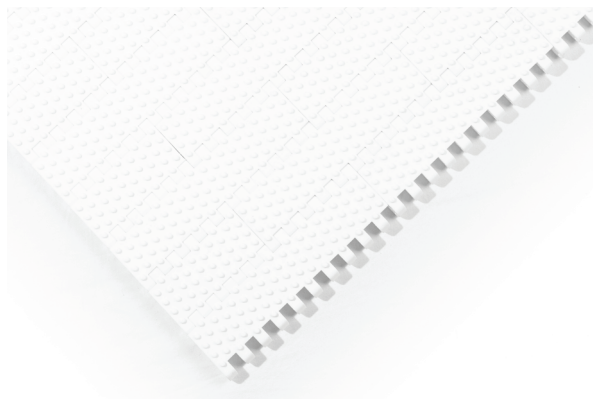


# EC381 NT

|                        |                                   |
|------------------------|-----------------------------------|
| <b>Pitch:</b>          | 38,1 mm / 1.5 inch                |
| <b>Belt Surface:</b>   | Close, Nub Top Surface            |
| <b>Minimum Width:</b>  | 152,4 mm / 6.0 inch               |
| <b>Open Area (%):</b>  | 0%                                |
| <b>Flight:</b>         | Yes                               |
| <b>Sidewall:</b>       | Yes                               |
| <b>Pin:</b>            | Ø 5.7 mm / 0.224 inch - End Locks |
| <b>Approved:</b>       | FDA and EU                        |
| <b>Color:</b>          | Blue / White / Gray               |
| <b>Cleanability:</b>   | Excellent                         |
| <b>Belt Thickness:</b> | 14.40 mm / 0.567 inch             |

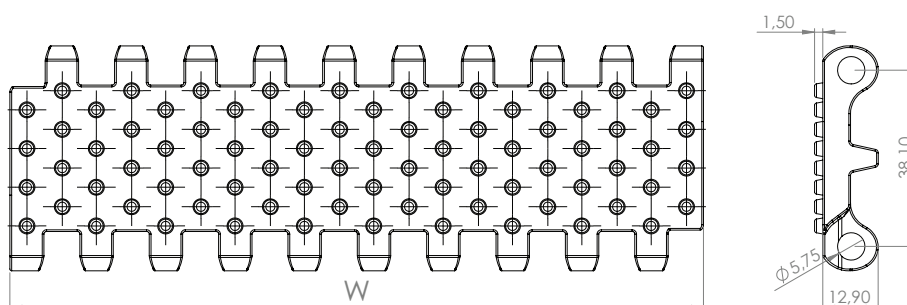


## EC381 NT Technical Information

| Belt Material |                  | POM                    | POM                    | POM                    | PP                      | PP                     | PE                      | PE                      |
|---------------|------------------|------------------------|------------------------|------------------------|-------------------------|------------------------|-------------------------|-------------------------|
| Pin Material  |                  | PA                     | POM                    | PP                     | PP                      | POM                    | POM                     | PE                      |
| Belt Strength | N/m   lb/ft      | 26970 - 1848           | 26970 - 1848           | 18000 - 1233           | 15900 - 1089            | 15900 - 1089           | 15200 - 1042            | 15200 - 1042            |
| Temperature   | °C<br>°F         | -40 / 93<br>-40 / +200 | -40 / 93<br>-40 / +200 | +5 / +93<br>+40 / +200 | +5 / +105<br>+40 / +220 | +5 / +93<br>+40 / +200 | -40 / +65<br>+40 / +150 | -70 / +65<br>-50 / +150 |
| Belt Weight   | kg/m²   lb/sqft² | 9,90 / 2.03            | 10.14 / 2.08           | 9,80 / 2.01            | 6,49 / 1.33             | 6,82 / 1.40            | 7,22 / 1.48             | 6,93 / 1.42             |

| Diameter of idling rollers (min.) |      | Diameter of support rollers (min.) |      | Diameter of gravity take-up and center drive support rollers (min.) |      | Backbending radius for elevators without side guards or hold down devices (min.) |      | Backbending radius for elevators with side guards or hold down devices (min.) |      |
|-----------------------------------|------|------------------------------------|------|---------------------------------------------------------------------|------|----------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------|------|
| mm                                | inch | mm                                 | inch | mm                                                                  | inch | mm                                                                               | inch | mm                                                                            | inch |
| 90                                | 3.5  | 90                                 | 3.5  | 150                                                                 | 6    | 150                                                                              | 6    | 250                                                                           | 6    |

