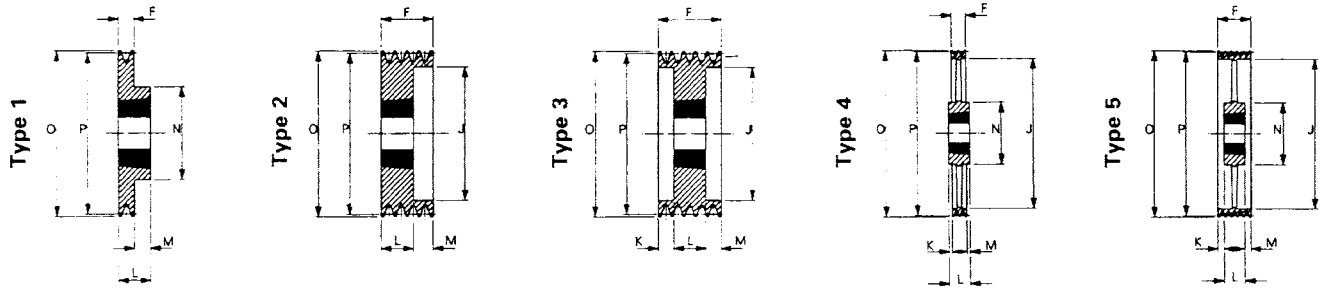


## Taper Lock Pulleys for Z, SPZ, XPZ &amp; QXPZ Belts



Catalogue Code	Pitch Dia (P)	No. of Grooves	Bush No.	Max. Bore		Pulley Type	F	J	K	L	M	N	Outside Dia (O)
				Metric	Inch								
031Z0041	<b>56</b>	1	1008	25	1	9	49	28	13	22	—	—	60
031Z0042	<b>56</b>	2	1108	28	1/8	9	49	35	27	22	—	—	60
031Z0051	<b>60</b>	1	1008	25	1	9	22	—	—	22	—	—	64
031Z0052	<b>60</b>	2	1108	28	1/8	9	28	36	27	22	—	—	64
031Z0061	<b>63</b>	1	1108	28	1/8	1	16	—	—	22	6	56	67
031Z0062	<b>63</b>	2	1108	28	1/8	2	28	40	—	22	6	—	67
031Z0063	<b>63</b>	3	1108	28	1/8	2	40	40	—	22	18	—	67
031Z0071	<b>67</b>	1	1108	28	1/8	1	16	—	—	22	6	60	71
031Z0072	<b>67</b>	2	1108	28	1/8	6	28	42	6	22	—	—	71
031Z0073	<b>67</b>	3	1108	28	1/8	6	40	42	18	22	—	—	71
031Z0081	<b>71</b>	1	1108	28	1/8	1	16	—	—	22	6	60	75
031Z0082	<b>71</b>	2	1108	28	1/8	6	28	42	6	22	—	—	75
031Z0083	<b>71</b>	3	1108	28	1/8	6	40	42	18	22	—	—	75
031Z0091	<b>75</b>	1	1108	28	1/8	1	16	—	—	22	6	60	79
031Z0092	<b>75</b>	2	1210	32	1/4	6	28	51	3	25	—	—	79
031Z0093	<b>75</b>	3	1210	32	1/4	6	40	51	15	25	—	—	79
031Z0101	<b>80</b>	1	1210	32	1/4	1	16	—	—	25	9	75	84
031Z0102	<b>80</b>	2	1210	32	1/4	6	28	51	3	25	—	—	84
031Z0103	<b>80</b>	3	1210	32	1/4	6	40	51	15	25	—	—	84
031Z0104	<b>80</b>	4	1210	32	1/4	6	52	51	27	25	—	—	84
031Z0111	<b>85</b>	1	1210	32	1/4	1	16	—	—	25	9	80	89
031Z0112	<b>85</b>	2	1610	42	15/8	6	28	60	3	25	—	—	89
031Z0113	<b>85</b>	3	1610	42	15/8	6	40	60	15	25	—	—	89
031Z0114	<b>85</b>	4	1610	42	15/8	6	52	60	27	25	—	—	89
031Z0115*	<b>85</b>	5	1610	42	15/8	6	64	60	39	25	—	—	89
031Z0121	<b>90</b>	1	1210	32	1/4	1	16	—	—	25	9	80	94
031Z0122	<b>90</b>	2	1610	42	15/8	6	28	61	3	25	—	—	94
031Z0123	<b>90</b>	3	1610	42	15/8	6	40	61	15	25	—	—	94
031Z0124	<b>90</b>	4	1610	42	15/8	6	52	61	27	25	—	—	94
031Z0125*	<b>90</b>	5	1610	42	15/8	6	64	61	39	25	—	—	94
031Z0131	<b>95</b>	1	1210	32	1/4	1	16	—	—	25	9	85	99
031Z0132	<b>95</b>	2	1610	42	15/8	6	28	66	3	25	—	—	99
031Z0133	<b>95</b>	3	1610	42	15/8	6	40	66	15	25	—	—	99
031Z0134	<b>95</b>	4	1610	42	15/8	6	52	66	27	25	—	—	99
031Z0135*	<b>95</b>	5	1610	42	15/8	6	64	66	39	25	—	—	99
031Z0141	<b>100</b>	1	1210	32	1/4	1	16	—	—	25	9	85	104
031Z0142	<b>100</b>	2	1610	42	15/8	6	28	71	3	25	—	—	104
031Z0143	<b>100</b>	3	1610	42	15/8	6	40	71	15	25	—	—	104
031Z0144	<b>100</b>	4	1610	42	15/8	6	52	71	27	25	—	—	104
031Z0145*	<b>100</b>	5	2012	50	2	6	64	71	32	32	—	—	104
031Z0151	<b>106</b>	1	1610	42	15/8	1	16	—	—	25	9	92	111
031Z0152	<b>106</b>	2	1610	42	15/8	6	28	76	3	25	—	—	111
031Z0153	<b>106</b>	3	1610	42	15/8	6	40	76	15	25	—	—	111
031Z0154	<b>106</b>	4	1610	42	15/8	6	52	76	27	25	—	—	111
031Z0155*	<b>106</b>	5	2012	50	2	6	64	76	32	32	—	—	111
031Z0161	<b>112</b>	1	1610	42	15/8	1	16	—	—	25	9	92	116
031Z0162	<b>112</b>	2	1610	42	15/8	6	28	83	3	25	—	—	116
031Z0163	<b>112</b>	3	2012	50	2	6	40	83	8	32	—	—	116
031Z0164	<b>112</b>	4	2012	50	2	6	52	83	20	32	—	—	116
031Z0165*	<b>112</b>	5	2012	50	2	6	64	83	32	32	—	—	116

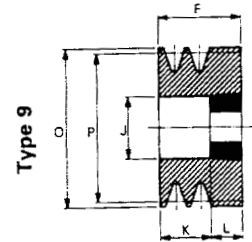
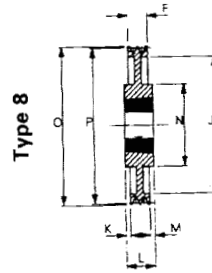
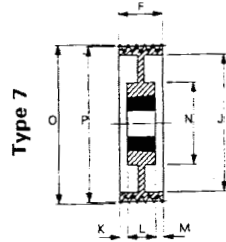
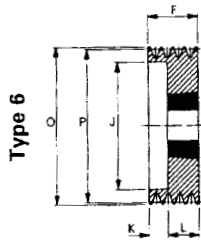
Type 6NR pulleys are made to catalogue dimensions, but modern manufacturing techniques result in there being no recess behind the Taper Lock bush, the J dimension is then approximately equal to the small diameter of the Taper Lock bush.

Dimensions in millimetres unless otherwise stated. \*Non-preferred pulley sizes. Pitch diameters in italic type indicate pulleys to be used with Z V-belts, XPZ & QXPZ wedge belts only.

All envelope, prime functional and Taper Lock bush dimensions are correct at the time of publication. Non-functional dimensions may vary slightly.

These pulleys are designed to operate at rim speeds upto 40m/sec, for higher speeds contact your local authorised distributor.

