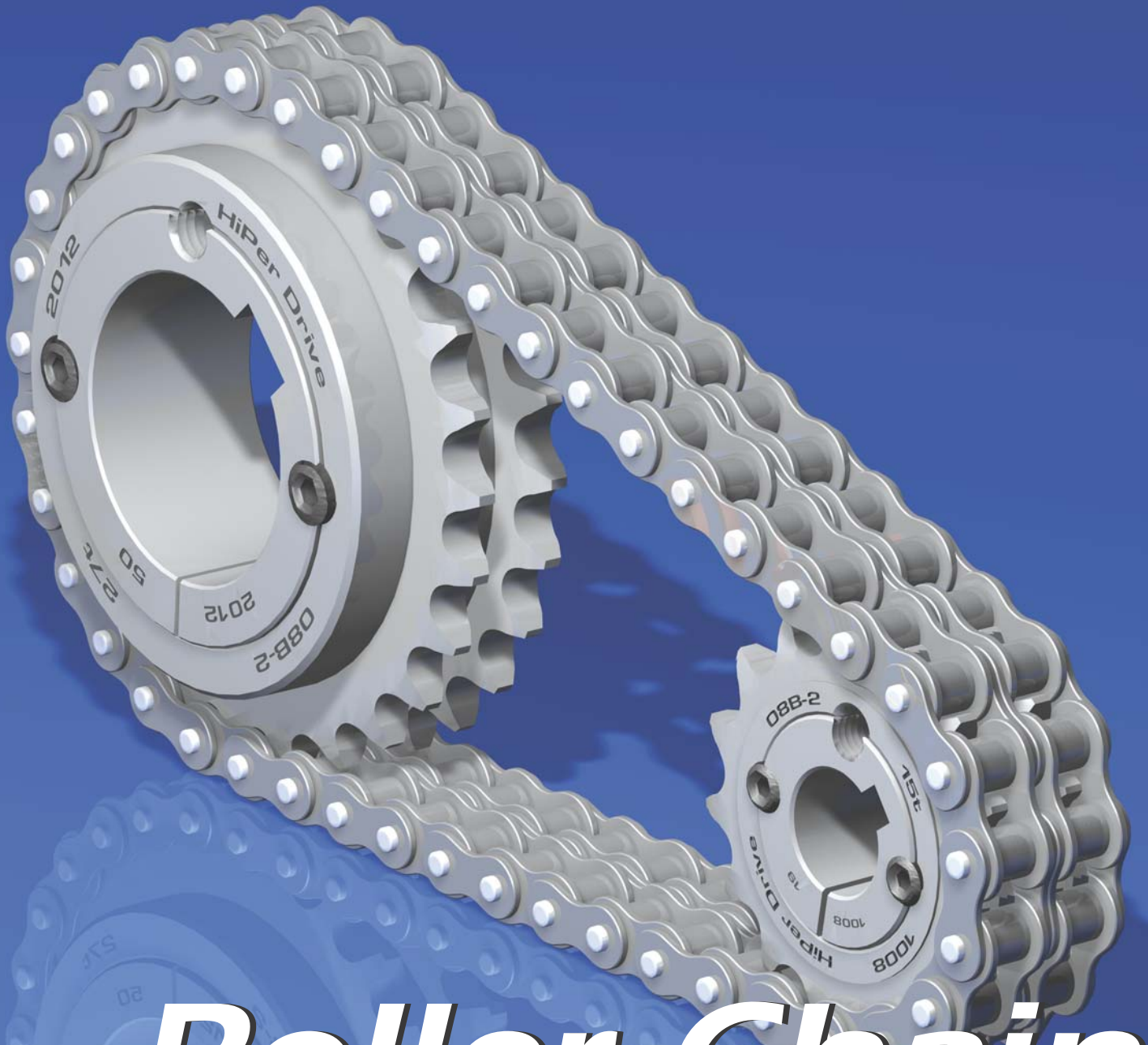


Transeals Pty Ltd

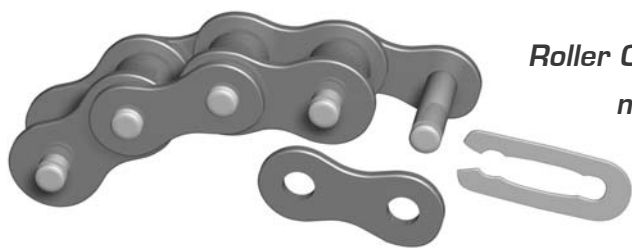
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Power Transmission Equipment
Hydraulic Seals Specialists