|                 |       |       |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| Belt Width mm   | 152,4 | 228,6 | 304,8 | 381,0 | 457,2 | 533,4 | 609,6 | 685,8 | 762,0 | 838,2 | 914,4 | 990,6 | 1066,8 | 1143,0 | 1219,2 | 1295,4 | 1371,6 |
| Belt Width inch | 6.00  | 9.00  | 12.00 | 15.00 | 18.00 | 21.00 | 24.00 | 27.00 | 30.00 | 33.00 | 36.00 | 39.00 | 42.00  | 45.00  | 48.00  | 51.00  | 54.00  |



## Product Features and Functional Benefits

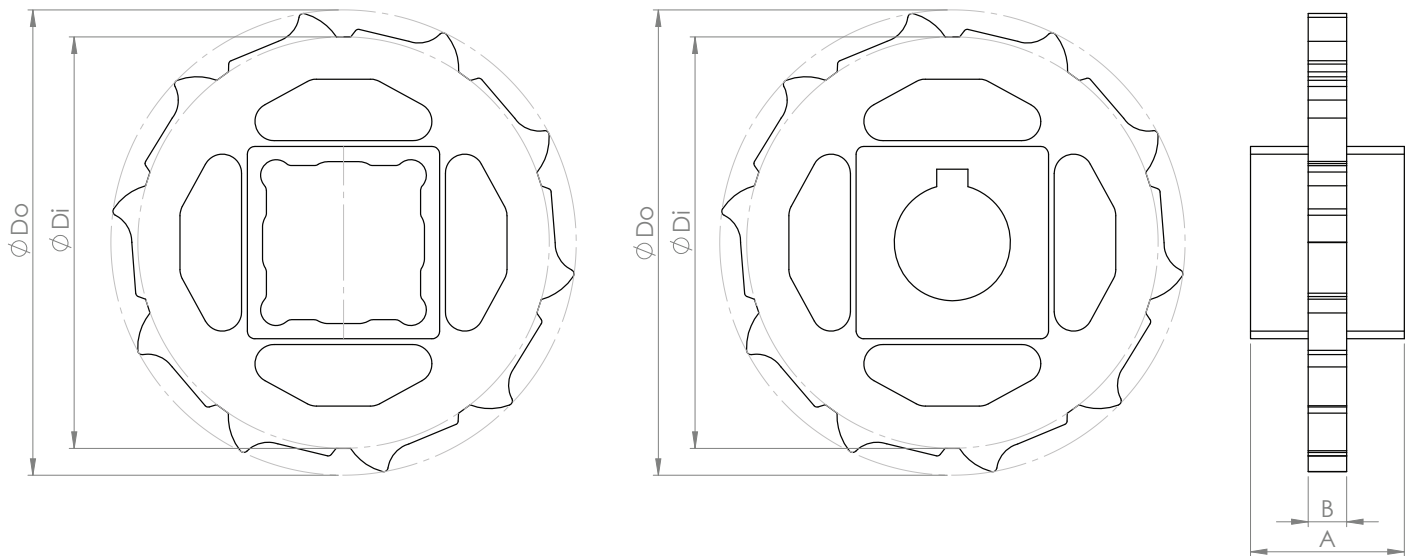
- Easy to clean, closed nub top surface.
- Reduced contact surface for sticky operations.
- Reduces bacteria growth.
- Self indent modules available.
- Unique sprocket engagement.

## Important Notes

- Standard belt width increments 76,2 mm (3 inch).
- Non-Standard belt width increments 15,2 mm (0.6 inch).
- Standard Nub indent: 42,0 mm (1.65 inch).
- Please contact with customer service for precise belt measurements.
- Special raw materials and additional colors available.