# Taper Lock Pulleys for Z, SPZ, XPZ & QXPZ Belts



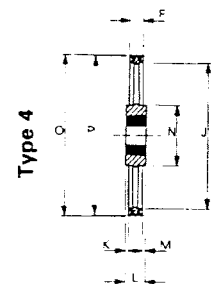
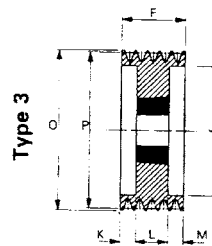
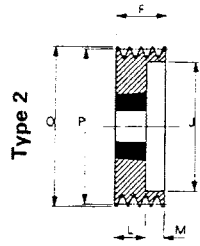
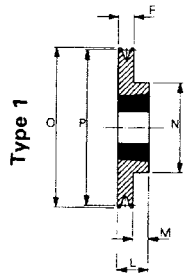
Catalogue Code	Pitch Dia (P)	No. of Grooves	Bush No.	Max. Bore		Pulley Type	F	J	K	L	M	N	Outside Dia (O)
				Metric	Inch								
031Z0171	118	1	1610	42	1 9/8	1	16	-	-	25	9.0	92	123
031Z0172	118	2	1610	42	1 9/8	6	28	90	3.0	25	-	-	123
031Z0173	118	3	2012	50	2	6	40	90	8.0	32	-	-	123
031Z0174	118	4	2012	50	2	6	52	90	20.0	32	-	-	123
031Z0175*	118	5	2012	50	2	6	64	90	32.0	32	-	-	123
031Z0181	125	1	1610	42	1 9/8	1	16	-	-	25	9.0	92	129
031Z0182	125	2	1610	42	1 9/8	6	28	96	3.0	25	-	-	129
031Z0183	125	3	2012	50	2	2	40	96	-	32	8.0	-	129
031Z0184	125	4	2012	50	2	2	52	96	-	32	20.0	-	129
031Z0185*	125	5	2012	50	2	6	64	96	32.0	32	-	-	129
031Z0191	132	1	1610	42	1 9/8	1	16	-	-	25	9.0	92	137
031Z0192	132	2	1610	42	1 9/8	6	28	103	3.0	25	-	-	137
031Z0193	132	3	2012	50	2	2	40	103	-	32	8.0	-	137
031Z0194	132	4	2012	50	2	2	52	103	-	32	20.0	-	137
031Z0195*	132	5	2517	60	2 1/2	6	64	103	19.0	45	-	-	137
031Z0201	140	1	1610	42	1 9/8	1	16	-	-	25	9.0	92	144
031Z0202	140	2	1610	42	1 9/8	6	28	111	3.0	25	-	-	144
031Z0203	140	3	2012	50	2	2	40	111	-	32	8.0	-	144
031Z0204	140	4	2012	50	2	2	52	111	-	32	20.0	-	144
031Z0205*	140	5	2517	60	2 1/2	2	64	111	-	45	19.0	-	144
031Z0221	160	1	1610	42	1 9/8	1	16	-	-	25	9.0	92	164
031Z0222	160	2	2012	50	2	1	28	-	-	32	4.0	112	164
031Z0223	160	3	2012	50	2	2	40	131	-	32	8.0	-	164
031Z0224	160	4	2517	60	2 1/2	2	52	131	-	45	7.0	-	164
031Z0225*	160	5	2517	60	2 1/2	2	64	131	-	45	19.0	-	164
031Z0241	180	1	1610	42	1 9/8	1	16	-	-	25	9.0	92	184
031Z0242	180	2	2012	50	2	1	28	-	-	32	4.0	112	184
031Z0243	180	3	2012	50	2	2	40	151	-	32	8.0	-	184
031Z0244	180	4	2517	60	2 1/2	2	52	151	-	45	7.0	-	184
031Z0245*	180	5	2517	60	2 1/2	2	64	151	-	45	19.0	-	184
031Z0261	200	1	2012	50	2	8	16	171	-	32	16.0	112	204
031Z0262	200	2	2012	50	2	8	28	171	-	32	4.0	112	204
031Z0263	200	3	2012	50	2	7	40	171	4.0	32	4.0	112	204
031Z0264	200	4	2517	60	2 1/2	7	52	171	3.5	45	3.5	124	204
031Z0265*	200	5	2517	60	2 1/2	7	64	171	9.5	45	9.5	124	204
031Z0301	250	1	2012	50	2	4	16	221	8.0	32	8.0	112	254
031Z0302	250	2	2012	50	2	4	28	221	2.0	32	2.0	112	254
031Z0303	250	3	2012	50	2	5	40	221	4.0	32	4.0	112	254
031Z0304	250	4	2517	60	2 1/2	5	52	221	3.5	45	3.5	124	254
031Z0305*	250	5	2517	60	2 1/2	5	64	221	9.5	45	9.5	124	254
031Z0331	315	1	2012	50	2	4	16	286	8.0	32	8.0	112	319
031Z0332	315	2	2012	50	2	4	28	286	2.0	32	2.0	112	319
031Z0333	315	3	2517	60	2 1/2	4	40	286	2.5	45	2.5	124	319
031Z0334	315	4	2517	60	2 1/2	5	52	286	3.5	45	3.5	124	319
031Z0335*	315	5	2517	60	2 1/2	5	64	286	9.5	45	9.5	124	319
031Z0351	400	1	2012	50	2	4	16	371	8.0	32	8.0	112	404
031Z0352	400	2	2517	60	2 1/2	4	28	371	8.5	45	8.5	124	404
031Z0353	400	3	2517	60	2 1/2	4	40	371	2.5	45	2.5	124	404
031Z0354	400	4	2517	60	2 1/2	5	52	371	3.5	45	3.5	124	404
031Z0355*	400	5	3020	75	3	5	64	371	6.5	51	6.5	146	404
031Z0372*	500	2	2517	60	2 1/2	4	28	471	8.5	45	8.5	124	504
031Z0373*	500	3	2517	60	2 1/2	5	40	471	2.5	45	2.5	124	504
031Z0374*	500	4	3020	75	3	5	52	471	0.5	51	0.5	146	504
031Z0375*	500	5	3020	75	3	4	64	471	6.0	76	6.0	146	504
031Z0393*	630	3	2517	60	2 1/2	4	40	601	2.5	45	2.5	124	634
031Z0394*	630	4	3020	75	3	4	52	601	12.0	76	12.0	146	634
031Z0395*	630	5	3020	75	3	4	64	601	6.0	76	6.0	146	634

Dimensions in millimetres unless otherwise stated. \* Non-preferred pulley sizes.

Intermediate diameters available on a non-stock basis, see page 70

All envelope, prime functional and Taper Lock bush dimensions are correct at the time of publication. Non-functional dimensions may vary slightly. These pulleys are designed to operate at rim speeds upto 40m/sec, for higher speeds contact your local authorised distributor.

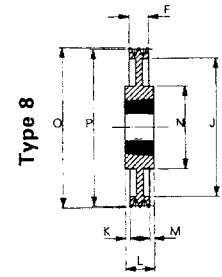
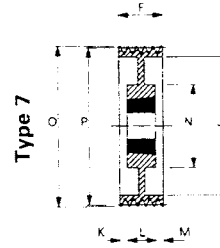
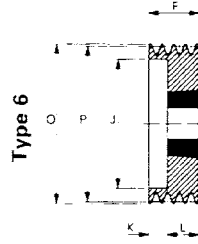
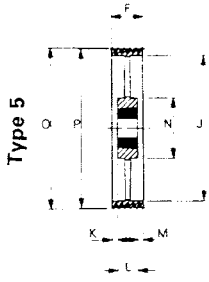
## Taper Lock Pulleys for A, SPA, XPA &amp; QXPA Belts



Catalogue Code	Pitch Dia (P)	No. of Grooves	Bush No.	Max. Bore		Pulley Type	F	J	K	L	M	N	Outside Dia (O)
				Metric	Inch								
031A0101	80	1	1210	32	1 1/4	1	20	—	—	25	5.0	75	86
031A0102	80	2	1210	32	1 1/4	6	35	46	10.0	25	—	—	86
031A0103	80	3	1210	32	1 1/4	6	50	46	25.0	25	—	—	86
031A0111	85	1	1210	32	1 1/4	1	20	—	—	25	5.0	80	91
031A0112	85	2	1210	32	1 1/4	6	35	46	10.0	25	—	—	91
031A0113	85	3	1210	32	1 1/4	6	50	46	25.0	25	—	—	91
031A0121	90	1	1210	32	1 1/4	1	20	—	—	25	5.0	80	96
031A0122	90	2	1610	42	1 5/8	6	35	61	10.0	25	—	—	96
031A0123	90	3	1610	42	1 5/8	6	50	61	25.0	25	—	—	96
031A0124	90	4	1610	42	1 5/8	3	65	61	13.5	38	13.5	—	96
031A0131	95	1	1210	32	1 1/4	1	20	—	—	25	5.0	85	101
031A0132	95	2	1610	42	1 5/8	6	35	66	10.0	25	—	—	101
031A0133	95	3	1610	42	1 5/8	6	50	66	25.0	25	—	—	101
031A0134	95	4	1610	42	1 5/8	3	65	66	13.5	38	13.5	—	101
031A0141	100	1	1610	42	1 5/8	1	20	—	—	25	5.0	85	106
031A0142	100	2	1610	42	1 5/8	6	35	71	10.0	25	—	—	106
031A0143	100	3	1610	42	1 5/8	2	50	71	—	25	25.0	—	106
031A0144	100	4	1610	42	1 5/8	2	65	71	—	38	27.0	—	106
031A0145	100	5	1610	42	1 5/8	2	80	71	—	38	42.0	—	106
031A0146*	100	6	1610	42	1 5/8	3	95	71	28.5	38	28.5	—	106
031A0151	106	1	1610	42	1 5/8	1	20	—	—	25	5.0	92	112
031A0152	106	2	1610	42	1 5/8	6	35	76	10.0	25	—	—	112
031A0153	106	3	1610	42	1 5/8	2	50	76	—	25	25.0	—	112
031A0154	106	4	2012	50	2	6	65	76	33.0	32	—	—	112
031A0155	106	5	2012	50	2	6	80	76	48.0	32	—	—	112
031A0156*	106	6	2012	50	2	6	95	76	63.0	32	—	—	112
031A0161	112	1	1610	42	1 5/8	1	20	—	—	25	5.0	92	118
031A0162	112	2	1610	42	1 5/8	6	35	83	10.0	25	—	—	118
031A0163	112	3	2012	50	2	6	50	83	18.0	32	—	—	118
031A0164	112	4	2012	50	2	6	65	83	33.0	32	—	—	118
031A0165	112	5	2012	50	2	6	80	83	48.0	32	—	—	118
031A0166*	112	6	2012	50	2	6	95	83	63.0	32	—	—	118
031A0171	118	1	1610	42	1 5/8	1	20	—	—	25	5.0	92	124
031A0172	118	2	1610	42	1 5/8	6	35	90	10.0	25	—	—	124
031A0173	118	3	2012	50	2	2	50	90	—	32	18.0	—	124
031A0174	118	4	2012	50	2	2	65	90	—	32	33.0	—	124
031A0175	118	5	2012	50	2	2	80	90	—	32	48.0	—	124
031A0176*	118	6	2012	50	2	6	95	90	63.0	32	—	—	124
031A0181	125	1	1610	42	1 5/8	1	20	—	—	25	5.0	92	131
031A0182	125	2	1610	42	1 5/8	6	35	96	10.0	25	—	—	131
031A0183	125	3	2012	50	2	2	50	96	—	32	18.0	—	131
031A0184	125	4	2012	50	2	2	65	96	—	32	33.0	—	131
031A0185	125	5	2012	50	2	3	80	96	24.0	32	24.0	—	131
031A0186*	125	6	2012	50	2	3	95	96	31.5	32	31.5	—	131
031A0191	132	1	1610	42	1 5/8	1	20	—	—	25	5.0	92	138
031A0192	132	2	2012	50	2	6	35	103	3.0	32	—	—	138
031A0193	132	3	2012	50	2	2	50	103	—	32	18.0	—	138
031A0194	132	4	2517	60	2 1/2	2	65	103	—	45	20.0	—	138
031A0195	132	5	2517	60	2 1/2	3	80	103	17.5	45	17.5	—	138
031A0196*	132	6	2517	60	2 1/2	3	95	103	25.0	45	25.0	—	138
031A0201	140	1	1610	42	1 5/8	1	20	—	—	25	5.0	92	146
031A0202	140	2	2012	50	2	6	35	111	3.0	32	—	—	146
031A0203	140	3	2517	60	2 1/2	6	50	111	5.0	45	—	—	146
031A0204	140	4	2517	60	2 1/2	2	65	111	—	45	20.0	—	146
031A0205	140	5	2517	60	2 1/2	3	80	111	17.5	45	17.5	—	146
031A0206*	140	6	2517	60	2 1/2	3	95	111	25.0	45	25.0	—	146
031A0211	150	1	1610	42	1 5/8	1	20	—	—	25	5.0	92	156
031A0212	150	2	2012	50	2	6	35	121	3.0	32	—	—	156
031A0213	150	3	2517	60	2 1/2	6	50	121	5.0	45	—	—	156
031A0214	150	4	2517	60	2 1/2	2	65	121	—	45	20.0	—	156
031A0215	150	5	2517	60	2 1/2	3	80	121	17.5	45	17.5	—	156
031A0216*	150	6	2517	60	2 1/2	3	95	121	25.0	45	25.0	—	156