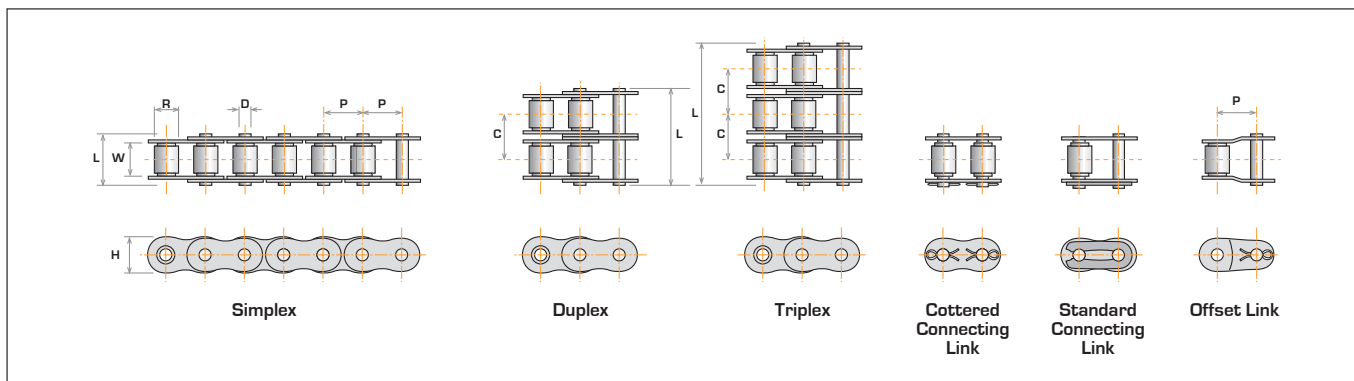


Roller Chain & Sprockets

January 2003 Edition – Metric



Roller Chain Drives provide a simple, economical and flexible mechanism to transmit power on low speed, high torque drives. Transeals stock a comprehensive range of roller chains, sprockets, idlers and tensioners.



British Standard Roller Chain

| Simplex | | Duplex | | Triplex | | Common Dimensions | | | | | |
|------------|-----------|------------|-----------|------------|-----------|-------------------|------------|---------|---------|----------|-------|
| Chain Type | L Pin Lng | Chain Type | L Pin Lng | Chain Type | L Pin Lng | P Pitch | R Roller Ø | D Pin Ø | W Width | H Height | C |
| 05B-1 | 8.64 | — | — | — | — | 8.00 | 5.00 | — | 3.00 | 5.64 | — |
| 06B-1 | 12.70 | 06B-2 | 22.78 | 06B-3 | 33.02 | 9.53 | 6.35 | 3.28 | 5.72 | 8.20 | 10.24 |
| 08B-1 | 16.71 | 08B-2 | 30.63 | 08B-3 | 44.50 | 12.70 | 8.51 | 4.45 | 7.75 | 11.61 | 13.92 |
| 10B-1 | 19.00 | 10B-2 | 35.61 | 10B-3 | 52.32 | 15.88 | 10.16 | 5.08 | 9.65 | 14.50 | 16.59 |
| 12B-1 | 22.30 | 12B-2 | 42.75 | 12B-3 | 61.01 | 19.05 | 12.07 | 5.72 | 11.67 | 15.90 | 19.46 |
| 16B-1 | 35.10 | 16B-2 | 67.11 | 16B-3 | 99.42 | 25.40 | 15.88 | 8.26 | 17.02 | 20.12 | 31.88 |
| 20B-1 | 40.18 | 20B-2 | 76.71 | 20B-3 | 113.44 | 31.75 | 19.05 | 10.16 | 19.56 | 26.01 | 36.45 |
| 24B-1 | 53.34 | 24B-2 | 101.85 | 24B-3 | 150.22 | 38.10 | 25.40 | 14.63 | 25.40 | 33.40 | 48.36 |
| 28B-1 | 65.10 | 28B-2 | 124.69 | 28B-3 | 184.30 | 44.45 | 27.94 | 15.88 | 30.99 | 36.58 | 59.56 |
| 32B-1 | 65.20 | 32B-2 | 124.00 | 32B-3 | 182.63 | 50.80 | 29.21 | 17.81 | 30.99 | 41.71 | 58.55 |

