



Movement Technologies

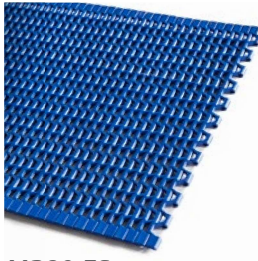
Bandas Modulares Serie Curva



Movement Technologies



MP80 C
Micropitch Belt Series



MP80 FG
Micropitch Belt Series



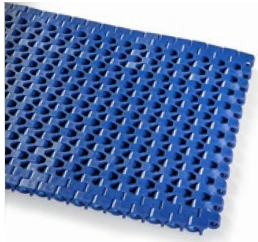
MP80 NS
Micropitch Belt Series



MP80 NP
Micropitch Belt Series



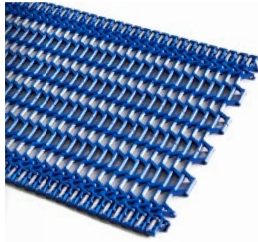
ECI27 C



ECI27 FG



ECI27 GT



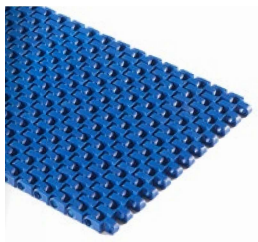
MD127 GAP%50



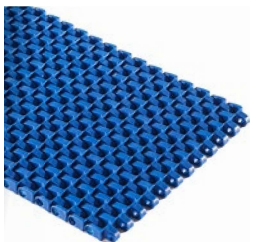
HCI27 C



SM127 C



SM127 FG



SM127 CRV



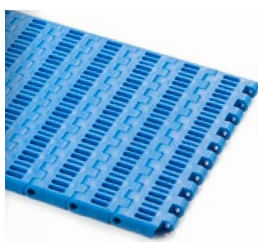
XP254 CR
Corrugated & Logistic Belt Series



XP254 FLT CR
Corrugated & Logistic Belt Series



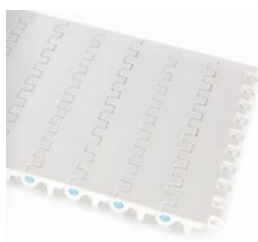
XP254 C



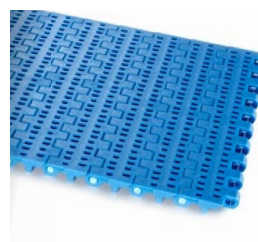
XP254 PR%22



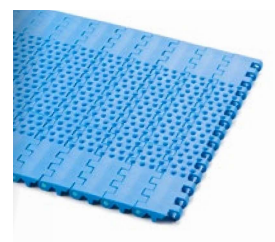
XP254 FG



EC254 C



EC254 PR%16



EC254 NT



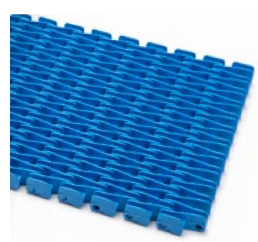
MD254 FG



MD254 C



MD254 GT



MD254 RR



MD254 GAP%48



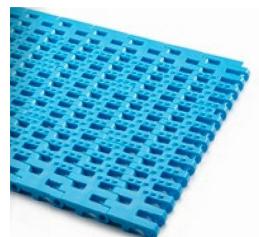
EC508 C



EC508 PR%22



EC508 FG



EC508 FG-NT



EC508 PR%11



EC508 PR%13



EC508 DT



EC508 NT



MD508 C



MD508 FG



MD508 PR%25



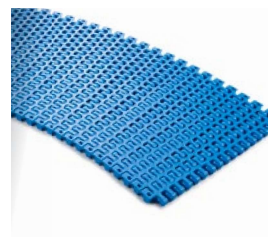
HP508 RR



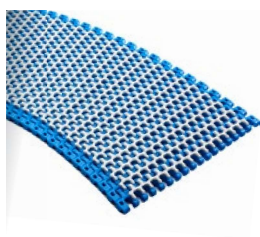
HP508 FG
Battery Belt



HP508 C



EC254 R
Radius Belt 2,1



EC254 R-GT
Radius Belt 2,1 with
friction surface



EC254T R
Tight Radius Belt 1,4



EC508T R
Tight Radius Belt 1,5

1" Radius Belts

Modular Belt Series

EC254 R

EC254 R-GT / Friction Top

EC254T R

Sprockets & Accessories

Engineering Information

Radius Belt Calculation





EC254 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**

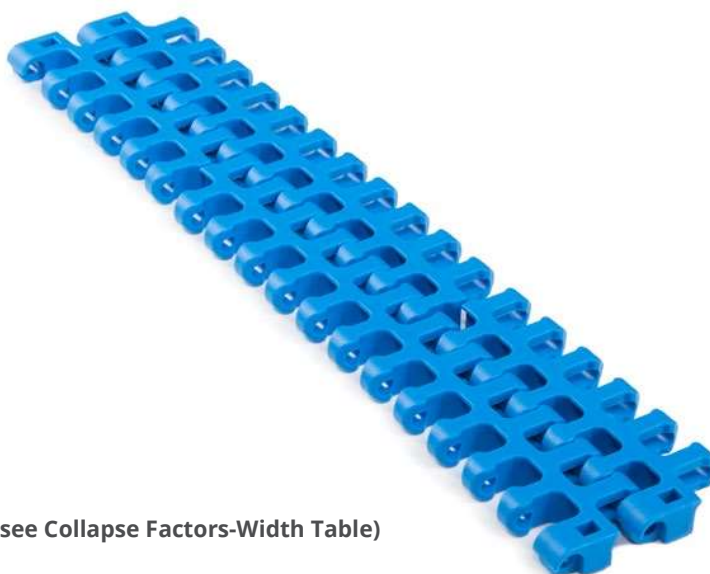
Car Part Manufacturing, Battery Filling

- **Packaging Applications**

Tray Packers, Box Transport Horizontal

EC254 R

Pitch :	25,8 mm / 1 inch
Belt Surface :	Open, Smooth Surface
Minimum Width :	100 mm / 3.94 inch
Open Area (%) :	36%. (Biggest opening 7,5 x 12 mm)
Flight :	Yes. (T25, T50)
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 :	2.1 - 2.4 (Please check page 169 to see Collapse Factors-Width Table)
Belt Thickness:	11 mm / 0.433 inch



Product Features and Functional Benefits

- 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
- 100 mm / **3.94 inch** module

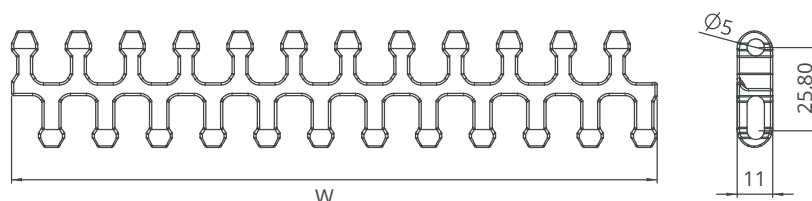
EC254 R / Technical Information

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	20900	1430	1100	248	+5 / +42.8	+90 / +194	4,7 - 0.96
Polyethylene	-	-	-	-	-	-	-
Acetal	29700	2035	1650	372	-43 / -45.4	+110 / +230	7,0 - 1.44

EC254 R / Standard Belt Widths

BELT SERIES	WIDTH (W)				Belt With Tolerance (max.)
	PP		POM		
	mm	inch	mm	inch	
EC254 R	100,0	4.0	100,0	4.0	± 0,5 mm
EC254 R	150,0	6.0	150,0	6.0	± 0,5 mm
EC254 R	200,0	8.0	200,0	8.0	± 2 mm
EC254 R	250,0	10.0	250,0	10.0	± 2 mm
EC254 R	300,0	12.0	300,0	12.0	± 3 mm
EC254 R	350,0	14.0	350,0	14.0	± 3 mm
EC254 R	400,0	16.0	400,0	16.0	± 3 mm
EC254 R	450,0	18.0	450,0	18.0	± 3 mm
EC254 R	500,0	20.0	500,0	20.0	± 4 mm
EC254 R	550,0	22.0	550,0	22.0	± 4 mm
EC254 R	600,0	24.0	600,0	24.0	± 4 mm
EC254 R	650,0	26.0	650,0	26.0	± 4 mm
EC254 R	700,0	28.0	700,0	28.0	± 4 mm
EC254 R	750,0	30.0	750,0	30.0	± 4 mm
EC254 R	800,0	32.0	800,0	32.0	± 4 mm

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



- 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.