Dimensions in millimetres unless otherwise stated. \*Non-preferred pulley sizes. Pitch diameters in italic type indicate pulleys to be used A V-belts, XPA & QXPA wedge belts only. All envelope, prime functional and Taper Lock bush dimensions are correct at the time of publication. Non-functional dimensions may vary slightly. These pulleys are designed to operate at rim speeds upto 40m/sec, for higher speeds contact your local authorised distributor.

# Taper Lock Pulleys for A, SPA, XPA & QXPA Belts

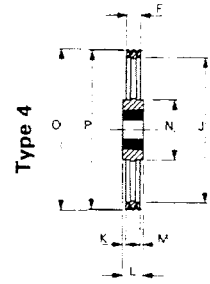
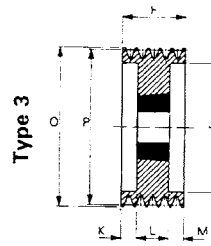
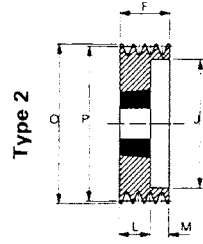
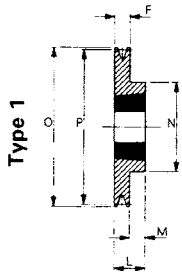


Catalogue Code	Pitch Dia (P)	No. of Grooves	Bush No.	Max. Bore		Pulley Type	F	J	K	L	M	N	Outside Dia (O)
				Metric	Inch								
031A0221	160	1	1610	42	1 <sup>5</sup> / <sub>8</sub>	1	20	-	-	25	5.0	92	166
031A0222	160	2	2012	50	2	7	35	125	1.5	32	1.5	108	166
031A0223	160	3	2517	60	2 <sup>1</sup> / <sub>2</sub>	6	50	128	5.0	45	-	-	166
031A0224	160	4	2517	60	2 <sup>1</sup> / <sub>2</sub>	2	65	128	-	45	20.0	-	166
031A0225	160	5	2517	60	2 <sup>1</sup> / <sub>2</sub>	3	80	128	17.5	45	17.5	-	166
031A0226*	160	6	2517	60	2 <sup>1</sup> / <sub>2</sub>	3	95	128	25.0	45	25.0	-	166
031A0241	180	1	1610	42	1 <sup>5</sup> / <sub>8</sub>	1	20	-	-	25	5.0	92	186
031A0242	180	2	2012	50	2	7	35	148	1.5	32	1.5	108	186
031A0243	180	3	2517	60	2 <sup>1</sup> / <sub>2</sub>	6	50	148	5.0	45	-	-	186
031A0244	180	4	2517	60	2 <sup>1</sup> / <sub>2</sub>	2	65	148	-	45	20.0	-	186
031A0245	180	5	3020	75	3	3	80	148	14.5	51	14.5	-	186
031A0246*	180	6	3020	75	3	3	95	148	22.0	51	22.0	-	186
031A0261	200	1	2012	50	2	8	20	162	-	32	12.0	108	206
031A0262	200	2	2517	60	2 <sup>1</sup> / <sub>2</sub>	8	35	162	5.0	45	5.0	123	206
031A0263	200	3	2517	60	2 <sup>1</sup> / <sub>2</sub>	7	50	162	2.5	45	2.5	123	206
031A0264	200	4	3020	75	3	2	65	168	-	51	14.0	-	206
031A0265	200	5	3020	75	3	3	80	168	14.5	51	14.5	-	206
031A0266*	200	6	3020	75	3	3	95	168	22.0	51	22.0	-	206
031A0281	224	1	2012	50	2	8	20	189	-	32	12.0	112	230
031A0282	224	2	2517	60	2 <sup>1</sup> / <sub>2</sub>	8	35	189	-	45	10.0	124	230
031A0283	224	3	2517	60	2 <sup>1</sup> / <sub>2</sub>	7	50	189	2.5	45	2.5	124	230
031A0284	224	4	3020	75	3	2	65	189	-	51	14.0	-	230
031A0285	224	5	3020	75	3	2	80	189	-	51	29.0	-	230
031A0286*	224	6	3020	75	3	3	95	189	22.0	51	22.0	-	230
031A0301	250	1	2012	50	2	8	20	215	6.0	32	6.0	112	256
031A0302	250	2	2517	60	2 <sup>1</sup> / <sub>2</sub>	8	35	215	5.0	45	5.0	124	256
031A0303	250	3	2517	60	2 <sup>1</sup> / <sub>2</sub>	7	50	215	2.5	45	2.5	124	256
031A0304	250	4	3020	75	3	7	65	215	10.0	51	10.0	159	256
031A0305	250	5	3020	75	3	7	80	215	17.5	51	17.5	159	256
031A0306*	250	6	3020	75	3	7	95	215	22.0	51	22.0	159	256
031A0321	280	1	2012	50	2	8	20	245	-	32	12.0	112	286
031A0322	280	2	2517	60	2 <sup>1</sup> / <sub>2</sub>	8	35	245	-	45	10.0	124	286
031A0323	280	3	2517	60	2 <sup>1</sup> / <sub>2</sub>	7	50	245	2.5	45	2.5	124	286
031A0324	280	4	3020	75	3	7	65	245	7.0	51	7.0	159	286
031A0325	280	5	3525	100	4	7	80	245	4.5	89	4.5	178	286
031A0326*	280	6	3525	100	4	7	95	245	15.0	65	15.0	178	286
031A0331	315	1	2012	50	2	4	20	280	-	32	12.0	112	321
031A0332	315	2	2517	60	2 <sup>1</sup> / <sub>2</sub>	4	35	280	-	45	10.0	124	321
031A0333	315	3	3020	75	3	8	50	280	0.5	51	0.5	159	321
031A0334	315	4	3020	75	3	7	65	280	8.0	51	8.0	159	321
031A0335	315	5	3525	100	4	8	80	283	7.5	65	7.5	178	321
031A0336*	315	6	3525	100	4	7	95	280	15.0	65	15.0	178	321
031A0351	400	1	2012	50	2	4	20	365	-	32	12.0	112	406
031A0352	400	2	2517	60	2 <sup>1</sup> / <sub>2</sub>	4	35	365	-	45	10.0	124	406
031A0353	400	3	3020	75	3	4	50	365	0.5	51	0.5	159	406
031A0354	400	4	3020	75	3	5	65	365	7.0	51	7.0	159	406
031A0355	400	5	3525	100	4	4	80	365	7.5	65	7.5	178	406
031A0356*	400	6	3525	100	4	5	95	368	15.0	65	15	178	406
031A0372	500	2	2517	60	2 <sup>1</sup> / <sub>2</sub>	4	35	465	-	45	10.0	124	506
031A0373	500	3	3020	75	3	4	50	465	0.5	51	0.5	159	506
031A0374	500	4	3020	75	3	5	65	465	7.0	51	7.0	159	506
031A0375	500	5	3525	100	4	4	80	465	7.5	65	7.5	178	506
031A0376*	500	6	3525	100	4	5	95	465	15.0	65	15.0	178	506
031A0392*	630	2	3020	75	3	4	35	595	-	45	16.0	159	636
031A0393	630	3	3020	75	3	4	50	595	0.5	89	0.5	178	636
031A0394	630	4	3525	100	4	4	65	595	12.0	89	12.0	178	636
031A0395	630	5	3525	100	4	4	80	595	7.5	65	7.5	178	636
031A0396	630	6	4030	115	4 <sup>1</sup> / <sub>2</sub>	4	95	595	9.5	76	9.5	216	636
031A0413*	800	3	3525	100	4	4	50	765	7.5	65	7.5	178	806
031A0414*	800	4	3525	100	4	4	65	765	0.0	65	0.0	178	806
031A0415*	800	5	4030	115	4 <sup>1</sup> / <sub>2</sub>	4	80	765	2.0	76	2.0	216	806
031A0416*	800	6	4030	115	4 <sup>1</sup> / <sub>2</sub>	4	95	765	9.5	76	9.5	216	806

Dimensions in millimetres unless otherwise stated. \* Non-preferred pulley sizes. Intermediate diameters available on a non-stock basis, see page 70

All envelope, prime functional and Taper Lock bush dimensions are correct at the time of publication. Non-functional dimensions may vary slightly. These pulleys are designed to operate at rim speeds upto 40m/sec, for higher speeds contact your local authorised distributor.

