# ALLIED-LOCKE INDUSTRIES
INCORPORATED

Precision Roller Chain • Engineering Class Chain
Agricultural Chain • Sprockets • Environmental Products

# Industrial Inverted Tooth Chain
## for High Speed and High Load Applications

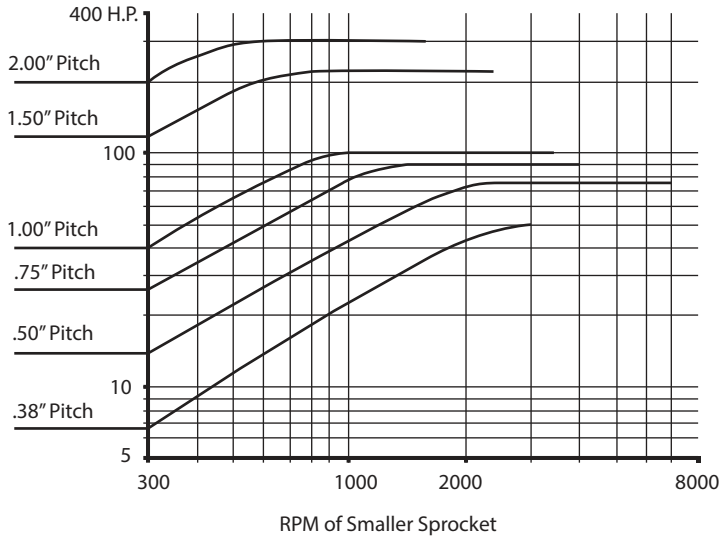
**Inverted tooth chain is especially good for use in high speed and high load applications**

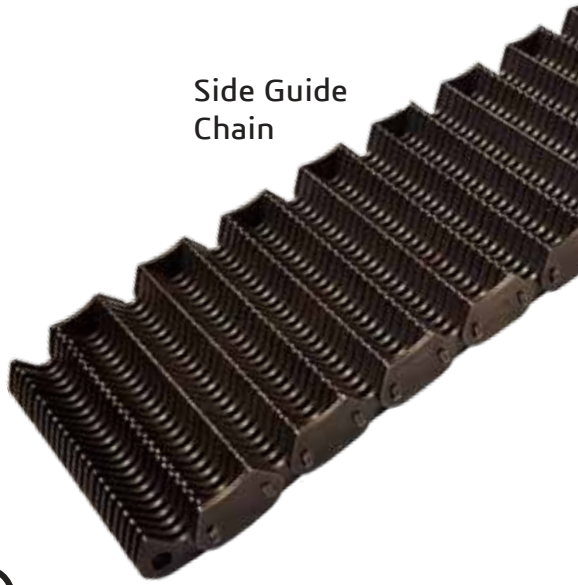
- High Tensile Strength
- Excellent Fatigue Resistance
- Low Noise
- Ultimate Wear Life

Center Guide Chain

**Horsepower Capacity**

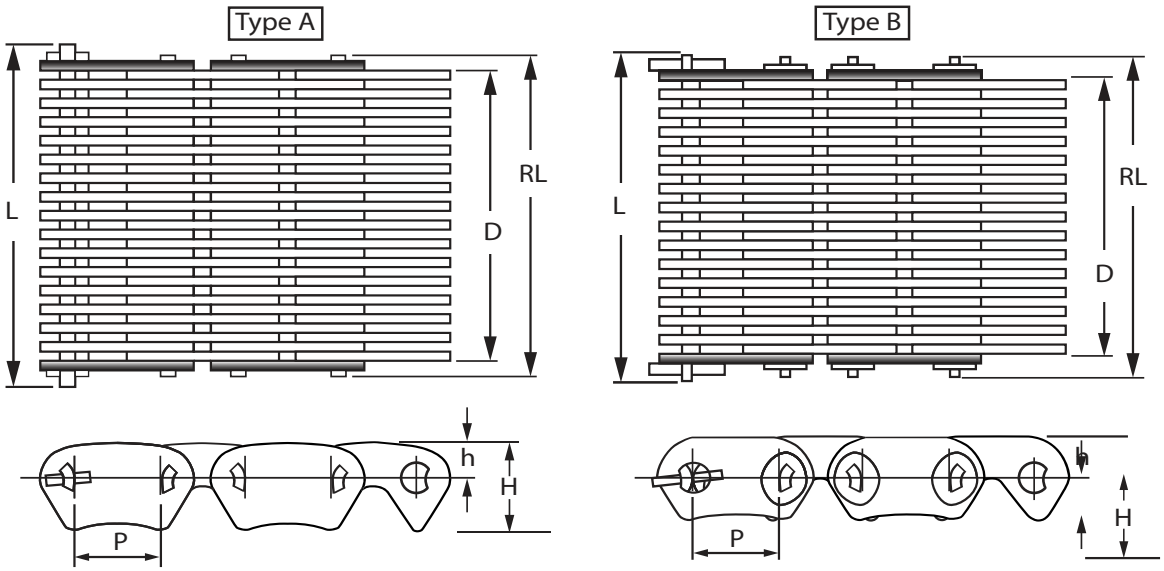
Inverted tooth chains can be operated at loads and speeds that often exceed the capability of belts and other types of chain.