# EC381 Series

## Sprockets and Technical Specifications



### EC381 Series / Standard Molded Sprockets Dimensions

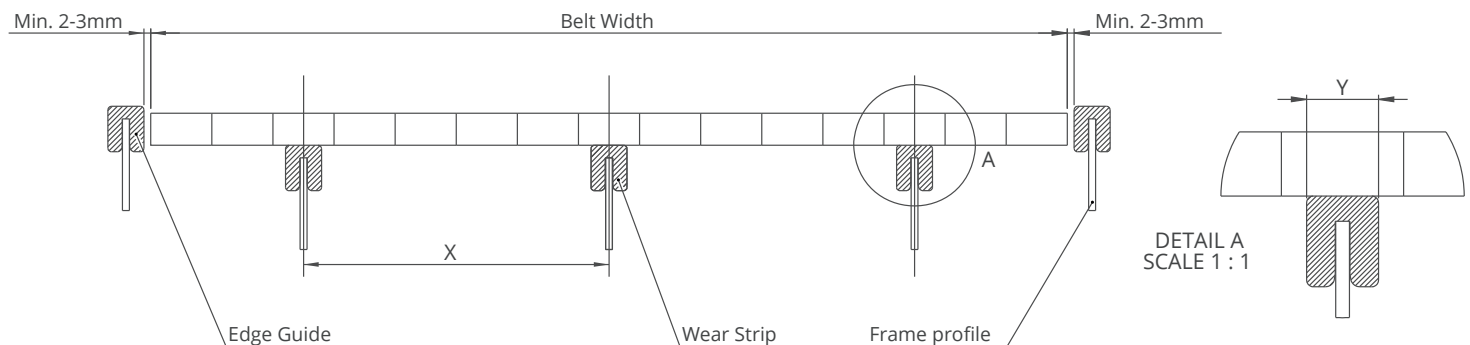
| NO. TEETH | Di<br>mm/inch | Do<br>mm/inch | A<br>mm/inch | B<br>mm/inch | Square Bore (Q) |      | Round Bore (R) |          | PRODUCT CODE    |                |
|-----------|---------------|---------------|--------------|--------------|-----------------|------|----------------|----------|-----------------|----------------|
|           |               |               |              |              | mm              | inch | mm             | inch     | Square Type (Q) | Round Type (R) |
| Z8        | 80 / 3.15     | 95 / 3.74     | 40 / 1.57    | 10 / 0.39    | 40              | -    | 25 - 30        | 1 - 1.25 | EC381SQZ8*PA    | EC381SRZ8*PA   |
| Z10       | 104,5 / 4.11  | 123 / 4.84    | 40 / 1.57    | 10 / 0.39    | 40              | 1.5  | 25 - 30        | 1 - 1.25 | EC381SQZ10*PA   | EC381SRZ10*PA  |
| Z12       | 130 / 5.12    | 146,5 / 5.77  | 40 / 1.57    | 10 / 0.39    | 40              | -    | 25 - 30        | 1 - 1.25 | EC381SQZ12*PA   | EC381SRZ12*PA  |

\*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.

### EC381 Series / Slider Support System For Straight Running Belts



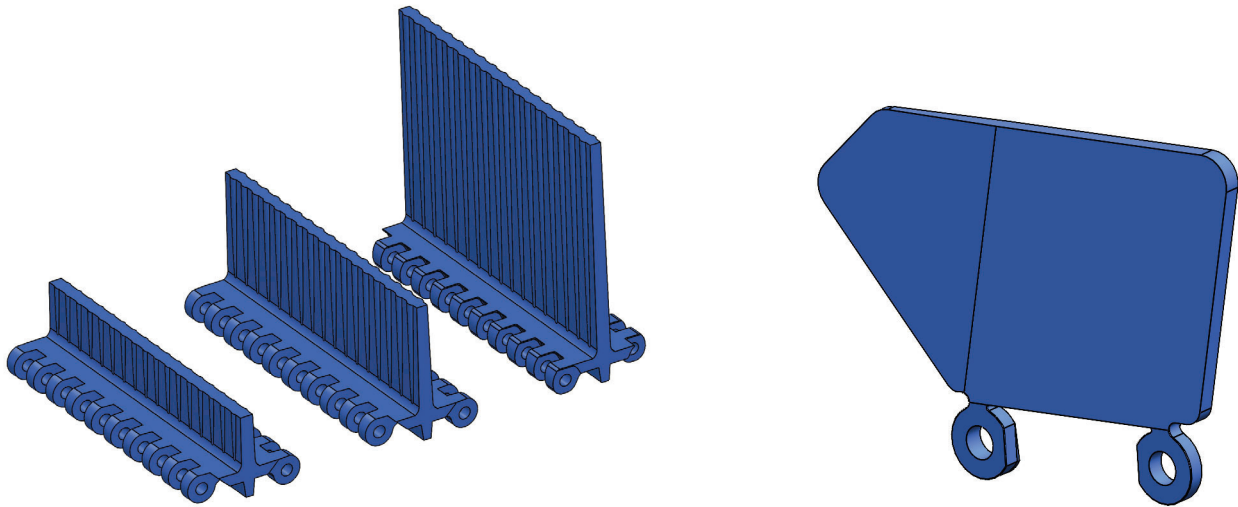
**Note:** The distances between the carryway wear strips (X) may be changed to due to operation conditions and transported load. In general, we recommend;

