

Transeals Pty Ltd

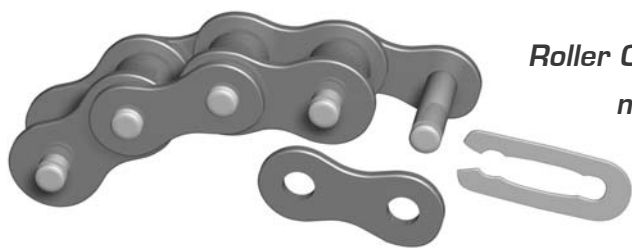
A.B.N. 29 008 902 163

Power Transmission Equipment
Hydraulic Seals Specialists

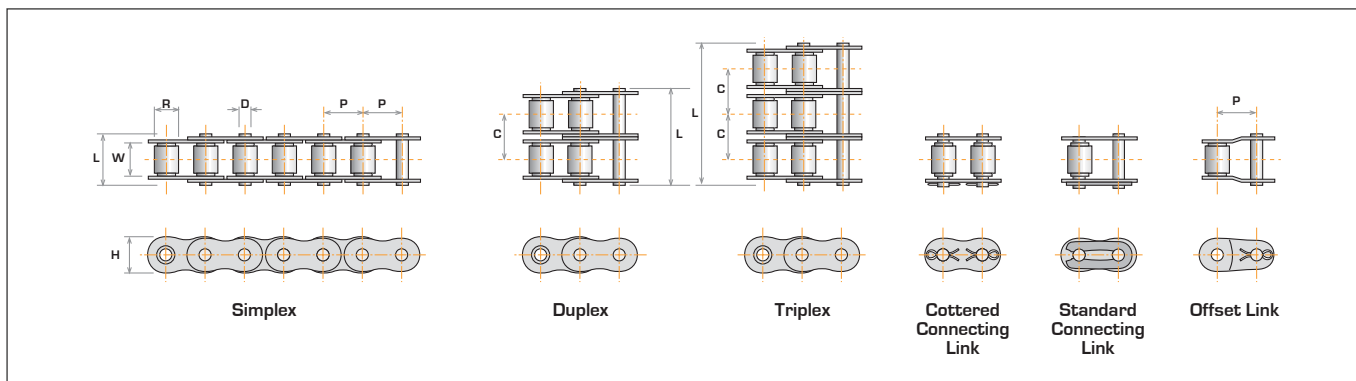


Roller Chain & Sprockets

January 2003 Edition



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	0.340	—	—	—	—	0.315	0.197	—	0.118	0.222	—
06B-1	0.500	06B-2	0.897	06B-3	1.300	0.375	0.250	0.129	0.225	0.323	0.403
08B-1	0.658	08B-2	1.206	08B-3	1.752	0.500	0.335	0.175	0.305	0.457	0.548
10B-1	0.748	10B-2	1.402	10B-3	2.060	0.625	0.400	0.200	0.380	0.571	0.653
12B-1	0.878	12B-2	1.683	12B-3	2.402	0.750	0.475	0.225	0.460	0.626	0.766
16B-1	1.382	16B-2	2.642	16B-3	3.914	1.000	0.625	0.325	0.670	0.792	1.255
20B-1	1.582	20B-2	3.020	20B-3	4.466	1.250	0.750	0.400	0.770	1.024	1.435
24B-1	2.100	24B-2	4.010	24B-3	5.914	1.500	1.000	0.576	1.000	1.315	1.904
28B-1	2.563	28B-2	4.909	28B-3	7.256	1.750	1.100	0.625	1.220	1.440	2.345
32B-1	2.567	32B-2	4.882	32B-3	7.190	2.000	1.150	0.701	1.220	1.642	2.305