Side Guide Chain

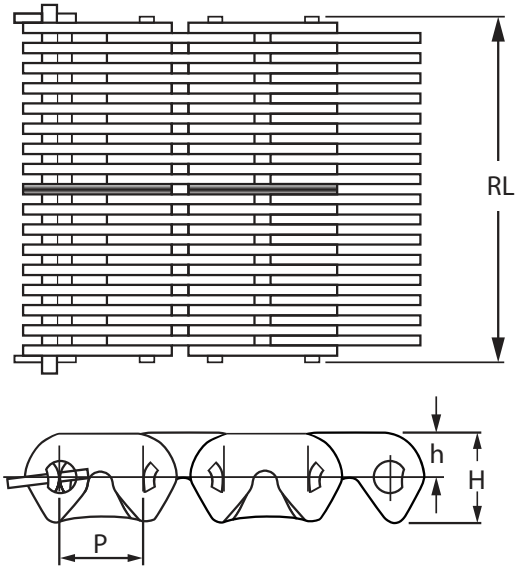
# Allied-Locke Excel Series uses the outer sidebars as guides. They are shaded below.




| CHAIN # | CHAIN TYPE | PITCH | WIDTH | HEIGHT ABOVE PITCH LINE | HEIGHT | DISTANCE BETWEEN GUIDES (min) | RIVET LENGTH | CONN. PIN LENGTH | AVERAGE ULTIMATE TENSILE STRENGTH (LB) | CHAIN WEIGHT (LB/Ft) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | P | | h | H | D | RL | L | | |
| EX303 | A | 0.375 | 0.75 | 0.17 | 0.43 | 0.69 | 0.89 | 1.03 | 6,173 | 0.7 |
| EX304 | | | 1.00 | | | 0.94 | 1.15 | 1.28 | 8,267 | 0.9 |
| EX306 | | | 1.50 | | | 1.44 | 1.65 | 1.78 | 12,346 | 1.3 |
| EX308 | | | 2.00 | | | 1.94 | 2.15 | 2.29 | 16,535 | 1.7 |
| EX312 | | | 3.00 | | | 2.94 | 3.15 | 3.29 | 24,692 | 2.6 |
| EX404 | A | 0.500 | 1.00 | 0.22 | 0.57 | 0.94 | 1.15 | 1.28 | 11,023 | 1.1 |
| EX406 | | | 1.50 | | | 1.44 | 1.65 | 1.78 | 16,535 | 1.7 |
| EX408 | | | 2.00 | | | 1.94 | 2.15 | 2.29 | 22,046 | 2.3 |
| EX412 | | | 3.00 | | | 2.94 | 3.15 | 3.29 | 33,069 | 2.4 |
| EX416 | | | 4.00 | | | 3.94 | 4.15 | 4.29 | 44,092 | 4.6 |
| EX606 | A/B | 0.750 | 1.50 | 0.34 (TYPE A) 0.41 (TYPE B) | 0.85 (TYPE A) 0.82 (TYPE B) | 1.52 | 1.53 | 1.54 | 24,692 | 2.6 |
| EX608 | | | 2.00 | | | 2.00 | 2.01 | 2.02 | 33,069 | 3.5 |
| EX612 | | | 3.00 | | | 3.00 | 3.01 | 3.02 | 49,604 | 5.2 |
| EX616 | | | 4.00 | | | 4.00 | 4.01 | 4.02 | 66,139 | 6.9 |
| EX620 | | | 5.00 | | | 5.00 | 5.01 | 5.02 | 82,673 | 8.6 |
| EX808 | A/B | 1.000 | 2.00 | 0.45 (TYPE A) 0.54 (TYPE B) | 1.14 (TYPE A) 1.10 (TYPE B) | 2.00 | 2.03 | 2.02 | 44,092 | 4.6 |
| EX812 | | | 3.00 | | | 3.00 | 3.03 | 3.02 | 66,139 | 6.9 |
| EX816 | | | 4.00 | | | 4.00 | 4.03 | 4.02 | 88,185 | 9.2 |
| EX820 | | | 5.00 | | | 5.00 | 5.03 | 5.02 | 110,231 | 11.5 |
| EX824 | | | 6.00 | | | 6.00 | 6.03 | 6.02 | 132,277 | 13.8 |
| EX1212 | B | 1.500 | 3.00 | 0.81 | 1.65 | 2.98 | 3.01 | 3.02 | 99,208 | 10.4 |
| EX1216 | | | 4.00 | | | 3.98 | 4.01 | 4.02 | 132,277 | 13.8 |
| EX1220 | | | 5.00 | | | 4.98 | 5.01 | 5.02 | 165,347 | 17.3 |
| EX1224 | | | 6.00 | | | 5.98 | 6.01 | 6.02 | 198,416 | 20.7 |
| EX1612 | B | 2.000 | 3.00 | 1.08 | 2.19 | 2.98 | 3.02 | 3.02 | 132,277 | 13.8 |
| EX1616 | | | 4.00 | | | 3.98 | 4.02 | 4.02 | 176,370 | 18.4 |
| EX1620 | | | 5.00 | | | 4.98 | 5.02 | 5.02 | 220,462 | 23.0 |
| EX1624 | | | 6.00 | | | 5.98 | 6.02 | 6.02 | 264,554 | 27.6 |