## Taper Lock Pulleys for B, SPB, XPB, QXPB &amp; USPB Belts

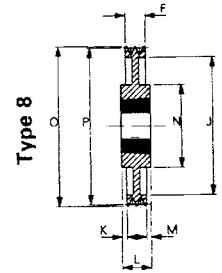
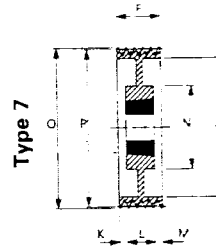
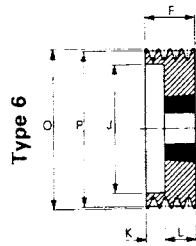
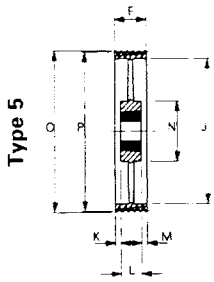


Catalogue Code	Pitch Dia (P)	No. of Grooves	Bush No.	Max. Bore		Pulley Type	F	J	K	L	M	N	Outside Dia (O)
				Metric	Inch								
031B0162	<b>112</b>	2	2012	50	2	2	44	72	25	19.0	–	–	119
031B0163	<b>112</b>	3	2012	50	2	2	63	72	–	25	37.0	–	119
031B0172	<b>118</b>	2	2012	50	2	2	44	78	–	25	19.0	–	125
031B0173	<b>118</b>	3	2012	50	2	2	63	78	–	25	37.0	–	125
031B0182	<b>125</b>	2	2012	50	2	2	44	82	–	32	12.0	–	132
031B0183	<b>125</b>	3	2012	50	2	2	63	89	–	32	31.0	–	132
031B0184	<b>125</b>	4	2012	50	2	3	82	82	25.0	32	25.0	–	132
031B0185*	<b>125</b>	5	2012	50	2	6	101	87	69.0	32	–	–	132
031B0192	<b>132</b>	2	2012	50	2	2	44	89	–	32	12.0	–	139
031B0193	<b>132</b>	3	2012	50	2	2	63	89	–	32	31.0	–	139
031B0194	<b>132</b>	4	2012	50	2	3	82	89	25.0	32	25.0	–	139
031B0195*	<b>132</b>	5	2517	60	2 1/2	6	101	94	56.0	45	–	–	139
031B0202	<b>140</b>	2	2012	50	2	2	44	97	–	32	12.0	–	147
031B0203	<b>140</b>	3	2012	50	2	2	63	97	–	32	31.0	–	147
031B0204	<b>140</b>	4	2517	60	2 1/2	3	82	100	18.5	45	18.5	–	147
031B0205	<b>140</b>	5	2517	60	2 1/2	3	101	97	28.0	45	28.0	–	147
031B0206	<b>140</b>	6	2517	60	2 1/2	3	120	100	37.5	45	37.5	–	147
031B0212	<b>150</b>	2	2012	50	2	2	44	107	–	32	12.0	–	157
031B0213	<b>150</b>	3	2517	60	2 1/2	2	63	107	–	45	18.0	–	157
031B0214	<b>150</b>	4	2517	60	2 1/2	3	82	107	18.5	45	18.5	–	157
031B0215	<b>150</b>	5	2517	60	2 1/2	3	101	107	28.0	45	28.0	–	157
031B0216	<b>150</b>	6	2517	60	2 1/2	3	120	107	37.5	45	37.5	–	157
031B0222	<b>160</b>	2	2012	50	2	2	44	117	–	32	12.0	–	167
031B0223	<b>160</b>	3	2517	60	2 1/2	2	63	117	–	45	18.0	–	167
031B0224	<b>160</b>	4	2517	60	2 1/2	3	82	117	18.5	45	18.5	–	167
031B0225	<b>160</b>	5	2517	60	2 1/2	3	101	117	28.0	45	28.0	–	167
031B0226	<b>160</b>	6	3020	75	3	3	120	117	34.5	51	34.5	–	167
031B0232	<b>170</b>	2	2012	50	2	2	44	127	–	32	12.0	–	177
031B0233	<b>170</b>	3	2517	60	2 1/2	2	63	127	–	45	18.0	–	177
031B0234	<b>170</b>	4	2517	60	2 1/2	3	82	127	18.5	45	18.5	–	177
031B0235	<b>170</b>	5	3020	75	3	3	101	127	25.0	51	25.0	–	177
031B0236	<b>170</b>	6	3020	75	3	3	120	127	34.5	51	34.5	–	177
031B0242	<b>180</b>	2	2517	60	2 1/2	1	44	–	–	45	1.0	117	187
031B0243	<b>180</b>	3	2517	60	2 1/2	2	63	137	–	45	18.0	–	187
031B0244	<b>180</b>	4	2517	60	2 1/2	3	82	137	18.5	45	18.5	–	187
031B0245	<b>180</b>	5	3020	75	3	3	101	137	25.0	51	25.0	–	187
031B0246	<b>180</b>	6	3020	75	3	3	120	137	34.5	51	34.5	–	187
031B0248*	<b>180</b>	8	3020	75	3	3	158	137	53.5	51	53.5	–	187
031B0252	<b>190</b>	2	2517	60	2 1/2	1	44	–	–	45	1.0	117	197
031B0253	<b>190</b>	3	2517	60	2 1/2	2	63	147	–	45	18.0	–	197
031B0254	<b>190</b>	4	2517	60	2 1/2	3	82	147	18.5	45	18.5	–	197
031B0255	<b>190</b>	5	3020	75	3	3	101	147	25.0	51	25.0	–	197
031B0256	<b>190</b>	6	3020	75	3	3	120	147	34.5	51	34.5	–	197
031B0258*	<b>190</b>	8	3020	75	3	3	158	147	53.5	51	53.5	–	197
031B0262	<b>200</b>	2	2517	60	2 1/2	1	44	–	–	45	1.0	117	207
031B0263	<b>200</b>	3	2517	60	2 1/2	7	63	157	–	45	18.0	117	207
031B0264	<b>200</b>	4	3020	75	3	3	82	157	15.5	51	15.5	–	207
031B0265	<b>200</b>	5	3020	75	3	3	101	157	25.0	51	25.0	–	207
031B0266	<b>200</b>	6	3020	75	3	3	120	157	34.5	51	34.5	–	207
031B0268*	<b>200</b>	8	3525	100	4	3	158	157	46.5	65	46.5	–	207
031B0272	<b>212</b>	2	2517	60	2 1/2	1	44	–	–	45	1.0	117	219
031B0273	<b>212</b>	3	2517	60	2 1/2	7	63	169	–	45	18.0	117	219
031B0274	<b>212</b>	4	3020	75	3	3	82	169	15.5	51	15.5	–	219
031B0275	<b>212</b>	5	3020	75	3	3	101	169	25.0	51	25.0	–	219
031B0276	<b>212</b>	6	3525	100	4	3	120	169	28.0	65	28.0	–	219
031B0278*	<b>212</b>	8	3525	100	4	3	158	169	46.5	65	46.5	–	219
031B0282	<b>224</b>	2	2517	60	2 1/2	8	44	181	1.0	45	–	117	231
031B0283	<b>224</b>	3	2517	60	2 1/2	7	63	181	–	45	18.0	117	231
031B0284	<b>224</b>	4	3020	75	3	3	82	181	15.5	51	15.5	–	231
031B0285	<b>224</b>	5	3020	75	3	3	101	181	25.0	51	25.0	–	231
031B0286	<b>224</b>	6	3525	100	4	3	120	181	28.0	65	28.0	–	231
031B0288*	<b>224</b>	8	3525	100	4	3	158	181	46.5	65	46.5	–	231

Dimensions in millimetres unless otherwise stated. \*Non-preferred pulley sizes. Pitch diameters in italic type indicate pulleys to be used with B V-belts, XPB & QXPB wedge belts only. All envelope, prime functional and Taper Lock bush dimensions are correct at the time of publication. Non-functional dimensions may vary slightly.

Non-functional dimensions may vary slightly. These pulleys are designed to operate at rim speeds up to 40m/sec, for higher speeds contact your local authorised distributor.

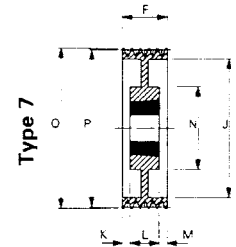
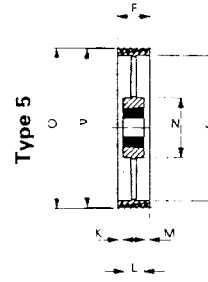
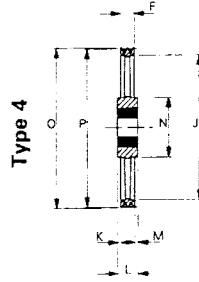
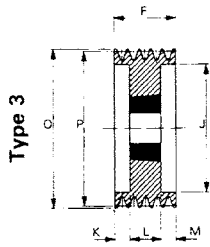
# Taper Lock Pulleys for B, SPB, XPB, QXPB & USPB Belts