www.rodamientos.net

EC254 R-GT

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**

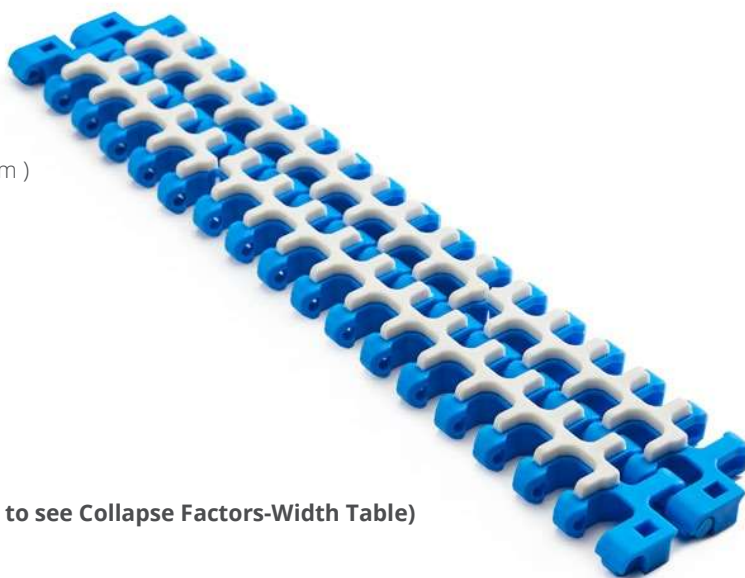
Car Part Manufacturing, Battery Filling

- **Packaging Applications**

Tray Packers, Box Transport Horizontal

EC254 R-GT

Pitch :	25,8 mm / 1 inch
Belt Surface :	Open, Friction Top Surface
Minimum Width :	100 mm / 3.94 inch
Open Area (%) :	36%. (Biggest opening 7.5 x 12 mm)
Flight :	Yes. (h=25 mm, h=50 mm)
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 :	2.1 - 2.4 (Please check page 169 to see Collapse Factors-Width Table)
Belt Thickness:	15,5 mm / 0.61 inch



Product Features and Functional Benefits

- 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** edge module with 21 mm indent

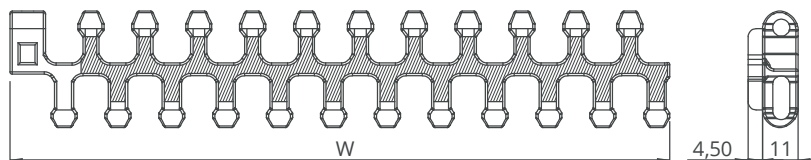
EC254 R-GT / Technical Information

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	20900	1430	1100	248	+5 / +42.8	+90 / +194	6,4 - 1.31
Polyethylene	-	-	-	-	-	-	-
Acetal	-	-	-	-	-	-	-

EC254 R-GT / Standard Belt Widths

BELT SERIES	WIDTH (W)				Belt With Tolerance (max.)
	PP		POM		
	mm	inch	mm	inch	
EC254 R-GT	100,0	4.0	-	-	± 0,5 mm
EC254 R-GT	150,0	6.0	-	-	± 0,5 mm
EC254 R-GT	200,0	8.0	-	-	± 2 mm
EC254 R-GT	250,0	10.0	-	-	± 2 mm
EC254 R-GT	300,0	12.0	-	-	± 3 mm
EC254 R-GT	350,0	14.0	-	-	± 3 mm
EC254 R-GT	400,0	16.0	-	-	± 3 mm
EC254 R-GT	450,0	18.0	-	-	± 3 mm
EC254 R-GT	500,0	20.0	-	-	± 4 mm
EC254 R-GT	550,0	22.0	-	-	± 4 mm
EC254 R-GT	600,0	24.0	-	-	± 4 mm
EC254 R-GT	650,0	26.0	-	-	± 4 mm
EC254 R-GT	700,0	28.0	-	-	± 4 mm
EC254 R-GT	750,0	30.0	-	-	± 4 mm
EC254 R-GT	800,0	32.0	-	-	± 4 mm

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



- 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.

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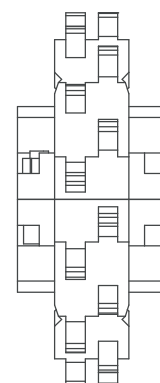
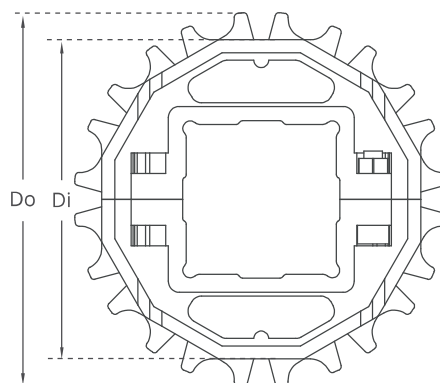
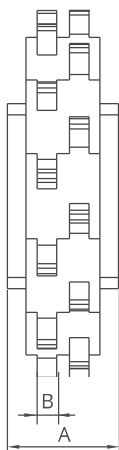
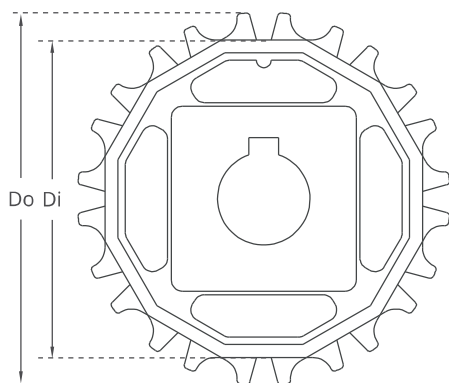
EC254 R Series Sprockets and Technical Specifications



Z15



Z28



Split moulded sprockets are available.

EC254 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	85,8 / 3.38	100,8 / 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	135,6 / 5.34	150,6 / 5.93	6 / 0.24	30 / 1.18	40 / 1.5	25-30 / 1-1.25	MD-TR254SQZ18*POM	MD-TR254SRZ18*POM
Z20	150,7 / 5.93	167,3 / 6.59	6 / 0.24	30 / 1.18	40 / 1.5	25-30 / 1-1.25	MD-TR254SQZ20*POM	MD-TR254SRZ20*POM

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

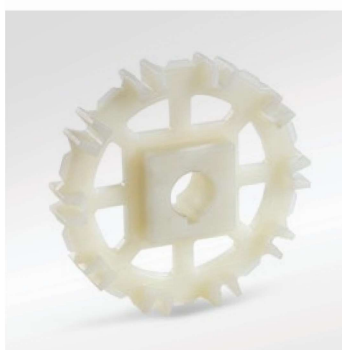
***Machined Split Sprockets are available for each size.**



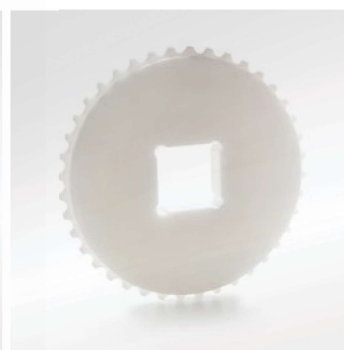
Clamp



Machined Split Sprocket

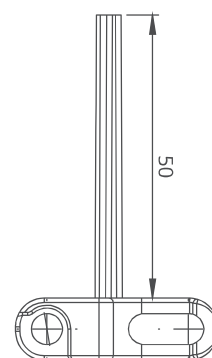
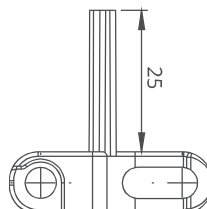