**100-200mm for 2" belts**  
**100-145mm for 1"belts**  
**100-145mm for 0,5" belts**  
**70-120mm for 0,3" belts**

For specific applications, please contact with Modutech representatives.

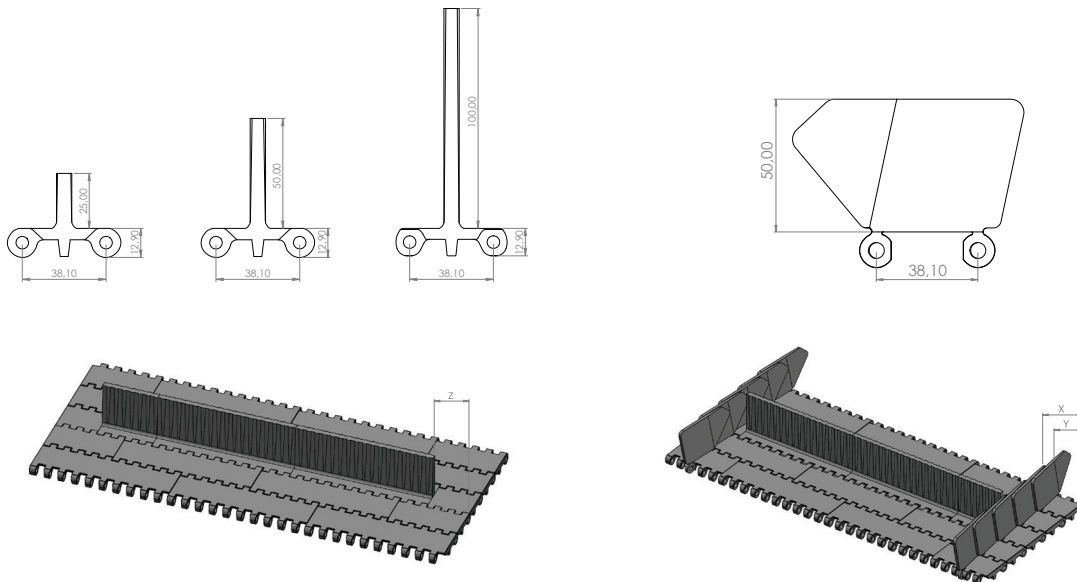
# EC381 Series

## Accessories and Technical Specifications



### EC381 Series / Flight & Sidewall Dimensions

| EC381 Series / Flight & Sidewall |                         |                        |                       |                           |
|----------------------------------|-------------------------|------------------------|-----------------------|---------------------------|
| Flight Product Code              | Flight Height (mm/inch) | Flight Width (mm/inch) | Sidewall Product Code | Sidewall Height (mm/inch) |
| EC381T25                         | 25 / 1                  | 152,4 / 6              | EC381SW50             | 50 / 1.97                 |
| EC381T50                         | 50 / 2                  | 152,4 / 6              | -                     | -                         |
| EC381T100                        | 100 / 4                 | 152,4 / 6              | -                     | -                         |



### EC381 Series / Sidewall Technical Specifications

| Possible Sidewall and Flights Indents | Z      |      | X     |      | Y     |      |
|---------------------------------------|--------|------|-------|------|-------|------|
|                                       | mm     | inch | mm    | inch | mm    | inch |
| Standard, no module cutting           | 30,48  | 1.20 | 22,80 | 0.90 | 21,14 | 0.83 |
| Standard, no module cutting           | 45,72  | 1.80 | 30,40 | 1.20 | 28,76 | 1.13 |
| Standard, module cutting              | 60,96  | 2.40 | 38,00 | 1.50 | 36,40 | 1.43 |
| Standard, module cutting              | 76,20  | 3.00 | 45,64 | 1.80 | 44,00 | 1.73 |
| Standard, no module cutting           | 101,60 | 4.00 | 53,26 | 2.10 | 51,62 | 2.03 |