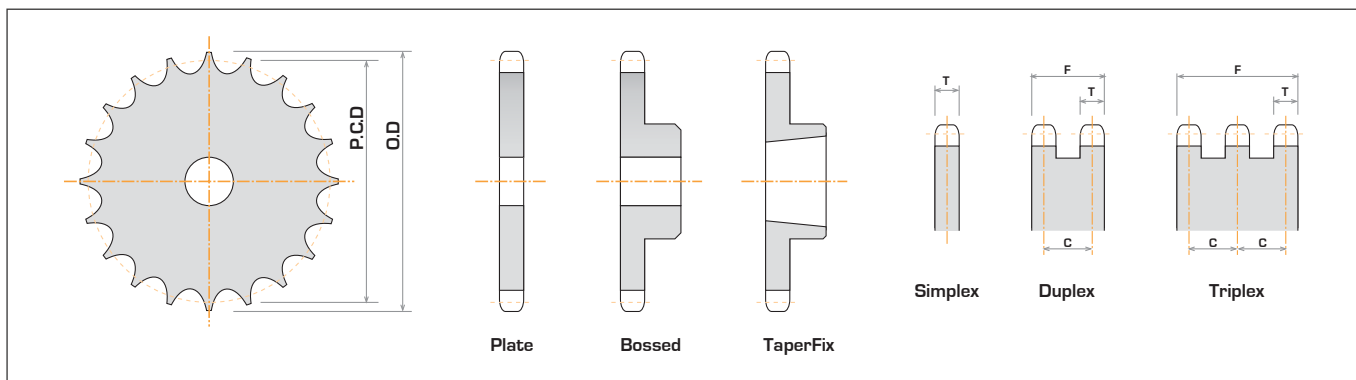
American Standard Roller Chain

| Simplex | | Duplex | | Triplex | | Common Dimensions | | | | | |
|------------|-----------|------------|-----------|------------|-----------|-------------------|------------|---------|---------|----------|-------|
| Chain Type | L Pin Lng | Chain Type | L Pin Lng | Chain Type | L Pin Lng | P Pitch | R Roller Ø | D Pin Ø | W Width | H Height | C |
| 25-1 | 7.52 | — | — | — | — | 6.35 | 3.30 | 2.29 | 3.18 | 5.84 | — |
| 35-1 | 11.84 | 35-2 | 21.95 | 35-3 | 32.00 | 9.53 | 5.08 | 3.58 | 4.75 | 8.99 | 10.11 |
| 40-1 | 16.41 | 40-2 | 30.63 | 40-3 | 44.81 | 12.70 | 7.92 | 3.96 | 7.92 | 11.76 | 14.40 |
| 50-1 | 20.32 | 50-2 | 38.20 | 50-3 | 56.69 | 15.88 | 10.16 | 5.08 | 9.53 | 14.66 | 18.08 |
| 60-1 | 25.40 | 60-2 | 48.01 | 60-3 | 70.41 | 19.05 | 11.91 | 5.94 | 12.70 | 17.55 | 22.81 |
| 80-1 | 32.41 | 80-2 | 61.60 | 80-3 | 90.91 | 25.40 | 15.88 | 7.92 | 15.88 | 23.39 | 29.29 |
| 100-1 | 39.22 | 100-2 | 74.93 | 100-3 | 110.74 | 31.75 | 19.05 | 9.53 | 19.05 | 29.31 | 35.79 |
| 120-1 | 49.33 | 120-2 | 95.00 | 120-3 | 140.49 | 38.10 | 22.22 | 11.10 | 25.40 | 35.10 | 45.39 |
| 140-1 | 53.85 | 140-2 | 103.00 | 140-3 | 151.54 | 44.45 | 25.40 | 12.70 | 25.40 | 40.89 | 48.90 |
| 160-1 | 64.11 | 160-2 | 122.63 | 160-3 | 181.51 | 50.80 | 28.58 | 14.27 | 31.75 | 46.71 | 58.50 |