Moulded Sprocket



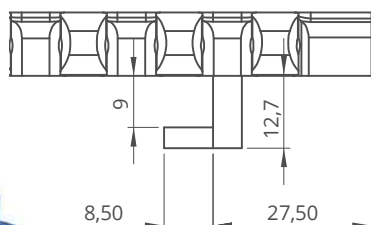
Machined Sprocket

EC254 R Series *Accessories and Technical Specifications*

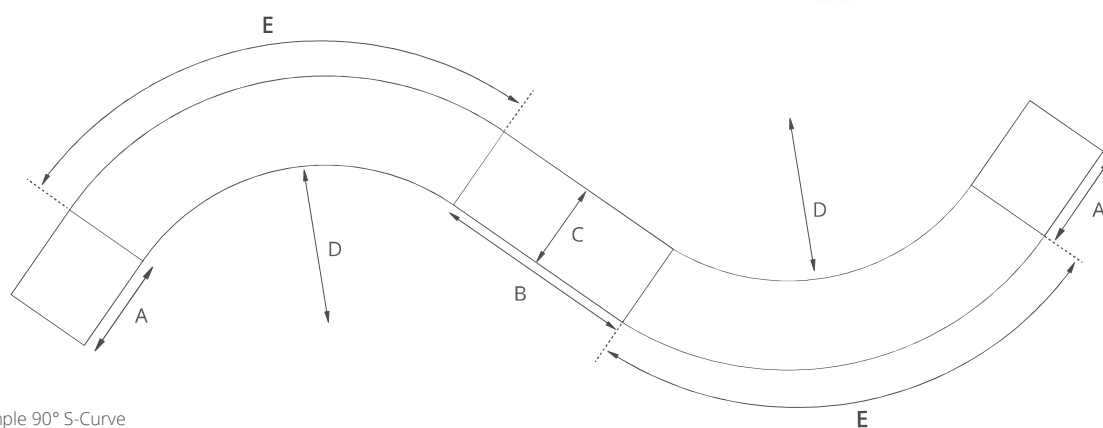
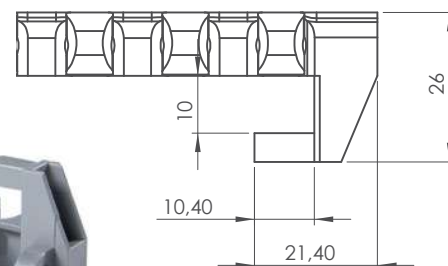


EC254 R Series / TAB - Technical Specification

TAB-M



TAB-E



Radius Belt Example 90° S-Curve

EC254 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: 400 mm 90° Radius Belt
Collapse Factor: 2.14

$$D: 400 \times 2.14 = 856 \text{ mm}$$

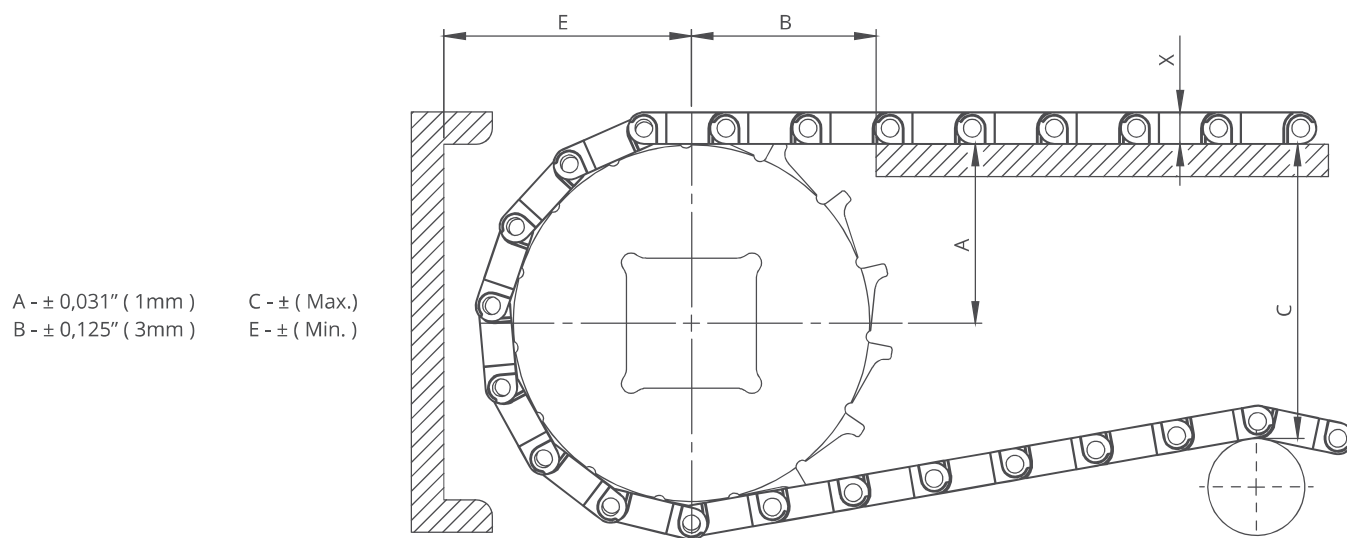
$$A: 400 \text{ (Min.)}$$

$$B: 2 \times 400 = 800 \text{ mm (Min.)}$$

$$E: \frac{2 \times (C+D) \times 3.14}{4} = 1972 \text{ mm}$$

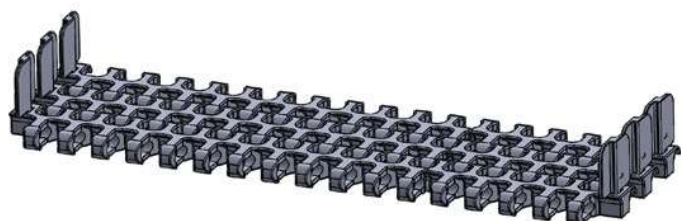
$$\text{Total length} = (2 \times A) + B + (2 \times E)$$

EC254 R Series *Engineering Information*



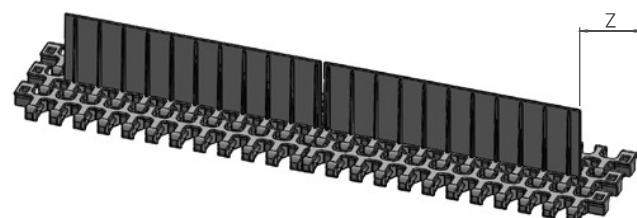
EC254 R Series / Conveyor Frame Dimensions

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								
EC254 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
EC254 R-GT												
2.38	60,5	8	1.15	29,2	1.55	39,4	1.95	49,5	2.18	53,7	0.61	15,5
3.07	78,0	10	1.46	37,1	1.77	45,0	2.60	66,1	2.48	61,6	0.61	15,5
3.74	95,0	12	1.76	44,8	1.97	50,1	3.24	82,3	2.79	69,3	0.61	15,5
4.70	119,5	15	2.22	56,4	2.23	56,7	4.18	106,1	3.25	80,9	0.61	15,5
5.02	127,5	16	2.37	60,2	2.38	60,5	4.46	113,2	3.46	86,0	0.61	15,5
5.71	145,0	18	2.73	69,3	2.45	62,3	5.19	131,8	3.76	93,8	0.61	15,5



EC254 R Series / Sidewall Technical Specifications

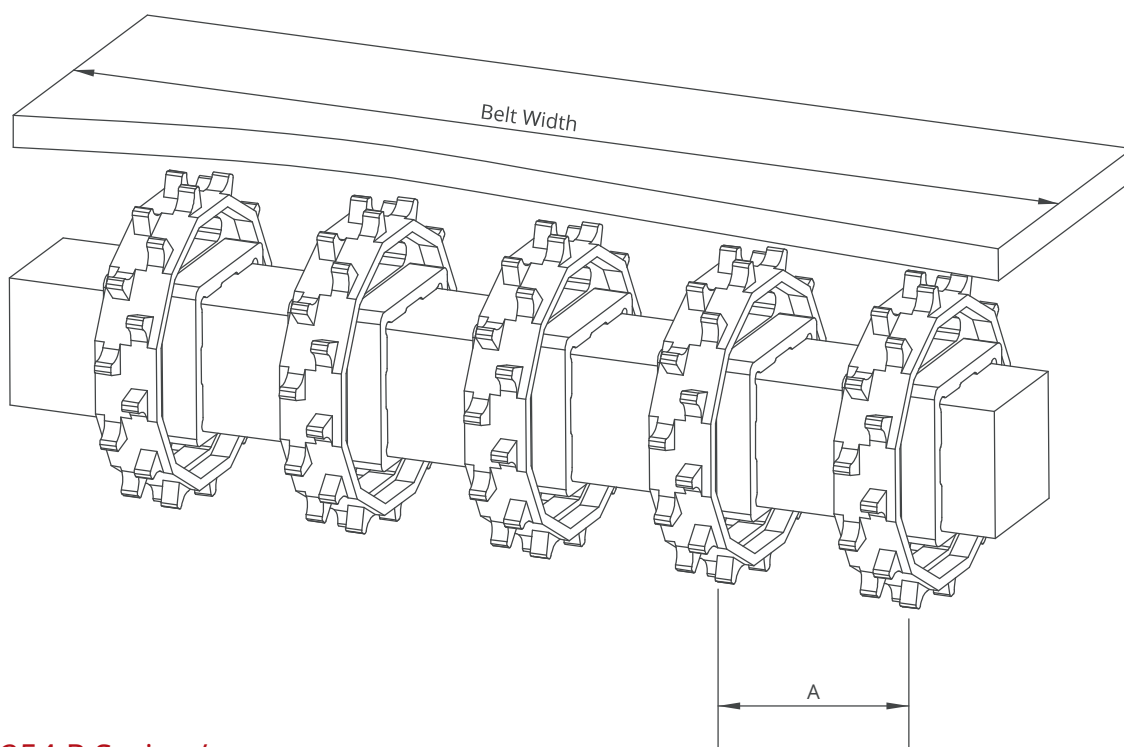
Possible Sidewall Indents	-	
	mm	inch
Standard, no module cutting	-	-



EC254 R Series / Flight Technical Specifications

Possible Flight Indents for EC254 R Series	Z	
	mm	inch
Standard, no module cutting	25,0	0.98
Standard, module cutting	37,5	1.48
Standard, module cutting	54,3	2.14

EC254 R Series *Engineering Information*



EC254 R Series / Sprockets Arrangement

Standard Belt Width		Number of sprockets per shaft		A (mm/inch)	
mm	inch	Drive Shaft	Return Shaft	Min.	Max.
150,0	6.0	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.