Catalogue Code	Pitch Dia (P)	No. of Grooves	Bush No.	Max. Bore		Pulley Type	F	J	K	L	M	N	Outside Dia (O)
				Metric	Inch								
031B0292	236	2	2517	60	2 1/2	8	44	193	1.0	45	-	117	243
031B0293	236	3	2517	60	2 1/2	7	63	193	-	45	18.0	117	243
031B0294	236	4	3020	75	3	3	82	193	15.5	51	15.5	-	243
031B0295	236	5	3525	100	4	3	101	193	18.0	65	18.0	-	243
031B0296	236	6	3525	100	4	3	120	193	28.0	65	28.0	-	243
031B0298*	236	8	3525	100	4	3	158	193	46.5	65	46.5	-	243
031B0302	250	2	2517	60	2 1/2	8	44	207	1.0	45	1.0	117	257
031B0303	250	3	3020	75	3	7	63	207	-	51	12.0	144	257
031B0304	250	4	3020	75	3	7	82	207	15.5	51	15.5	144	257
031B0305	250	5	3525	100	4	3	101	207	18.0	65	18.0	-	257
031B0306	250	6	3525	100	4	3	120	207	28.0	65	28.0	-	257
031B0308*	250	8	3525	100	4	3	158	207	46.5	65	46.5	-	257
031B0322	280	2	2517	60	2 1/2	8	44	237	1.0	45	-	117	287
031B0323	280	3	3020	75	3	7	63	237	6.0	51	6.0	144	287
031B0324	280	4	3020	75	3	7	82	237	15.5	51	15.5	144	287
031B0325	280	5	3525	100	4	7	101	237	18.0	65	18.0	187	287
031B0326	280	6	3525	100	4	7	120	237	27.5	65	27.5	187	287
031B0328*	280	8	3525	100	4	7	158	237	46.5	65	46.5	187	287
031B0332	315	2	2517	60	2 1/2	8	44	272	1.0	45	-	117	322
031B0333	315	3	3020	75	3	7	63	272	6.0	51	6.0	144	322
031B0334	315	4	3525	100	4	7	82	272	3.5	65	3.5	187	322
031B0335	315	5	3525	100	4	7	101	272	18.0	65	18.0	187	322
031B0336	315	6	3525	100	4	7	120	272	27.5	65	27.5	187	322
031B0338*	315	8	3525	100	4	7	158	272	46.5	65	46.5	187	322
031B0342	355	2	3020	75	3	5	44	312	3.5	51	3.5	144	362
031B0343	355	3	3020	75	3	8	63	312	6.0	51	6.0	144	362
031B0344	355	4	3525	100	4	8	82	312	3.5	51	3.5	187	362
031B0345	355	5	3525	100	4	5	101	312	18.0	65	18.0	187	362
031B0346	355	6	3525	100	4	5	120	312	27.5	65	27.5	187	362
031B0348*	355	8	3525	100	4	7	158	312	46.5	65	46.5	187	362
031B0352	400	2	3020	75	3	4	44	357	3.5	51	3.5	144	407
031B0353	400	3	3525	100	4	8	63	357	1.0	65	1.0	187	407
031B0354	400	4	3525	100	4	4	82	357	8.5	65	8.5	187	407
031B0355	400	5	3525	100	4	7	101	357	18.0	65	18.0	187	407
031B0356	400	6	3525	100	4	5	120	357	27.5	65	27.5	187	407
031B0358*	400	8	3525	100	4	5	158	357	46.5	65	46.5	200	407
014B0362	450	2	3020	75	3	4	44	407	3.5	51	3.5	144	457
014B0363	450	3	3525	100	4	4	63	407	1.0	65	1.0	187	457
014B0364	450	4	3525	100	4	4	82	407	8.5	65	8.5	187	457
014B0365	450	5	3525	100	4	5	101	407	18.0	65	18.0	187	457
014B0366	450	6	3525	100	4	5	120	407	27.5	65	27.5	216	457
014B0368*	450	8	3525	100	4	5	158	407	46.5	65	46.5	216	457
031B0372	500	2	3020	75	3	4	44	457	3.5	51	3.5	144	507
031B0373	500	3	3525	100	4	4	63	457	1.0	65	1.0	187	507
031B0374	500	4	3525	100	4	4	82	457	8.5	65	8.5	187	507
031B0375	500	5	3525	100	4	5	101	457	18.0	65	18.0	187	507
031B0376	500	6	3525	100	4	5	120	457	27.5	65	27.5	216	507
031B0378*	500	8	3525	100	4	5	158	457	46.5	65	46.5	216	507
014B0382	560	2	3020	75	3	4	44	517	4.0	76	4.0	144	567
014B0383	560	3	3525	100	4	4	63	517	1.0	65	1.0	187	567
014B0384	560	4	3525	100	4	4	82	517	8.5	65	8.5	187	567
014B0385	560	5	3525	100	4	4	101	517	18.0	65	18.0	216	567
014B0386	560	6	3525	100	4	5	120	517	27.5	65	27.5	187	567
014B0388*	560	8	4030	115	4 1/2	5	158	517	41.0	76	41.0	242	567
031B0392	630	2	3020	75	3	4	44	587	3.5	51	3.5	144	637
031B0393	630	3	3525	100	4	4	63	587	1.0	65	1.0	187	637
031B0394	630	4	3525	100	4	4	82	587	8.5	65	8.5	187	637
031B0395	630	5	3525	100	4	4	101	587	18.0	65	18.0	216	637
031B0396	630	6	3525	100	4	5	120	587	27.5	65	27.5	216	637
031B0398*	630	8	4030	115	4 1/2	5	158	587	41.0	76	41.0	242	637
031B0413	800	3	3525	100	4	4	63	754	1.0	65	1.0	187	807
031B0414	800	4	4030	115	4 1/2	4	82	754	3.0	76	3.0	216	807
031B0415	800	5	4030	115	4 1/2	4	101	754	12.5	76	12.5	216	807
031B0416	800	6	4535	125	5	5	120	754	15.5	89	15.5	242	807
031B0418*	800	8	4535	125	5	5	158	754	34.5	89	34.5	242	807
031B0433*	1000	3	4030	115	4 1/2	4	63	954	6.5	76	6.5	216	1007
031B0434	1000	4	4030	115	4 1/2	4	82	954	3.0	76	3.0	216	1007
031B0435	1000	5	4535	125	5	4	101	954	6.0	89	6.0	242	1007
031B0436	1000	6	4535	125	5	5	120	954	15.5	89	15.5	242	1007
031B0438*	1000	8	4535	125	5	5	158	954	34.5	89	34.5	242	1007

Dimensions in millimetres unless otherwise stated. \* Non-preferred pulley sizes. Intermediate diameters available on a non-stock basis, see page 70. All envelope, prime functional and Taper Lock bush dimensions are correct at the time of publication. Non-functional dimensions may vary slightly. These pulleys are designed to operate at rim speeds up to 40m/sec, for higher speeds contact your local authorised distributor.

## Taper Lock Pulleys for C, SPC, XPC, QXPC &amp; USPC Belts



Catalogue Code	Pitch Dia (P)	No. of Grooves	Bush No.	Max. Bore		Type	F	J	K	L	M	N	Outside Dia (O)
				Metric	Inch								
031C0263	<b>200</b>	3	2517	60	2 1/2	3	85	144	20.0	45	20.0	—	210
031C0264	<b>200</b>	4	3020	75	3	3	111	144	30.0	51	30.0	—	210
031C0265	<b>200</b>	5	3525	100	4	3	136	144	35.5	65	35.5	—	210
031C0266	<b>200</b>	6	3525	100	4	3	162	144	48.5	65	48.5	—	210
031C0273	<b>212</b>	3	3020	75	3	3	85	156	17.0	51	17.0	—	222
031C0274	<b>212</b>	4	3020	75	3	3	111	156	30.0	51	30.0	—	222
031C0275	<b>212</b>	5	3525	100	4	3	136	156	35.5	65	35.5	—	222
031C0276	<b>212</b>	6	3525	100	4	3	162	156	48.5	65	48.5	—	222
031C0283	<b>224</b>	3	3020	75	3	3	85	168	17.0	51	17.0	—	234
031C0284	<b>224</b>	4	3525	100	4	3	111	168	23.0	65	23.0	—	234
031C0285	<b>224</b>	5	3525	100	4	3	136	168	35.5	65	35.5	—	234
031C0286	<b>224</b>	6	3525	100	4	3	162	168	48.5	65	48.5	—	234
031C0288	<b>224</b>	8	3525	100	4	3	213	168	74.0	65	74.0	—	234
031C0293	<b>236</b>	3	3020	75	3	3	85	180	17.0	51	17.0	—	246
031C0294	<b>236</b>	4	3525	100	4	3	111	180	23.0	65	23.0	—	246
031C0295	<b>236</b>	5	3525	100	4	3	136	180	35.5	65	35.5	—	246
031C0296	<b>236</b>	6	3525	100	4	3	162	180	48.5	65	48.5	—	246
031C0298	<b>236</b>	8	3525	100	4	3	213	180	74.0	65	74.0	—	246
031C0303	<b>250</b>	3	3020	75	3	3	85	194	17.0	51	17.0	—	260
031C0304	<b>250</b>	4	3525	100	4	3	111	194	23.0	65	23.0	—	260
031C0305	<b>250</b>	5	3525	100	4	3	136	194	35.5	65	35.5	—	260
031C0306	<b>250</b>	6	3525	100	4	3	162	194	48.5	65	48.5	—	260
031C0308	<b>250</b>	8	3525	100	4	3	213	194	74.0	65	74.0	—	260
031C0313	<b>265</b>	3	3525	100	4	1	85	209	10.0	65	10.0	179	275
031C0314	<b>265</b>	4	3525	100	4	3	111	209	23.0	65	23.0	—	275
031C0315	<b>265</b>	5	3525	100	4	3	136	209	35.5	65	35.5	—	275
031C0316	<b>265</b>	6	3525	100	4	3	162	209	48.5	65	48.5	—	275
031C0318	<b>265</b>	8	3525	100	4	3	213	209	74.0	65	74.0	—	275
031C0323	<b>280</b>	3	3525	100	4	1	85	224	10.0	65	10.0	187	290
031C0324	<b>280</b>	4	3525	100	4	3	111	224	23.0	65	23.0	—	290
031C0325	<b>280</b>	5	3525	100	4	3	136	224	35.5	65	35.5	—	290
031C0326	<b>280</b>	6	3525	100	4	3	162	224	48.5	65	48.5	170	290
031C0328	<b>280</b>	8	3525	100	4	3	213	224	74.0	65	74.0	—	290
031C0473	<b>300</b>	3	3525	100	4	8	85	244	10.0	65	10.0	187	310
031C0474	<b>300</b>	4	3525	100	4	7	111	244	23.0	65	23.0	187	310
031C0475	<b>300</b>	5	3525	100	4	7	136	244	35.5	65	35.5	187	310
031C0476	<b>300</b>	6	3525	100	4	7	162	244	48.5	65	48.5	187	310
031C0478	<b>300</b>	8	3525	100	4	7	213	244	74.0	65	74.0	216	310
031C0333	<b>315</b>	3	3525	100	4	8	85	259	10.0	65	10.0	187	325
031C0334	<b>315</b>	4	3525	100	4	7	111	259	23.0	65	23.0	187	325
031C0335	<b>315</b>	5	3525	100	4	7	136	259	35.5	65	35.5	187	325
031C0336	<b>315</b>	6	3525	100	4	7	162	259	48.5	65	48.5	187	325
031C0338	<b>315</b>	8	3525	100	4	7	213	259	74.0	65	74.0	216	325
031C0483	<b>335</b>	3	3525	100	4	8	85	279	10.0	65	10.0	187	345
031C0484	<b>335</b>	4	3525	100	4	7	111	279	23.0	65	23.0	187	345
031C0485	<b>335</b>	5	3525	100	4	7	136	279	35.5	65	35.5	187	345
031C0486	<b>335</b>	6	3525	100	4	7	162	279	48.5	65	48.5	187	345
031C0488	<b>335</b>	8	3525	100	4	7	213	279	74.0	65	74.0	216	345
031C0343	<b>355</b>	3	3525	100	4	8	85	299	10.0	65	10.0	187	365
031C0344	<b>355</b>	4	3525	100	4	7	111	299	23.0	65	23.0	187	365
031C0345	<b>355</b>	5	3525	100	4	7	136	299	35.5	65	35.5	187	365
031C0346	<b>355</b>	6	3525	100	4	7	162	299	48.5	65	48.5	187	365
031C0348	<b>355</b>	8	3525	100	4	7	213	299	74.0	65	74.0	216	365
031C0493	<b>375</b>	3	3525	100	4	8	85	319	10.0	65	10.0	187	385
031C0494	<b>375</b>	4	3525	100	4	7	111	319	23.0	65	23.0	187	385
031C0495	<b>375</b>	5	3525	100	4	7	136	319	35.5	65	35.5	187	385
031C0496	<b>375</b>	6	3525	100	4	7	162	319	48.5	65	48.5	216	385
031C0498	<b>375</b>	8	4030	115	4 1/2	7	213	319	68.5	76	68.5	242	385