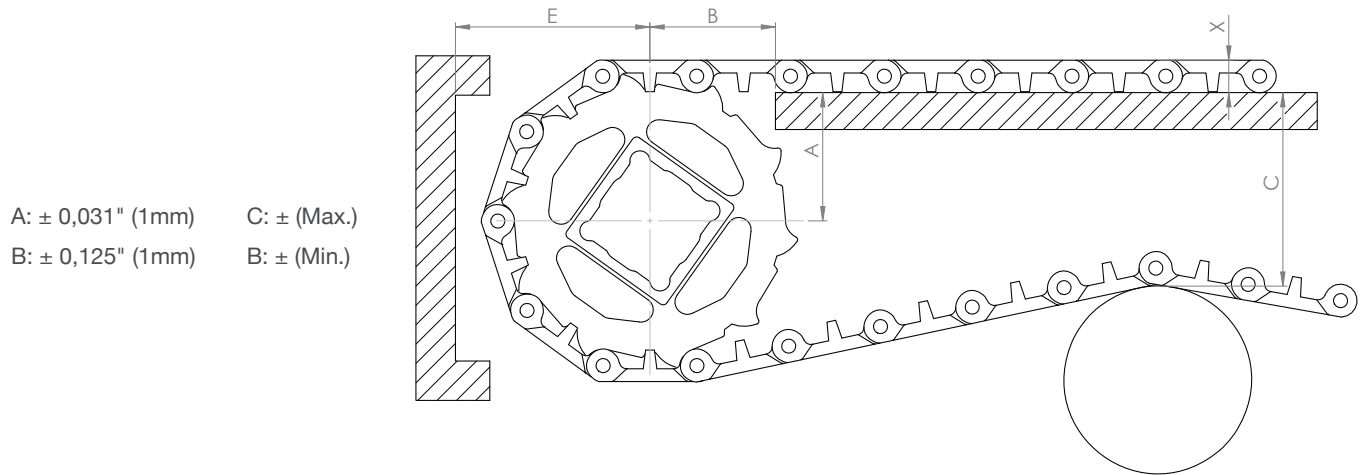
\* Gap between flight and sidewall minimum 2-3 mm

\*\* Sidewall indent dimensions (Y) are specified based on a 50 mm sidewall height.

For other heights, required indent clearances may vary. Please contact Modutech Technical Team for specific dimensions.