EC254 R Series / Collapse Factors per widths for EC254 R Series

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	2,07	2,10	2,12	2,14	2,15	2,16	2,17	2,18	2,18	2,19	2,19	2,19	2,20	2,20	2,20	2,21	2,21	2,21	2,21	2,21
Min. Inner Radius (mm)	517,5	630,0	742,0	856,0	967,5	1080,0	1193,5	1308,0	1417,0	1533,0	1642,5	1752,0	1870,0	1980,0	2090,0	2210,0	2320,5	2431,0	2541,5	2652,0
Min. Inner Radius (inch)	20.7	25.2	29.7	34.2	38.7	43.2	47.7	52.3	56.7	61.3	65.7	70.8	74.8	79.2	83.6	88.4	92.8	97.2	101.7	106.1

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

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 Conveyence

- **Automotive Applications**

Car Part Manufacturing, Battery Filling

- **Packaging Applications**

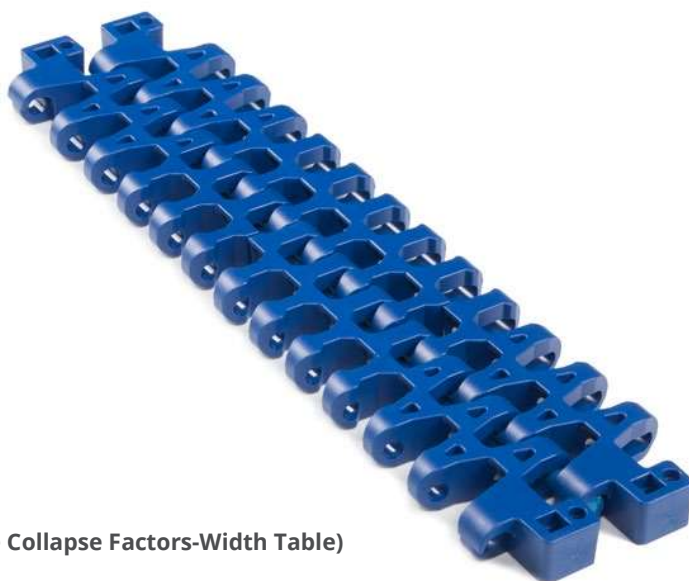
Tray Packers, Box Transport Horizontal

- **Postal Applications**

Parcel Handling

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 175 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

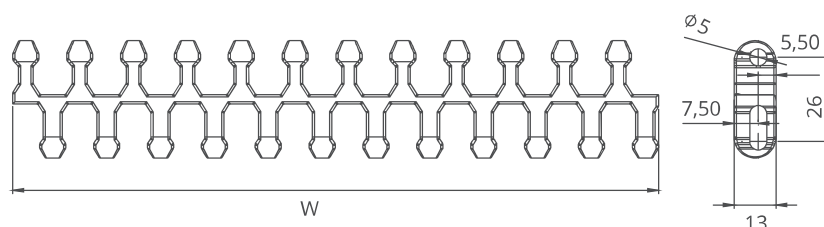
EC254T R / Technical Information

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

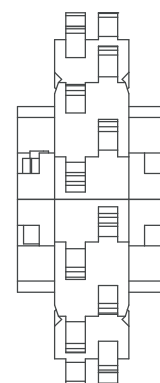
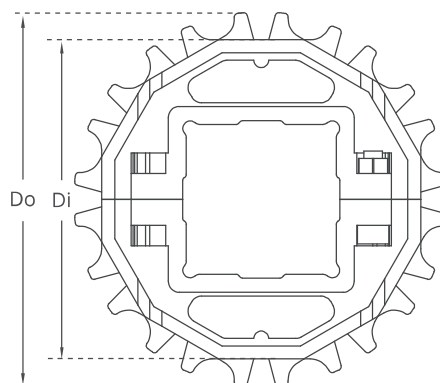
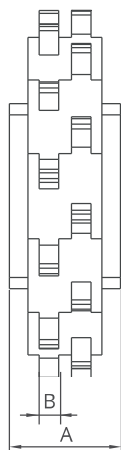
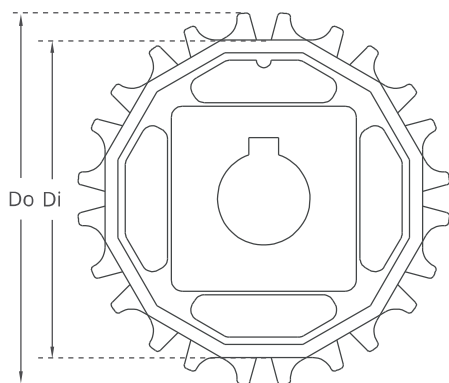
BELT SERIES	WIDTH (W)				Belt With Tolerance (max.)
	PP		POM		
	mm	inch	mm	inch	
EC254T R	167,0	6.57	167,0	6.57	± 0,5 mm
EC254T R	200,0	8.0	200,0	8.0	± 2 mm
EC254T R	250,0	10.0	250,0	10.0	± 2 mm
EC254T R	300,0	12.0	300,0	12.0	± 3 mm
EC254T R	350,0	14.0	350,0	14.0	± 3 mm
EC254T R	400,0	16.0	400,0	16.0	± 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.

www.rodamientos.net

EC254T R Series Sprockets and Technical Specifications



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	85,8 / 3.38	100,8 / 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	135,6 / 5.34	150,6 / 5.93	6 / 0.24	30 / 1.18	40 / 1.5	25-30 / 1-1.25	MD-TR254SQZ18*POM	MD-TR254SRZ18*POM
Z20	150,7 / 5.93	167,3 / 6.59	6 / 0.24	30 / 1.18	40 / 1.5	25-30 / 1-1.25	MD-TR254SQZ20*POM	MD-TR254SRZ20*POM

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

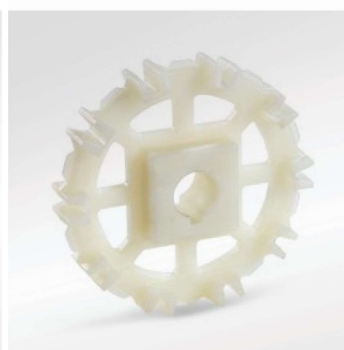
***Machined Split Sprockets are available for each size.**