Type A and Type B have different link profiles.
Type A can sustain higher load and speed. It is for high performance conditions.
Chains on this page are "Side Guide" style. Connecting Links are available.
Widths other than listed are available upon request.

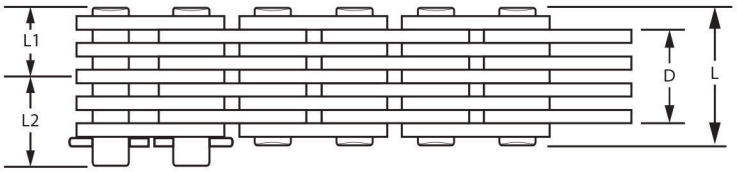
Allied-Locke Silent Series uses the inner-most sidebars as guides. They are shaded below.



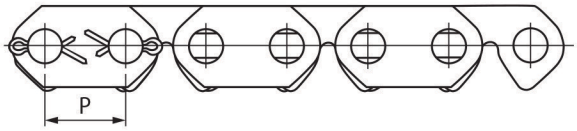
| CHAIN # | PITCH | WIDTH | HEIGHT ABOVE PITCH LINE (min) | HEIGHT (max) | RIVET LENGTH | AVERAGE ULTIMATE TENSILE STRENGTH (LB) | CHAIN WEIGHT (LB/Ft) |
|---|---|---|---|---|---|---|---|
| | P | W | h | H | RL | | |
| SC302* | 0.375 | 0.50 | 0.19 | 0.40 | 0.77 | 1,874 | 0.4 |
| SC303 | | 0.75 | | | 0.89 | 2,866 | 0.5 |
| SC304 | | 1.00 | | | 1.15 | 3,748 | 0.7 |
| SC305 | | 1.25 | | | 1.40 | 4,740 | 0.9 |
| SC306 | | 1.50 | | | 1.65 | 5,622 | 1.3 |
| SC308 | | 2.00 | | | 2.15 | 7,496 | 1.5 |
| SC403 | 0.500 | 0.75 | 0.25 | 0.53 | 0.89 | 5,622 | 0.7 |
| SC404 | | 1.00 | | | 1.15 | 7,496 | 1.0 |
| SC405 | | 1.25 | | | 1.40 | 9,370 | 1.3 |
| SC406 | | 1.50 | | | 1.65 | 11,244 | 1.5 |
| SC408 | | 2.00 | | | 2.15 | 14,991 | 2.0 |
| SC410 | | 2.50 | | | 2.65 | 18,739 | 2.5 |
| SC412 | | 3.00 | | | 3.15 | 22,597 | 3.0 |
| SC414 | | 3.50 | | | 3.65 | 26,235 | 3.5 |
| SC606 | 0.750 | 1.50 | 0.38 | 0.80 | 1.70 | 16,976 | 2.3 |
| SC608 | | 2.00 | | | 2.20 | 22,597 | 3.0 |
| SC610 | | 2.50 | | | 2.70 | 28,109 | 3.8 |
| SC612 | | 3.00 | | | 3.20 | 33,841 | 4.5 |
| SC616 | | 4.00 | | | 4.20 | 45,084 | 6.0 |
| SC620 | | 5.00 | | | 5.20 | 56,218 | 7.5 |
| SC812 | 1.000 | 3.00 | 0.50 | 1.06 | 3.24 | 45,084 | 6.0 |
| SC816 | | 4.00 | | | 4.24 | 60,076 | 8.0 |
| SC820 | | 5.00 | | | 5.24 | 74,957 | 10.0 |
| SC824 | | 6.00 | | | 6.24 | 90,059 | 12.0 |

