1,65	1,66	1,66	1,70	1,71
Min. Inner Radius (mm)	357,5	441,0	525,0	608,0	693,0	775,0	858,0	942,0	1027,0	1106,0	1192,5	1288,0	1377,0	1467,0	1558,0	1650,0	1743,0	1826,0	1955,0	2052,0
Min. Inner Radius (inch)	14.3	17.6	21.0	24.3	27.7	31.0	34.3	37.7	41.1	44.2	47.7	51.5	55.1	58.7	62.3	66.0	69.7	73.0	78.2	82.1

Standard range of belt width and collapse factor (Min. Inner radius = Collapse factor x Standard belt width)