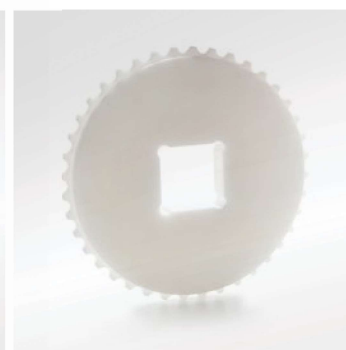
Clamp



Machined Split Sprocket



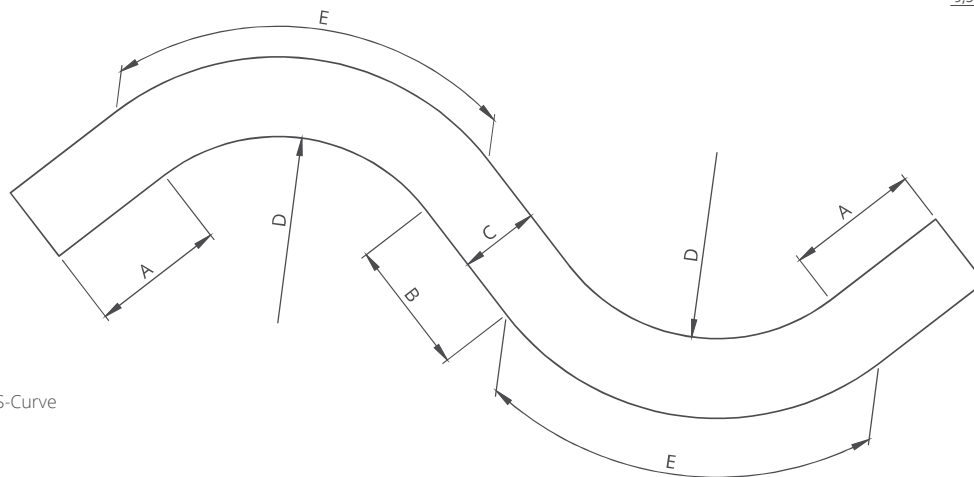
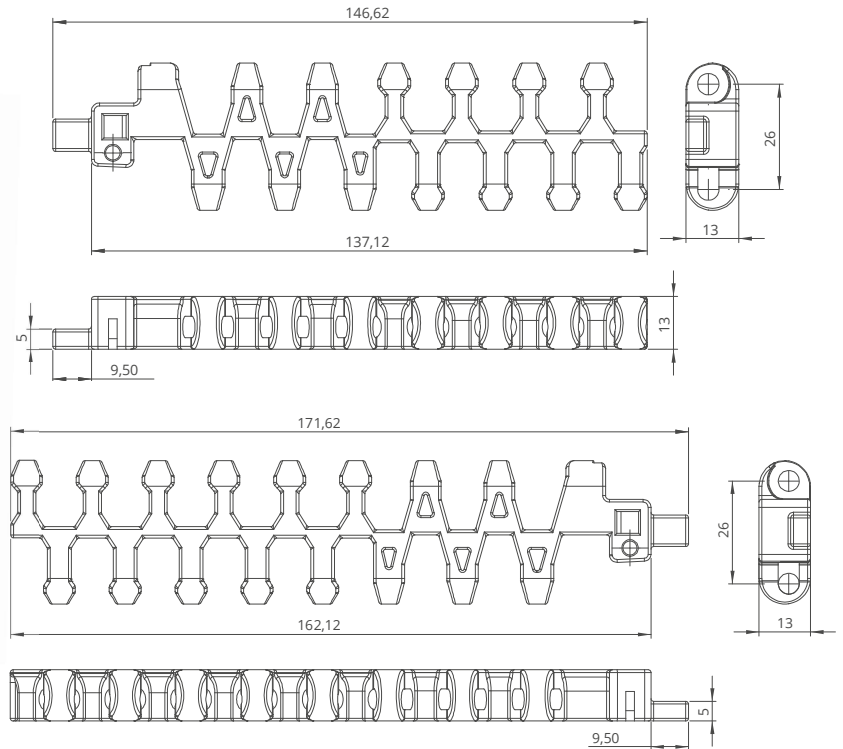
Moulded Sprocket



Machined Sprocket

EC254T R Series *Accessories and Technical Specifications*

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 mm x 1.55 = 775 mm

A: 500 mm

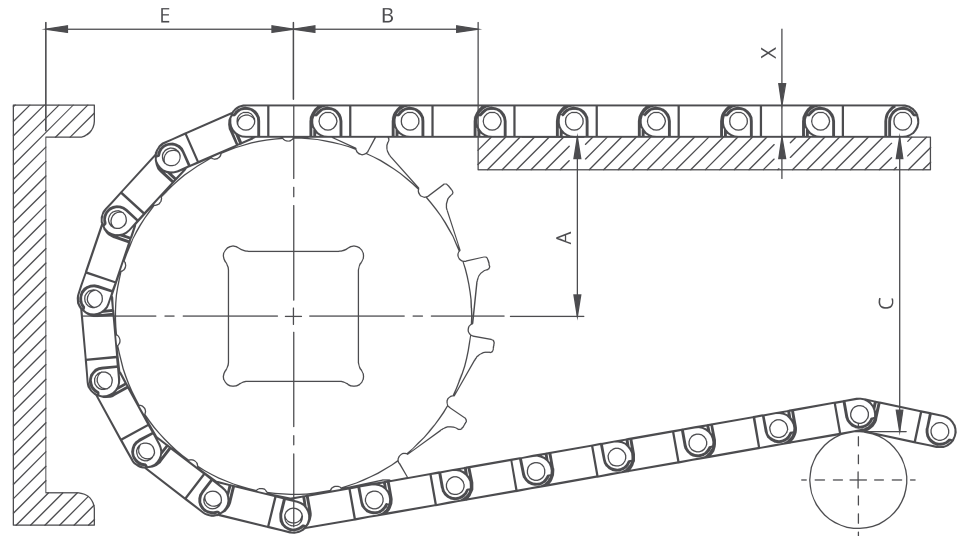
B: 2 x 500 mm = 1000 mm (min.)

E: $\frac{2 \times (C+D) \times 3,14}{4} = 2016 \text{ mm}$

Total length = (2 x A) + B + (2 x E)

EC254T R Series *Engineering Information*

A - $\pm 0,031"$ (1mm) C - \pm (Max.)
 B - $\pm 0,125"$ (3mm) E - \pm (Min.)



EC254T R Series / Conveyor Frame Dimensions

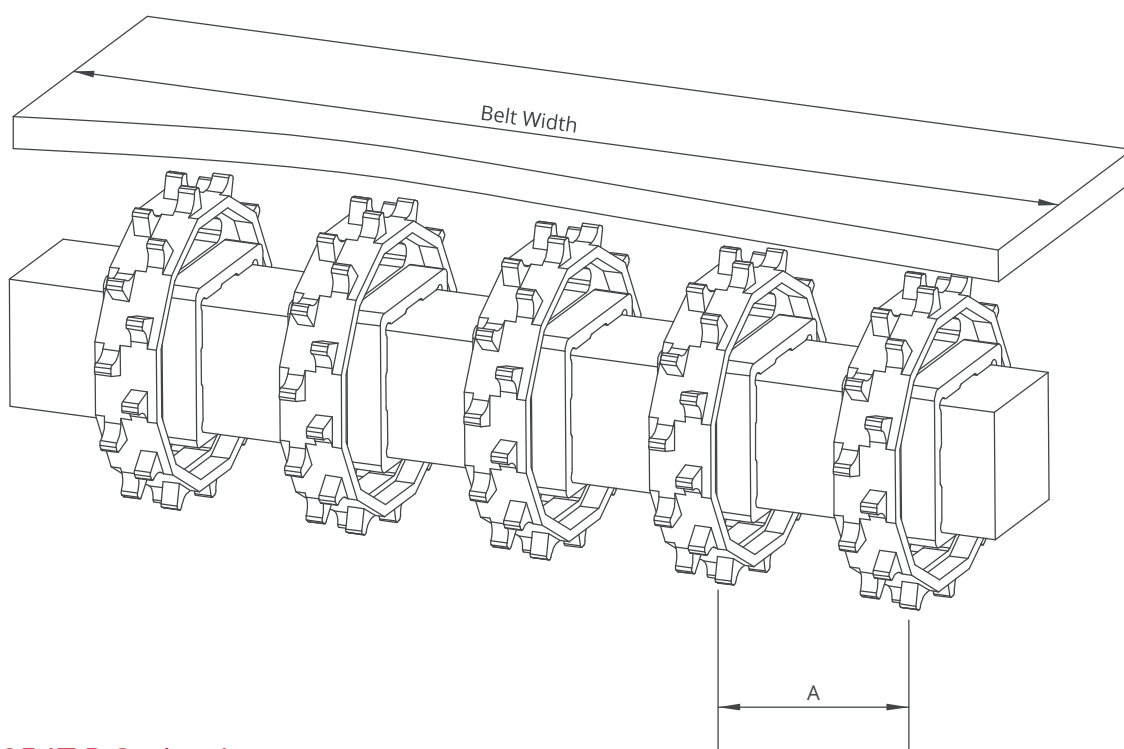
Sprockets Description			A		B		C		E		X	
Pitch Diameter		No.Teeth	Range (Bottom to Top)		inch	mm	inch	mm	inch	mm	inch	mm
inch	mm		inch	mm								
EC254T R												
2.38	60,5	8	1.15	29,2	1.55	39,4	1.95	49,5	1.94	49,2	0.43	11,0
3.07	78,0	10	1.46	37,1	1.77	45,0	2.60	66,1	2.25	57,1	0.43	11,0
3.74	95,0	12	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)