Although dimensions for roller chain and sprockets are imperial, those quoted have been converted to metric. An imperial version of this publication can be downloaded from <http://www.transeals.com.au>



Transeals stock a comprehensive range of sprockets. All are precision cut and most feature induction hardened teeth. For most applications, Transeals recommend TaperFix sprockets for their ease of fitment and positive drive. Many special configurations can be manufactured for OEM applications.



British Standard Sprockets

| Chain | 06B | 08B | 10B | 12B | 16B | 20B | 24B | 28B | 32B |
|--------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| Pitch | 9.52 | 12.70 | 15.88 | 19.05 | 25.40 | 31.75 | 38.10 | 44.45 | 50.80 |
| T Simplex | 5.31 | 7.21 | 9.17 | 11.10 | 16.18 | 18.57 | 24.13 | 29.44 | 29.44 |
| T Duplex & Triplex | 5.21 | 7.06 | 8.79 | 10.64 | 15.49 | 17.81 | 23.11 | 28.19 | 28.19 |
| F Duplex | 15.44 | 20.98 | 25.37 | 30.10 | 47.37 | 54.25 | 71.48 | 87.76 | 86.74 |
| F Triplex | 25.68 | 34.90 | 41.96 | 49.56 | 79.25 | 90.70 | 119.84 | 147.32 | 145.29 |
| C | 10.24 | 13.92 | 16.59 | 19.46 | 31.88 | 36.45 | 48.36 | 59.56 | 58.55 |
| PCD Per Tooth * | 3.05 | 4.04 | 5.05 | 6.07 | 8.10 | 10.11 | 12.14 | 14.17 | 16.18 |
| OD = PCD + ** | 4.83 | 6.60 | 9.14 | 10.67 | 13.97 | 17.27 | 20.57 | 24.64 | 27.94 |

American Standard Sprockets

| Chain | 35 | 40 | 50 | 60 | 80 | 100 | 120 | 140 | 160 |
|--------------------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| Pitch | 9.52 | 12.70 | 15.88 | 19.05 | 25.40 | 31.75 | 38.10 | 44.45 | 50.80 |
| T Simplex | 4.45 | 7.39 | 9.04 | 12.07 | 15.09 | 18.11 | 24.13 | 24.13 | 30.15 |
| T Duplex & Triplex | 4.34 | 7.24 | 8.86 | 11.81 | 14.76 | 17.73 | 23.62 | 23.62 | 29.54 |
| F Duplex | 14.48 | 21.62 | 26.97 | 34.59 | 44.07 | 53.49 | 69.06 | 72.49 | 88.09 |
| F Triplex | 24.61 | 35.99 | 45.09 | 57.38 | 73.36 | 89.23 | 114.5 | 121.36 | 146.63 |
| C | 10.13 | 14.38 | 18.11 | 22.78 | 29.29 | 35.76 | 45.44 | 48.87 | 58.55 |
| PCD Per Tooth * | 3.05 | 4.04 | 5.05 | 6.07 | 8.10 | 10.11 | 12.14 | 14.17 | 16.18 |
| OD = PCD + ** | 4.83 | 6.60 | 9.14 | 10.67 | 13.97 | 17.27 | 20.57 | 24.64 | 27.94 |

* Calculating the PCD with this method can result in a small variation from the exact PCD. The exact PCD can be calculated using the formula:

$$PCD = \frac{\text{Chain Pitch}}{\sin(180 / \text{No. teeth})}$$

** Approximate figure only for calculating space requirements for sprockets.