# EC381 Series

## Engineering Information

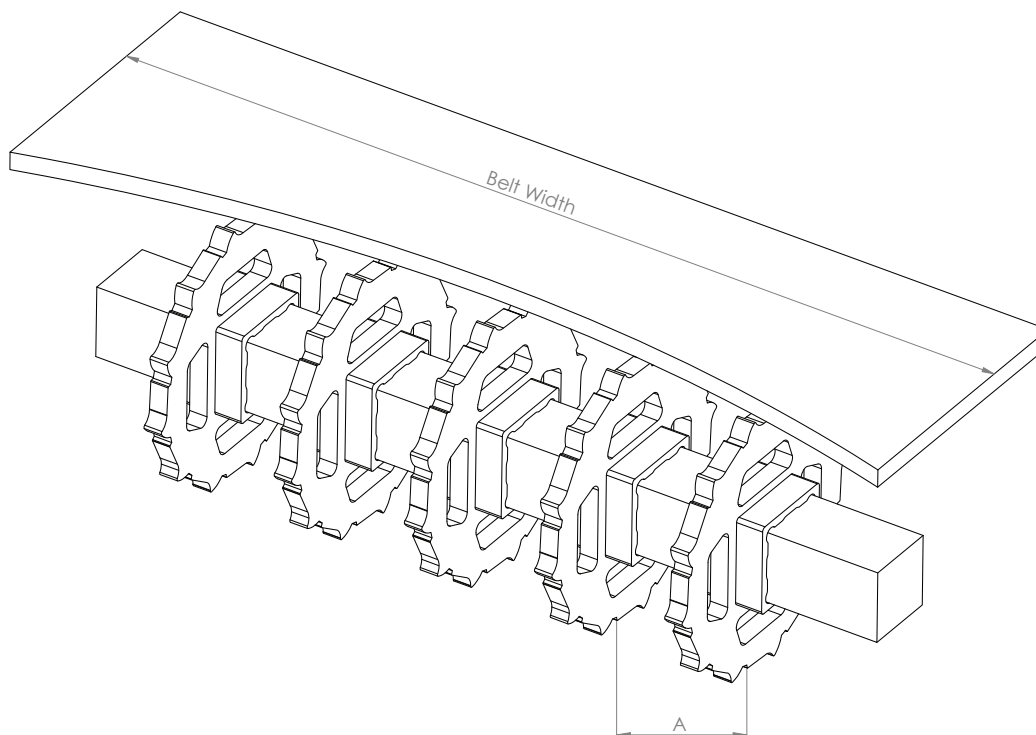


### EC381 Series / Conveyor Frame Dimensions

| 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   |      |      |      |      |      |      |      |      |
| EC381 C, EC381 FG, EC381 PR22 |        |          |                       |      |      |      |      |      |      |      |      |      |
| 5.26                          | 133,62 | 8        | 1.55                  | 39,3 | 1.84 | 46,7 | 2.09 | 53,1 | 2.69 | 68,3 | 0.51 | 12,9 |
| 6.59                          | 167,45 | 10       | 2.05                  | 52,0 | 2.01 | 51,0 | 3.09 | 78,5 | 3.11 | 79,0 | 0.51 | 12,9 |
| 7.64                          | 194,00 | 12       | 2.54                  | 64,4 | 2.20 | 56,0 | 3.87 | 98,2 | 3.70 | 94   | 0.51 | 12,9 |
| EC381 NT                      |        |          |                       |      |      |      |      |      |      |      |      |      |
| 5.26                          | 133,62 | 8        | 1.55                  | 39,3 | 1.84 | 46,7 | 2.09 | 53,1 | 2.75 | 69,8 | 0.57 | 14,4 |
| 6.59                          | 167,45 | 10       | 2.05                  | 52,0 | 2.01 | 51,0 | 3.09 | 78,5 | 3.17 | 80,5 | 0.57 | 14,4 |
| 7.64                          | 194,00 | 12       | 2.54                  | 64,4 | 2.20 | 56,0 | 3.87 | 98,2 | 3.76 | 95,5 | 0.57 | 14,4 |

# EC381 Series

## Engineering Information



### EC381 Series / Sprockets Arrangement

| Standard Belt Width |      | Number of sprockets per shaft |              | A (mm/inch) |           |
|---------------------|------|-------------------------------|--------------|-------------|-----------|
| mm                  | inch | Drive Shaft                   | Return Shaft | Min.        | Max.      |
| 152,4               | 6    | 2                             | 2            | 50 / 2.0    | 152 / 6.0 |
| 203,2               | 8    | 2                             | 2            | 50 / 2.0    | 152 / 6.0 |
| 254,0               | 10   | 2                             | 3            | 50 / 2.0    | 152 / 6.0 |
| 304,8               | 12   | 3                             | 3            | 50 / 2.0    | 152 / 6.0 |
| 355,6               | 14   | 3                             | 3            | 50 / 2.0    | 152 / 6.0 |
| 406,4               | 16   | 3                             | 3            | 50 / 2.0    | 152 / 6.0 |
| 457,2               | 18   | 3                             | 3            | 50 / 2.0    | 152 / 6.0 |
| 508,0               | 20   | 5                             | 4            | 50 / 2.0    | 152 / 6.0 |
| 609,6               | 24   | 5                             | 4            | 50 / 2.0    | 152 / 6.0 |
| 762,0               | 30   | 5                             | 4            | 50 / 2.0    | 152 / 6.0 |
| 812,8               | 32   | 7                             | 5            | 50 / 2.0    | 152 / 6.0 |
| 914,4               | 36   | 7                             | 5            | 50 / 2.0    | 152 / 6.0 |
| 1066,8              | 42   | 7                             | 5            | 50 / 2.0    | 152 / 6.0 |
| 1219,2              | 48   | 9                             | 7            | 50 / 2.0    | 152 / 6.0 |
| 1371,6              | 54   | 9                             | 7            | 50 / 2.0    | 152 / 6.0 |

**Note:** Number of sprockets depends on the belt load.