2" Radius Belt

Modular Belt Series

EC508T R

Sprockets & Accessories

Technical Specifications

- Drum Types, Wear Strip Placement, Support

Engineering Information

Radius Belt Calculation







EC508T 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 Conveyence

EC508T R (Tight Radius)

Pitch :	50,8 mm / 2 inch
Belt Surface :	Open, Smooth Surface
Minimum Width :	508 mm / 20 inch
Open Area (%) :	58%. (Biggest opening 15 x 17 mm)
Contact Area (%) :	85%. Open Contact Area
Flight :	No
Divider :	Yes (h=25 mm)
Rod :	Ø6 mm / 0.236 inch - Self Lock
Approved :	FDA and EU
Curve :	Yes
Color :	Additional colors available
Cleanability :	Excellent
Application :	Straight and side flexing
Collapse Factor :	1.5 - 1.7 (Please check page 185 to see Collapse Factors-Width Table)
Belt Thickness:	16 mm / 0.630 inch



Product Features and Functional Benefits

- Belt designed for tight radius applications.
- Available for medium and high load capacity.
- Stainless steel pins option for high temperature applications.
- Stainless steel pins option reduce belt elongation for high temperature application.
- High temperature and wear resistance. Unique locking system.
- Belt provides optimal open area for drainage and airflow.
- Suitable for proofer-cooling-freezing spiral towers.

Available Moulded Module Sizes

- 203,2 mm / **4 inch** module
- 184 mm / **7.24 inch** module
- 172 mm / **6.76 inch** module

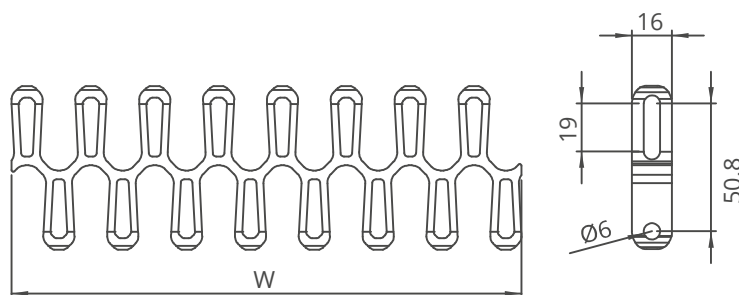
EC508T R / Technical Information

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	16500	1131	2560	568	+5 / +42.8	+90 / +194	5,2 - 1.07
Polyethylene	-	-	-	-	-	-	-
Acetal	23100	1583	3520	792	-43 / -45.4	+110 / +230	7,5 - 1.54

EC508T R / Standard Belt Widths

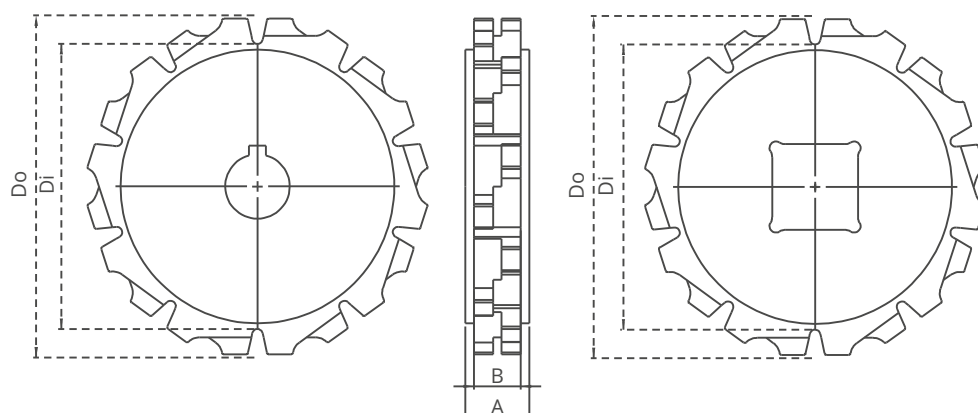
- Belt strength and temperature values are maximum on the table.

BELT SERIES	WIDTH (W)				Belt With Tolerance (max.)
	PP		POM		
	mm	inch	mm	inch	
EC508T R	508,0	20.0	508,0	20.0	± 0,5 mm
EC508T R	558,8	22.0	558,8	22.0	± 2 mm
EC508T R	609,6	24.0	609,6	24.0	± 2 mm
EC508T R	660,4	26.0	660,4	26.0	± 3 mm
EC508T R	711,2	28.0	711,2	28.0	± 3 mm
EC508T R	762,0	30.0	762,0	30.0	± 3 mm
EC508T R	812,8	32.0	812,8	32.0	± 3 mm
EC508T R	863,6	34.0	863,6	34.0	± 4 mm
EC508T R	914,4	36.0	914,4	36.0	± 4 mm
EC508T R	965,2	38.0	965,2	38.0	± 4 mm
EC508T R	1016,0	40.0	1016,0	40.0	± 4 mm
EC508T R	1066,8	42.0	1066,8	42.0	± 4 mm
EC508T R	1117,6	44.0	1117,6	44.0	± 4 mm
EC508T R	1168,4	46.0	1168,4	46.0	± 4 mm



- Standard belt increments 50,8 mm.
- Non-standard increments 25,4 mm
- Please contact with customer service for precise belt measurements.
- For smaller and bigger sizes, please contact with customer service.

EC508T R Serie *Sprockets and Accessories*



EC508T R Serie / Machined Sprocket Dimensions

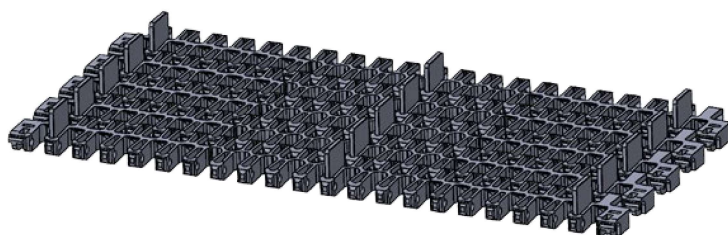
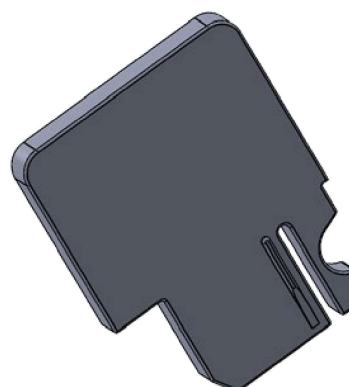
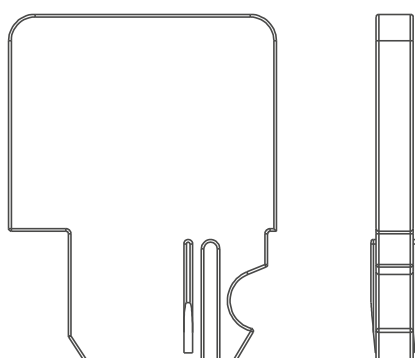
NO.TEETH	Di mm/inch	Do mm/inch	B mm/inch	A mm/inch	Square Bore (Q) mm/inch	Round Bore (R) mm/inch	PRODUCT CODE	
							Square Type (Q)	Round Type (R)
Z8	99,7 / 3.93	127,3 / 5.01	22 / 0.87	30 / 1.18	40 / 1.5	25-30 / 1-1.25	EC508TRSQZ8*POM	EC508TRSRZ8*POM
Z10	133,6 / 5.26	160,4 / 6.31	22 / 0.87	30 / 1.18	40 / 1.5	25-30 / 1-1.25	EC508TRSQZ10*POM	EC508TRSRZ10*POM
Z12	167,1 / 6.58	193,2 / 7.61	22 / 0.87	30 / 1.18	40 / 1.5	25-30 / 1-1.25	EC508TRSQZ12*POM	EC508TRSRZ12*POM

*All required sprockets produced by CNC.

*Other sprockets and hub sizes are manufactured up to request.

*POM (Acetal) and PA (Polyamide) sprockets raw material is available on request.