Dimensions in millimetres unless otherwise stated. \* Non-preferred pulley sizes.

All envelope, prime functional and Taper Lock bush dimensions are correct at the time of publication.

Non-functional dimensions may vary slightly.

These pulleys are designed to operate at rim speeds upto 40m/sec, for higher speeds contact your local authorised distributor.

Pitch diameters in italic type indicate pulleys to be used with C V belts, XPC & QXPC wedge belts only.

# Taper Lock Pulleys for C, SPC, XPC, QXPC & USPC Belts

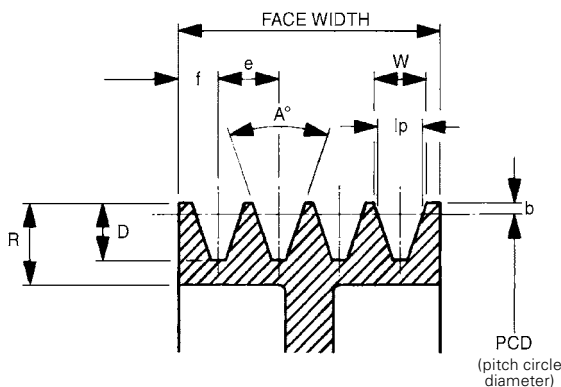
Catalogue Code	Pitch Dia (P)	No. of Grooves	Bush No.	Max. Bore		Type	F	J	K	L	M	N	Outside Dia (O)
				Metric	Inch								
031C0353	400	3	3525	100	4	4	85	344	10.0	65	10.0	187	410
031C0354	400	4	3525	100	4	5	111	344	23.0	65	23.0	187	410
031C0355	400	5	3525	100	4	5	136	344	35.5	65	35.5	187	410
031C0356	400	6	3525	100	4	7	162	344	48.5	65	48.5	216	410
031C0358	400	8	4030	115	4 1/2	7	213	344	68.5	76	68.5	242	410
031C0503	425	3	3525	100	4	4	85	369	10.0	65	10.0	187	435
031C0504	425	4	3525	100	4	5	111	369	23.0	65	23.0	187	435
031C0505	425	5	3525	100	4	5	136	369	35.5	65	35.5	216	435
031C0506	425	6	4535	125	5	7	162	369	36.5	89	36.5	242	435
031C0508	425	8	4535	125	5	7	213	369	62.0	89	62.0	267	435
031C0363	450	3	3525	100	4	4	85	394	10.0	65	10.0	187	460
031C0364	450	4	3525	100	4	5	111	394	23.0	65	23.0	187	460
031C0365	450	5	3525	100	4	5	136	394	35.5	65	35.5	216	460
031C0366	450	6	4535	125	5	7	162	394	36.5	89	36.5	242	460
031C0368	450	8	4535	125	5	7	213	394	62.0	89	62.0	267	460
031C0513	475	3	3525	100	4	4	85	419	10.0	65	10.0	187	485
031C0514	475	4	3525	100	4	5	111	419	23.0	65	23.0	187	485
031C0515	475	5	3525	100	4	5	136	419	35.5	65	35.5	216	485
031C0516	475	6	4535	125	5	7	162	419	36.5	89	36.5	242	485
031C0518	475	8	4535	125	5	7	213	419	62.0	89	62.0	267	485
031C0373	500	3	3525	100	4	4	85	444	10.0	65	10.0	187	510
031C0374	500	4	3525	100	4	5	111	444	23.0	65	23.0	187	510
031C0375	500	5	3525	100	4	5	136	444	35.5	65	35.5	216	510
031C0376	500	6	4535	125	5	5	162	444	36.5	89	36.5	242	510
031C0378	500	8	4535	125	5	7	213	444	62.0	89	62.0	267	510
031C0523	530	3	3525	100	4	4	85	474	10.0	65	10.0	187	540
031C0524	530	4	3525	100	4	5	111	474	23.0	65	23.0	187	540
031C0525	530	5	4535	125	5	5	136	474	23.5	89	23.5	216	540
031C0526	530	6	4535	125	5	5	162	474	36.5	89	36.5	242	540
031C0528	530	8	4535	125	5	7	213	474	62.0	89	62.0	267	540
031C0383	560	3	3525	100	4	4	85	504	10.0	65	10.0	216	570
031C0384	560	4	3525	100	4	5	111	504	23.0	65	23.0	216	570
031C0385	560	5	4535	125	5	5	136	504	23.5	89	23.5	242	570
031C0386	560	6	4535	125	5	5	162	504	36.5	89	36.5	267	570
031C0388	560	8	4535	125	5	5	213	504	62.0	89	62.0	267	570
031C0393	630	3	4030	115	4 1/2	4	85	574	4.5	76	4.5	246	640
031C0394	630	4	4030	115	4 1/2	4	111	574	17.5	76	17.5	242	640
031C0395	630	5	4535	125	5	5	136	574	23.5	89	23.5	267	640
031C0396	630	6	4535	125	5	5	162	574	36.5	89	36.5	267	640
031C0398	630	8	4535	125	5	5	213	574	62.0	89	62.0	267	640
031C0413	800	3	4535	125	5	4	85	737	2.0	89	2.5	242	810
031C0414	800	4	5040	125	5	4	111	737	4.5	102	4.5	267	810
031C0415	800	5	5040	125	5	5	136	737	17.0	102	17.0	267	810
031C0416	800	6	5040	125	5	5	162	737	30.0	102	30.0	267	810
031C0418	800	8	5040	125	5	5	213	737	55.5	102	55.5	267	810
031C0433	1000	3	5040	125	5	4	85	937	8.5	102	8.5	267	1010
031C0434	1000	4	5040	125	5	4	111	937	4.5	102	4.5	267	1010
031C0435	1000	5	5040	125	5	5	136	937	17.0	102	17.0	267	1010
031C0436	1000	6	5040	125	5	5	162	937	30.0	102	30.0	267	1010
031C0438	1000	8	5040	125	5	5	213	937	55.5	102	55.5	267	1010
031C0443	1250	3	5040	125	5	4	85	1187	8.5	102	8.5	267	1260
031C0444	1250	4	5040	125	5	4	111	1187	4.5	102	4.5	267	1260
031C0445	1250	5	5040	125	5	5	136	1187	17.0	102	17.0	267	1260
031C0446	1250	6	5040	125	5	5	162	1187	30.0	102	30.0	267	1260
031C0448	1250	8	5040	125	5	5	213	1187	55.5	102	55.5	267	1260

Dimensions in millimetres unless otherwise stated.

Intermediate diameters available on a non-stock basis, see page 69

All envelope, prime functional and Taper Lock bush dimensions are correct at the time of publication. Non-functional dimensions may vary slightly.

## Pulley Groove Dimensions



Belt Section	Pulley PCD	A° ± 0.5°	D +0.03 -0.0	e* ± 0.15	f ± 0.3	b ± 0.13	Ip	W	R NOM
SPZ Dual Groove	Up to 80 Over 80	34 38	11.0	12	8	2.0	8.5	9.7 9.9	17.25
SPA Dual Groove	Up to 118 Over 118	34 38	13.75	15	10	2.75	11	12.7 12.9	21.25
SPB Dual Groove	Up to 190 Over 190	34 38	17.5	19	12.5	3.5	14	16.1 16.4	27.25
SPC Dual Groove	Up to 315 Over 315	34 38	23.8	25.5	17	4.8	19	21.9 22.3	37.25

\*e dimension – the tolerance shown is between any two grooves.