* SC302 has outer guides. Distance between guides is 0.46”
Except for the SC302, chains on this page are “Center Guide” style.
Silent chain series are with 2 pin joints. Connecting links are available.
Widths other than listed are available upon request.

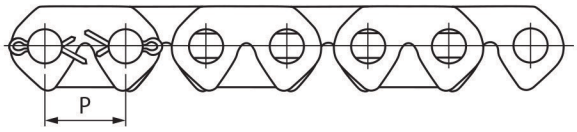
## 3/16" Pitch Silent Chain




Side Guide Profile



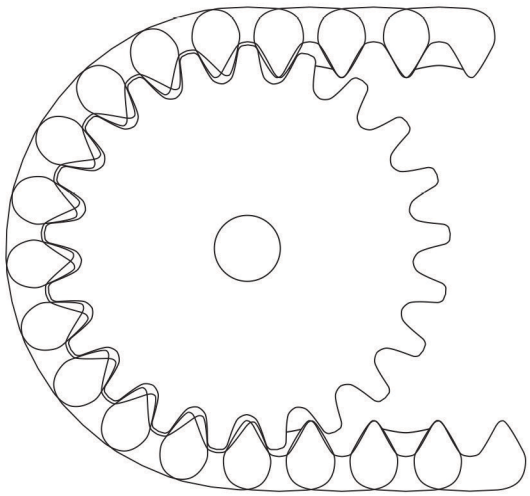

Center Guide Profile




| CHAIN # | GUIDE TYPE | PITCH | WIDTH | DISTANCE BETWEEN GUIDES (min) | RIVET LENGTH | CONNECTOR PIN LENGTH | | AVERAGE ULTIMATE TENSILE STRENGTH (LB) | CHAIN WEIGHT (LB/Ft) |
|---|---|---|---|---|---|---|---|---|---|
| | | P | | D | L | L1 | L2 | | |
| SC0305 | Side | 0.187 | 0.16 | 0.09 | 0.20 | 0.11 | 0.14 | 507 | 0.07 |
| SC0307 | Side | | 0.22 | 0.16 | 0.26 | 0.14 | 0.17 | 750 | 0.10 |
| SC0309 | Side | | 0.28 | 0.22 | 0.33 | 0.17 | 0.20 | 992 | 0.12 |
| SC0311 | Side | | 0.34 | 0.28 | 0.39 | 0.20 | 0.23 | 1,257 | 0.15 |
| SC0315 | Side | | 0.47 | 0.41 | 0.52 | 0.27 | 0.30 | 1,764 | 0.20 |
| SC0319 | Center | | 0.59 | - | 0.64 | 0.33 | 0.36 | 2,315 | 0.25 |
| SC0325 | Center | | 0.78 | - | 0.83 | 0.42 | 0.45 | 2,976 | 0.33 |
| SC0331 | Center | | 0.97 | - | 1.01 | 0.52 | 0.54 | 3,748 | 0.40 |

Other inverted tooth chain sizes and duplex chain are also available.
Please contact us for more information.

**High Speed Performance**
Less chordal action and joint friction, when compared to roller chain.



**ALLIED-LOCKE INDUSTRIES, INC.**
**800.435.7752 - TOLL FREE PHONE**
**800.462.3130-FAX**
**info@alliedlocke.com**
**www.alliedlocke.com**