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



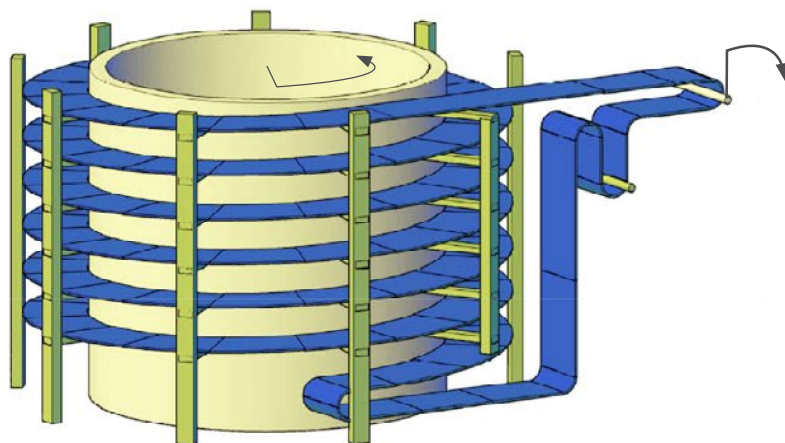
EC508T R Serie / Divider Technical Specifications

Divider	-	
	mm	inch
Standard	35,9	1.41
Standard	61,3	2.41
Standard	86,7	3.41
Standard	112,1	4.41

EC508T R Serie *Technical Specifications*

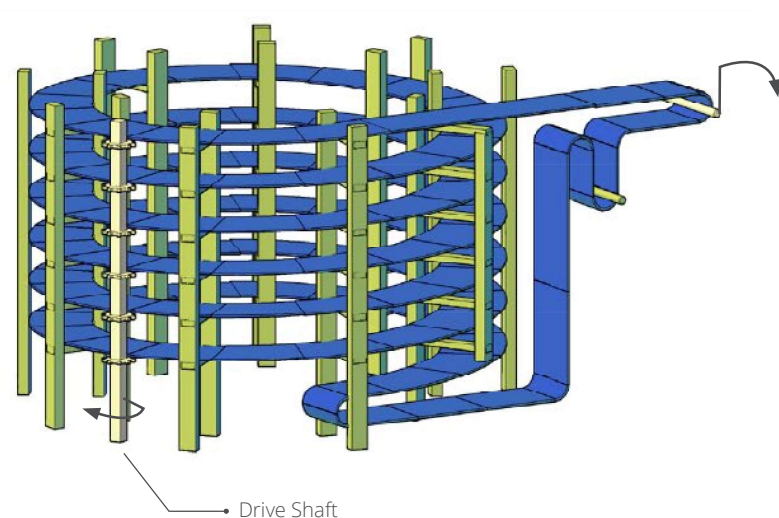
EC508T R Serie / Drum Types

Central Driver Drum



Spiral conveyor of this kind is made of modular belt that twisted around of special drum structure in the center. The belt is sliding on rails with plastic profile with low friction. The rails are fixed on external vertical support columns. The drive drum has a cylindrical shape and made of profiled pipes or plates, forming a continuous or rarefied surface.

Lateral Driver Drum



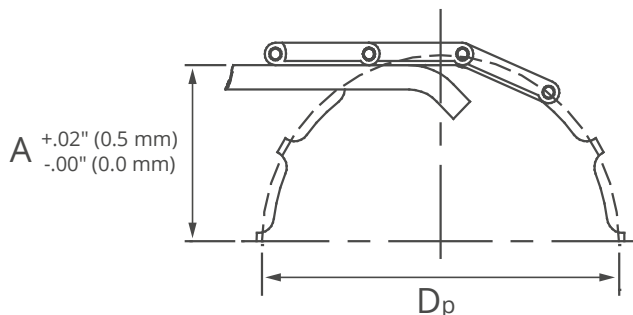
Lateral drive system has been implemented as a stainless steel structure with a gear motor located in a bottom part and connected with a vertical shaft that has driving sprockets, the number of which equals the number of tiers on the spiral conveyor. Belt received the teeth on the outer contour and through which carried out the movement from the sprockets, thus forming a multilevel gear transmission.

Wear Strip Placement Calculation

This formula is a general guideline and does not take into consideration belts traveling at speeds greater than 75 ft/min. (23 m/minute). For high speed applications, Modutech recommends increasing the height of "A" and shortening the wear strips as much as one belt pitch in length.

$$A = \frac{1}{2} \times (D_p - BT)$$

A = Calculated Height
 D_p = Sprocket Pitch Diameter
 BT = Belt Thickness



EC508T R Serie *Technical Specifications*

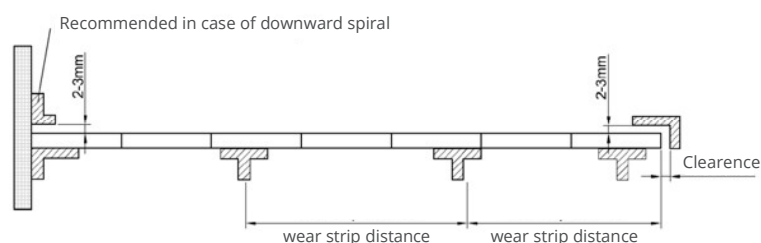
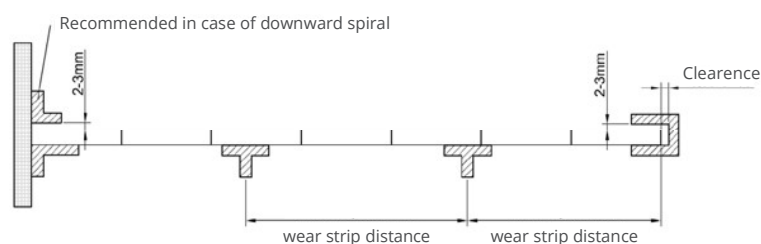
EC508T R Serie / Wear Strip Placement

Due to the strength and rigidity of the stainless steel pins the number of wear strip can be largely reduced compared to other belts with plastic pin.

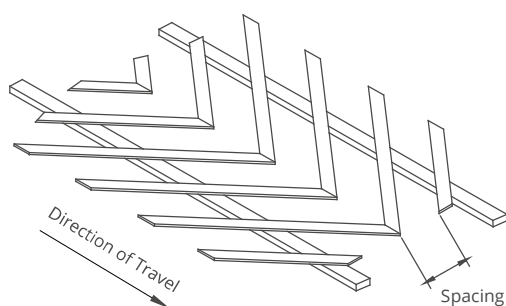
The wear strip distance is based on the product weight and how is distributed on the belt. a range between 250 and 400 mm is covering most of the case. on the return path the guides can be spaced up 1 meter apart.

Due to excellent belt width tolerance the lateral gap between belt and guides can be few mm, anyhow it is important to keep into firm consideration the thermal dilatation of the belt that corresponds exactly to the dilatation of the stainless steel pin.

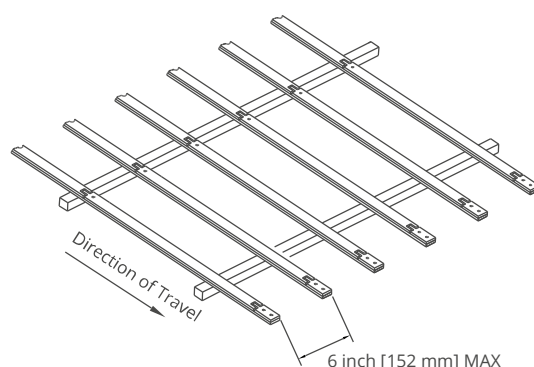
Note: Please contact with your sales representative for suitable wear strip types and location for spiral towers.



EC508T R Serie / Support



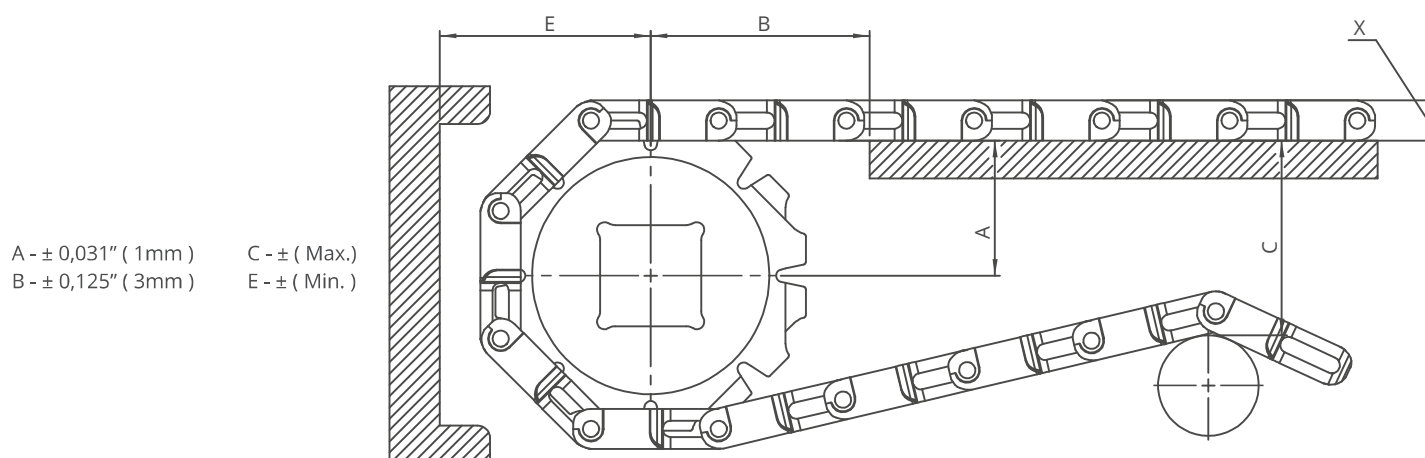
Herringbone rails: Modutech recommended. Flat wear strips in a "V" configuration with the point of the "V" pointing in the direction of travel. Low friction wear strip material preferred to minimize belt wear. Recommended spacing between rails of 100–300mm depending on belt type, load, and other factors. This configuration distributes the wear over the entire belt width.