## Additional Taper Lock Pulley Sizes

### Additional SPZ Pulley Sizes

Product Code	Description	Bush Size
031Z0064	SPZ 63 X 4	1108
031Z0074	SPZ 67 X 4	1108
031Z0084	SPZ 71 X 4	1108
031Z0094	SPZ 75 X 4	1210
031Z0126	SPZ 90 X 6	1610
031Z0136	SPZ 95 X 6	1610
031Z0146	SPZ 100 X 6	2012
031Z0156	SPZ 106 X 6	2012
031Z0166	SPZ 112 X 6	2012
031Z0176	SPZ 118 X 6	2517
031Z0186	SPZ 125 X 6	2517
031Z0196	SPZ 132 X 6	2517
031Z0206	SPZ 140 X 6	2517
031Z0211	SPZ 150 X 1	1610
031Z0212	SPZ 150 X 2	2012
031Z0213	SPZ 150 X 3	2012
031Z0214	SPZ 150 X 4	2517
031Z0215	SPZ 150 X 5	2517
031Z0216	SPZ 150 X 6	2517
031Z0226	SPZ 160 X 6	2517
031Z0231	SPZ 170 X 1	1610
031Z0232	SPZ 170 X 2	2012
031Z0233	SPZ 170 X 3	2012
031Z0234	SPZ 170 X 4	2517
031Z0235	SPZ 170 X 5	2517
031Z0236	SPZ 170 X 6	2517
031Z0246	SPZ 180 X 6	2517
031Z0251	SPZ 190 X 1	1610
031Z0252	SPZ 190 X 2	2012
031Z0253	SPZ 190 X 3	2012
031Z0254	SPZ 190 X 4	2012
031Z0255	SPZ 190 X 5	2517
031Z0256	SPZ 190 X 6	2517
031Z0266	SPZ 200 X 6	2517
031Z0281	SPZ 224 X 1	2012
031Z0282	SPZ 224 X 2	2012
031Z0283	SPZ 224 X 3	2012
031Z0284	SPZ 224 X 4	2517
031Z0285	SPZ 224 X 5	2517
031Z0286	SPZ 224 X 6	2517
031Z0306	SPZ 250 X 6	2517
031Z0321	SPZ 280 X 1	2012
031Z0322	SPZ 280 X 2	2012
031Z0323	SPZ 280 X 3	2517
031Z0324	SPZ 280 X 4	2517
031Z0325	SPZ 280 X 5	2517
031Z0326	SPZ 280 X 6	2517
031Z0336	SPZ 315 X 6	2517
031Z0341	SPZ 355 X 1	2012
031Z0342	SPZ 355 X 2	2012
031Z0343	SPZ 355 X 3	2517
031Z0344	SPZ 355 X 4	2517
031Z0345	SPZ 355 X 5	2517
031Z0346	SPZ 355 X 6	2517
031Z0356	SPZ 400 X 6	3020
031Z0361	SPZ 450 X 1	2517
031Z0362	SPZ 450 X 2	2517
031Z0363	SPZ 450 X 3	2517
031Z0364	SPZ 450 X 4	3020
031Z0365	SPZ 450 X 5	3020
031Z0366	SPZ 450 X 6	3020
031Z0371	SPZ 500 X 1	2517
031Z0376	SPZ 500 X 6	3020
031Z0392	SPZ 630 X 2	2517
031Z0396	SPZ 630 X 6	3525

### Additional SPA Pulley Sizes

Product Code	Description	Bush Size
031A0081	SPA 71 X 1	1108
031A0082	SPA 71 X 2	1108
031A0083	SPA 71 X 3	1108
031A0091	SPA 75 X 1	1108
031A0092	SPA 75 X 2	1108
031A0093	SPA 75 X 3	1108
031A0104	SPA 80 X 4	1210
031A0114	SPA 85 X 4	1210
031A0231	SPA 170 X 1	1610
031A0232	SPA 170 X 2	2012
031A0233	SPA 170 X 3	2517
031A0234	SPA 170 X 4	2517
031A0235	SPA 170 X 5	3020
031A0236	SPA 170 X 6	3020
031A0251	SPA 190 X 1	2012
031A0252	SPA 190 X 2	2012
031A0253	SPA 190 X 3	2517
031A0254	SPA 190 X 4	3020
031A0255	SPA 190 X 5	3020
031A0256	SPA 190 X 6	3020
031A0271	SPA 212 X 1	2012
031A0272	SPA 212 X 2	2517
031A0273	SPA 212 X 3	2517
031A0274	SPA 212 X 4	3020
031A0275	SPA 212 X 5	3020
031A0276	SPA 212 X 6	3020
031A0291	SPA 236 X 1	2012
031A0292	SPA 236 X 2	2517
031A0293	SPA 236 X 3	2517
031A0294	SPA 236 X 4	3020
031A0295	SPA 236 X 5	3020
031A0296	SPA 236 X 6	3020
031A0311	SPA 265 X 1	2012
031A0312	SPA 265 X 2	2517
031A0313	SPA 265 X 3	2517
031A0314	SPA 265 X 4	3020
031A0315	SPA 265 X 5	3020
031A0316	SPA 265 X 6	3020
031A0472	SPA 300 X 2	2517
031A0473	SPA 300 X 3	3020
031A0474	SPA 300 X 4	3020
031A0475	SPA 300 X 5	3525
031A0476	SPA 300 X 6	3525
031A0481	SPA 335 X 1	2012
031A0482	SPA 335 X 2	2517
031A0483	SPA 335 X 3	3020
031A0484	SPA 335 X 4	3020
031A0485	SPA 335 X 5	3525
031A0486	SPA 335 X 6	3525
031A0341	SPA 355 X 1	2012
031A0342	SPA 355 X 2	2517
031A0343	SPA 355 X 3	3020
031A0344	SPA 355 X 4	3020
031A0345	SPA 355 X 5	3525
031A0346	SPA 355 X 6	3525
031A0361	SPA 450 X 1	2012
031A0362	SPA 450 X 2	2517
031A0363	SPA 450 X 3	3020
031A0364	SPA 450 X 4	3020
031A0365	SPA 450 X 5	3525
031A0366	SPA 450 X 6	3525
031A0371	SPA 500 X 1	2517
031A0381	SPA 560 X 1	2517
031A0382	SPA 560 X 2	3020
031A0383	SPA 560 X 3	3020
031A0384	SPA 560 X 4	3525
031A0385	SPA 560 X 5	3525
031A0386	SPA 560 X 6	3525
031A0391	SPA 630 X 1	2517
031A0412	SPA 800 X 2	3525
<b>031A1433</b>	<b>SPA 1000 X 3</b>	<b>3535</b>
<b>031A1434</b>	<b>SPA 1000 X 4</b>	<b>4040</b>
<b>031A1435</b>	<b>SPA 1000 X 5</b>	<b>4545</b>
<b>031A1436</b>	<b>SPA 1000 X 6</b>	<b>4545</b>

## Additional Taper Lock Pulleys Sizes

### Additional SPB Pulley Sizes

Product Code	Description	Bush Size
031B0141	SPB 100 X 1	1610
031B0142	SPB 100 X 2	1610
031B0143	SPB 100 X 3	1610
031B0144	SPB 100 X 4	1210
031B0151	SPB 106 X 1	1610
031B0152	SPB 106 X 2	1610
031B0153	SPB 106 X 3	1610
031B0154	SPB 106 X 4	1610
031B0161	SPB 112 X 1	1610
031B0164	SPB 112 X 4	1610
031B0171	SPB 118 X 1	1610
031B0174	SPB 118 X 4	1610
031B0181	SPB 125 X 1	1610
031B0186	SPB 125 X 6	2012
031B0191	SPB 132 X 1	1610
031B0196	SPB 132 X 6	2012
031B0201	SPB 140 X 1	1610
031B0211	SPB 150 X 1	1610
031B0221	SPB 160 X 1	1610
031B0228	SPB 160 X 8	3020
031B1228	SPB 160 X 8	3030
031B0231	SPB 170 X 1	1610
031B0238	SPB 170 X 8	3020
031B0241	SPB 180 X 1	1610
031B0251	SPB 190 X 1	2012
031B0261	SPB 200 X 1	2012
031B0271	SPB 212 X 1	2012
031B0281	SPB 224 X 1	2012
031B0291	SPB 236 X 1	2012
031B0301	SPB 250 X 1	2012
031B0312	SPB 265 X 2	2517
031B0313	SPB 265 X 3	3020
031B0314	SPB 265 X 4	3020
031B0315	SPB 265 X 5	3525
031B0316	SPB 265 X 6	3525
031B0318	SPB 265 X 8	3525
031B0321	SPB 280 X 1	2012
031B0331	SPB 315 X 1	2012
031B0403	SPB 710 X 3	3525
031B0404	SPB 710 X 4	3525
031B0405	SPB 710 X 5	4030
031B0406	SPB 710 X 6	4535
031B0408	SPB 710 X 8	4535
031B0412	SPB 800 X 2	3525
031B0423	SPB 900 X 3	3525
031B0424	SPB 900 X 4	4030
031B0425	SPB 900 X 5	4535
031B0426	SPB 900 X 6	4535
031B0428	SPB 900 X 8	4535
031B0443	SPB 1250 X 3	5040
031B0444	SPB 1250 X 4	5040
031B0445	SPB 1250 X 5	5040
031B0446	SPB 1250 X 6	5040
031B0448	SPB 1250 X 8	5040
031B0471	SPB 300 X 1	2012
031B0472	SPB 300 X 2	2517
031B0473	SPB 300 X 3	3020
031B0474	SPB 300 X 4	3525
031B0475	SPB 300 X 5	3525
031B0476	SPB 300 X 6	3252
031B0478	SPB 300 X 8	3525
031C1470	SPC 300 X 10	4040
031B0482	SPB 335 X 2	3020
031B0483	SPB 335 X 3	3020
031B0484	SPB 335 X 4	3525
031B0486	SPB 335 X 6	3525
031B0488	SPB 335 X 8	3525