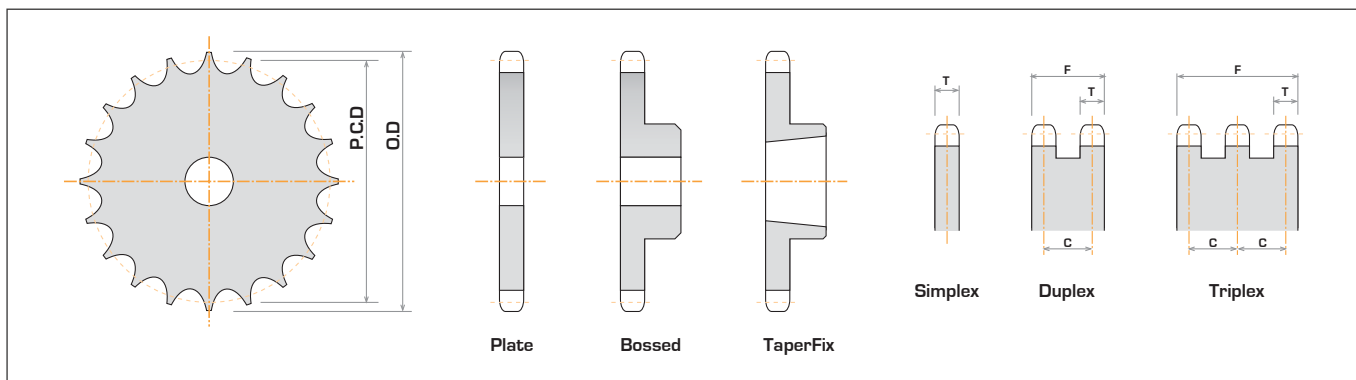
American Standard Roller Chain

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	0.296	—	—	—	—	0.250	0.130	0.090	0.125	0.230	—
35-1	0.466	35-2	0.864	35-3	1.260	0.375	0.200	0.141	0.187	0.354	0.398
40-1	0.646	40-2	1.206	40-3	1.764	0.500	0.312	0.156	0.312	0.463	0.567
50-1	0.800	50-2	1.504	50-3	2.232	0.625	0.400	0.200	0.375	0.577	0.712
60-1	1.000	60-2	1.890	60-3	2.772	0.750	0.469	0.234	0.500	0.691	0.898
80-1	1.276	80-2	2.425	80-3	3.579	1.000	0.625	0.312	0.625	0.921	1.153
100-1	1.544	100-2	2.950	100-3	4.360	1.250	0.750	0.375	0.750	1.154	1.409
120-1	1.942	120-2	3.740	120-3	5.531	1.500	0.875	0.437	1.000	1.382	1.787
140-1	2.120	140-2	4.055	140-3	5.966	1.750	1.000	0.500	1.000	1.610	1.925
160-1	2.524	160-2	4.828	160-3	7.146	2.000	1.125	0.562	1.250	1.839	2.303

Dimensions for roller chain and sprockets are imperial, hence dimensions quoted here are in inches. A metric 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	0.375	0.500	0.625	0.750	1.000	1.250	1.500	1.750	2.000
T Simplex	0.209	0.284	0.361	0.437	0.637	0.731	0.950	1.159	1.159
T Duplex & Triplex	0.205	0.278	0.346	0.419	0.610	0.701	0.910	1.110	1.110
F Duplex	0.608	0.826	0.999	1.185	1.865	2.136	2.814	3.455	3.415
F Triplex	1.011	1.374	1.652	1.951	3.120	3.571	4.718	5.800	5.720
C	0.403	0.548	0.653	0.766	1.255	1.435	1.904	2.345	2.305
PCD Per Tooth *	0.120	0.159	0.199	0.239	0.319	0.398	0.478	0.558	0.637
OD = PCD + **	0.19	0.26	0.36	0.42	0.55	0.68	0.81	0.97	1.10

American Standard Sprockets

Chain	35	40	50	60	80	100	120	140	160
Pitch	0.375	0.500	0.625	0.750	1.000	1.250	1.500	1.750	2.000
T Simplex	0.175	0.291	0.356	0.475	0.594	0.713	0.950	0.950	1.187
T Duplex & Triplex	0.171	0.285	0.349	0.465	0.581	0.698	0.930	0.930	1.163
F Duplex	0.570	0.851	1.062	1.362	1.735	2.106	2.719	2.854	3.468
F Triplex	0.969	1.417	1.775	2.259	2.888	3.513	4.508	4.778	5.773
C	0.399	0.566	0.713	0.897	1.153	1.408	1.789	1.924	2.305
PCD Per Tooth *	0.120	0.159	0.199	0.239	0.319	0.398	0.478	0.558	0.637
OD = PCD + **	0.19	0.26	0.36	0.42	0.55	0.68	0.81	0.97	1.10

* 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.