Longitudinal Rails: Flat wear strips the full length of the conveyor, parallel to each other and perpendicular to the terminal shafts. Low friction wear strip material preferred to minimize belt wear. Recommended spacing between rails of 100–300mm depending on belt type, load, and other factors. This configuration does not distribute wear over the full width of the belt.

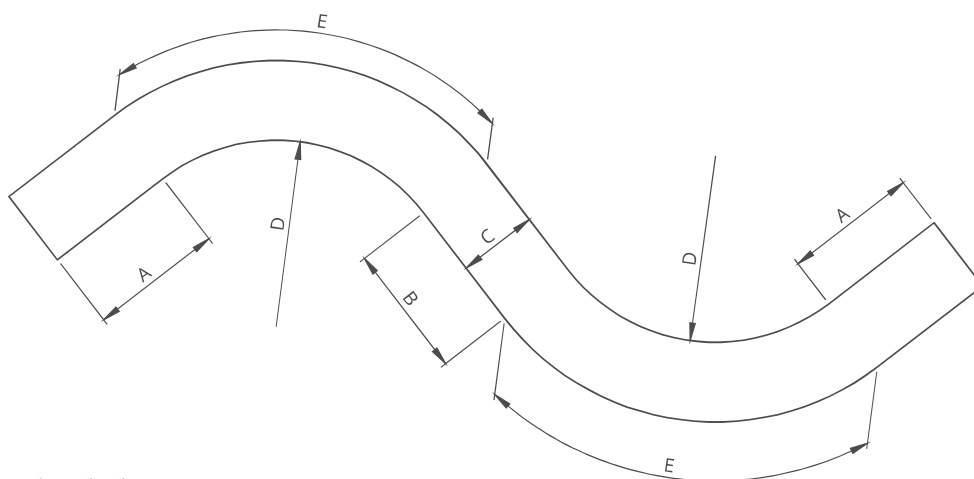


EC508T R Serie *Engineering Information*



EC508T R Serie / 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								
EC508T R												
4.52	114,8	8	2.36	60,1	1.85	47,0	4.47	113,5	3.36	85,4	0.63	16,0
5.81	147,5	10	2.96	75,1	2.31	58,7	5.85	141,8	4.01	101,8	0.63	16,0
7.09	180,2	12	3.55	90,1	2.77	70,5	6.70	170,2	4.65	118,1	0.63	16,0



Radius Belt Example 90° S-Curve

EC508T R Serie / 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: 762 mm Radius Belt
Collapse Factor: 1.53

$$D: 762 \text{ mm} \times 1.53 = 1166 \text{ mm}$$

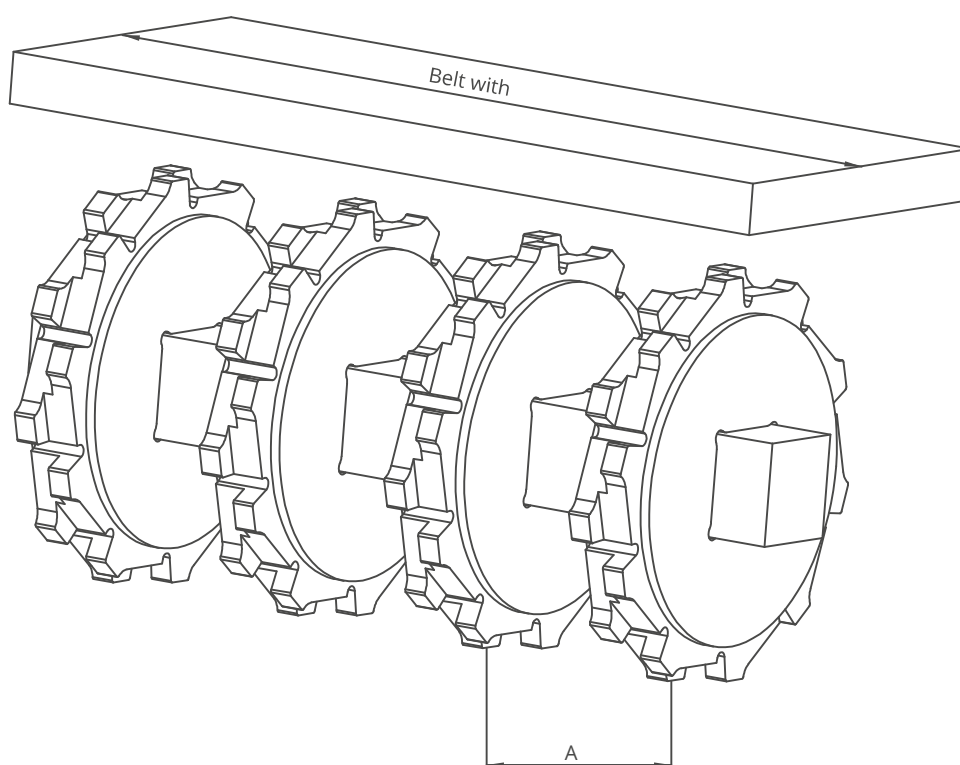
$$A: 762 \text{ mm}$$

$$B: 2 \times 762 \text{ mm} = 1524 \text{ mm (min.)}$$

$$E: \frac{2 \times (C+D) \times 3.14}{4} = 3027 \text{ mm}$$

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

EC508T R Serie *Engineering Information*



EC508T R Serie / Sprockets Arrangement

Standard Belt Width		Number of sprockets per shaft		A (mm/ <i>inch</i>)	
mm	<i>inch</i>	Drive Shaft	Return Shaft	Min.	Max.
508,0	20.0	6	5	50/ 2	120/ 4.7
558,8	22.0	7	6	50/ 2	120/ 4.7
609,6	24.0	8	7	50/ 2	120/ 4.7
660,4	26.0	8	7	50/ 2	120/ 4.7
711,2	28.0	9	8	50/ 2	120/ 4.7
762,0	30.0	10	9	50/ 2	120/ 4.7
812,8	32.0	10	9	50/ 2	120/ 4.7
863,6	34.0	11	10	50/ 2	120/ 4.7
914,4	36.0	11	10	50/ 2	120/ 4.7
965,2	38.0	12	11	50/ 2	120/ 4.7
1016,0	40.0	13	12	50/ 2	120/ 4.7
1066,8	42.0	13	12	50/ 2	120/ 4.7
1117,6	44.0	14	13	50/ 2	120/ 4.7
1168,4	46.0	15	14	50/ 2	120/ 4.7

Note: Number of sprockets depends on the belt load.

EC508T R Serie / Collapse Factors per width for EC508T R Serie

Nom. Belt Width (mm)	355,6	406,4	457,2	508,0	558,8	609,6	660,4	711,2	762,0	812,8	863,6	914,4	965,2	1016,0	1066,8	1117,6	1168,4	1219,2	1270,0	1320,8
Nom. Belt Width (<i>inch</i>)	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	50.0	52.0
Collapse Factor	1,49	1,49	1,49	1,49	1,50	1,51	1,52	1,53	1,53	1,54	1,54	1,55	1,56	1,56	1,57	1,57	1,58	1,60	1,62	1,63
Min. Inner Radius (mm)	529,8	605,5	681,2	756,9	838,2	920,5	1003,8	1088,1	1165,9	1251,7	1329,9	1417,3	1505,7	1585,0	1674,9	1754,6	1846,1	1950,7	2057,4	2152,9
Min. Inner Radius (<i>inch</i>)	20.9	23.8	26.8	29.8	33.0	36.2	39.5	42.8	45.9	49.3	52.4	55.8	59.3	62.4	65.9	69.1	72.7	76.8	81.0	84.8

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

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