### Additional SPC Pulley Sizes

Product Code	Description	Bush Size
031C0268	SPC 200 X 8	3525
031C0278	SPC 212 X 8	3525
031C1280	SPC 224 X 10	4040
031C0290	SPC 236 X 10	4040
<b>031C1300</b>	<b>SPC 250 X 10</b>	<b>4040</b>
<b>031C1310</b>	<b>SPC 265 X 10</b>	<b>4040</b>
<b>031C1320</b>	<b>SPC 280 X 10</b>	<b>4040</b>
<b>031C1470</b>	<b>SPC 300 X 10</b>	<b>4040</b>
<b>031C1330</b>	<b>SPC 315 X 10</b>	<b>4545</b>
<b>031C1480</b>	<b>SPC 335 X 10</b>	<b>4545</b>
<b>031C1340</b>	<b>SPC 355 X 10</b>	<b>4545</b>
<b>031C1490</b>	<b>SPC 375 X 10</b>	<b>4545</b>
<b>031C1350</b>	<b>SPC 400 X 10</b>	<b>5050</b>
<b>031C1500</b>	<b>SPC 425 X 10</b>	<b>5050</b>
<b>031C1360</b>	<b>SPC 450 X 10</b>	<b>5050</b>
<b>031C1510</b>	<b>SPC 475 X 10</b>	<b>5050</b>
<b>031C1370</b>	<b>SPC 500 X 10</b>	<b>5050</b>
<b>031C1520</b>	<b>SPC 530 X 10</b>	<b>5050</b>
<b>031C1380</b>	<b>SPC 560 X 10</b>	<b>5050</b>
<b>031C1390</b>	<b>SPC 630 X 10</b>	<b>5050</b>
<b>031C1400</b>	<b>SPC 710 X 10</b>	<b>5050</b>
031C0403	SPC 710 X 3	4030
031C0404	SPC 710 X 4	4535
031C0405	SPC 710 X 5	5040
031C0406	SPC 710 X 6	5040
031C0408	SPC 710 X 8	5040
<b>031C1410</b>	<b>SPC 800 X 10</b>	<b>5050</b>
031C0423	SPC 900 X 3	5040
031C0424	SPC 900 X 4	5040
031C0425	SPC 900 X 5	5040
031C0426	SPC 900 X 6	5040
031C0428	SPC 900 X 8	5040
<b>031C0420</b>	<b>SPC 900 X 10</b>	<b>5040</b>
<b>031C1430</b>	<b>SPC 1000 X 10</b>	<b>5050</b>
<b>031C1440</b>	<b>SPC 1250 X 10</b>	<b>5050</b>

These additional sizes of Taper Lock® vee pulleys are readily available but are not stocked at all distribution outlets.

Sizes in bold type use long series Taper Lock® bushes.

10 groove SPB pulleys with long series Taper Lock® bushes are also available in diameters from 200mm to 1250mm.

## Adjustable Pitch Pulleys and Bi-Loc Pulleys

### General

The LP adjustable pulley is used in conjunction with standard Taper Lock dual groove pulleys, pages 62-69, and Fenner Classic V-belts to allow small adjustments to driven speed from fixed speed prime movers.

### Construction

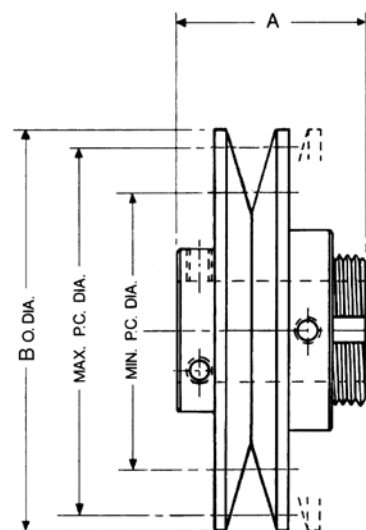
Made from grey cast iron, these pulleys have one fixed flank, and an opposite flank which can be adjusted by screw thread, with the drive stationary, and then fixed in position.

### Installation and Use

Pulleys are supplied pilot bored for reboring/ keywaying as appropriate.

Drive centre distance adjustment is used to maintain correct belt tension if pulley diameter is changed.

Note that the belt centre line shifts when diameter changes. Driven pulley may need realignment.



Catalogue Code	Pulley Designation	Belt Section	Max PCD	Min PCD	A	D	Min bore	Max bore
048A0000	LP80/93A	Z A	78 85	54 60	35	93	10	24
048B0000	LP95/108A	Z A	92 100	68 71	35	108	10	28
048C0000	LP112/120A	Z A	104 112	80 85	35	120	12	28
048D0000	LP132/138A	Z A	122 130	100 100	38	138	16	42
048E0000	LP160/180B	A B	158 170	128 132	45	180	18	48

Bores are to F7 limits. Dimensions in millimetres.

\* Stock pulleys are minimum bore without shaft grub screw holes. They can be supplied bored to size with tapped holes on request.

Catalogue Code	Pulley Designation	Belt Section	960 rev/min		1440 rev/min		2880 rev/min	
			Max pcd	Min pcd	Max pcd	Min pcd	Max pcd	Min pcd
048A0000	LP80/93A	Z	0.89	0.43	1.21	0.54	1.96	0.74
		A	1.11	0.41	1.49	0.50	2.20	0.55
048B0000	LP95/108A	Z	1.18	0.67	1.63	0.92	2.74	1.49
		A	1.60	0.73	2.19	0.89	3.38	1.07
048C0000	LP112/120A	Z	1.14	0.93	1.95	1.29	2.70	2.11
		A	1.98	1.11	2.74	1.49	4.28	2.20
048D0000	LP132/138A	Z	1.65	1.34	2.35	1.88	3.77	3.10
		A	2.51	1.60	3.50	2.19	5.56	3.38
048E0000	LP160/180B	A	3.20	2.40	4.50	3.40	7.10	5.30
		B	4.71	2.88	6.42	3.86	8.91	5.29

For other than smooth load 10 hours per day applications, the above powers should be derated by 25%.

### Bi-Loc Pulleys

The Fenner Bi-Loc system employs lightweight cast iron pulleys with 'Quadruple Duty' Grooves for A/SPA and B/SPB section belts. Twin-tapered steel bushes with metric and Imperial bores are used to mount single, double or different diameter pulleys on one shaft. A shrunk-on fit is achieved without keys or grub screws. Only a spanner is needed for fitting and removal.

- Mount single, double or different diameter pulleys on one bush.
- Use retainer and screws for single pulley assembly.
- Use bolts for double groove pulley assembly.



Pitch Diameter		Outside Dia. †	Bush No
A/SPA actual	B/SPB* nominal		
71	81	88	1 Bore range 10 - 28mm
75	85	92	
80	90	97	
85	95	102	
90	100	107	
95	105	112	
100	110	117	
106	116	123	
112	122	129	
118	128	135	
125	135	142	
132	142	149	
140	150	157	
150	160	167	
160	170	177	
180	190	197	
200	209	216	
224	233	240	
250	259	266	
280	289	296	
315	324	331	
355	364	371	
400	409	416	
450	459	466	

\* for actual B/SPB pitch diameter deduct 0.25mm

† for actual outside diameter deduct 0.32mm

## Fenner Wedge and Vee-Belt Tensioning Instructions

### "One-Shot" Tensioning

Fenner **FB** belts are Precision Built to ensure inherent length stability and matching during storage and on the drive. Over many years, the principle of "one-shot" tensioning has been verified by successful drives the world over.

- Install the belts to be a snug fit around the pulleys.
- Spin the pulleys 3-4 revolutions to bed belts into the pulley grooves.  
(Note: if done manually, beware of finger entrapment between belts and pulleys)
- Tension the belts to the 1.25x setting forces from the table.
- Run the drive under load for 15-20 minutes.
- Stop the drive, check tension & reset to the basic value (standard V and wedge belts) if necessary. CRE PLUS & Quattro PLUS belts should be reset to the 1.25x value.

With a drive that is properly designed for the application there should be no need for further attention during the life of the belts.

For short centre distance drives where the deflection of the belt is too small to measure accurately it is recommended that both deflection and setting force be doubled.

### Method of belt tensioning using Fenner Belt Tension Indicator

- Calculate the deflection in mm on a basis of 16mm per metre of centre distance. Centre distance (metres) x 16 = deflection (mm).
- Set the lower marker ring at the deflection distance required in mm on the lower scale.
- Set the upper marker ring against the bottom edge of the top tube.
- Place the belt tension indicator on top of the belt at the centre of span, and apply a force at right angles to the belt, deflecting it to the point where the lower marker ring is level with the top of an adjacent belt.
- Read off the setting force value indicated by the top edge of the upper marker ring.
- Compare this force to the kgf value shown in the table.
- If a Fenner Belt Tension Indicator is not available, a spring balance and rule will suffice.

### NOTES:

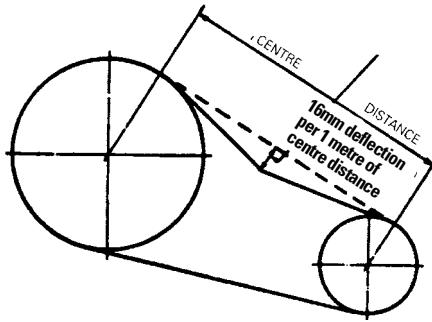
For single belt drives a straight edge should be placed across the two pulleys to act as a datum for measuring the amount of deflection.

If the measured force falls within the values given, the drive should be satisfactory. A measured force below the basic value indicates under-tensioning.

A new drive should be tensioned to the 1.25x value to allow for the normal drop in tension during the running-in period.

After the drive has been running for 15–20 minutes, under load the tension should be checked and re-adjusted, if necessary.

BELT TENSION INDICATOR APPLIES SETTING FORCE AT MID CENTRE DISTANCE



The setting forces below are designed to cover a wide range of drives. A precise setting force for individual applications can be calculated. Please consult your local Authorised Distributor or use the 'Fenner Select' design software at [www.fptgroup.com](http://www.fptgroup.com)

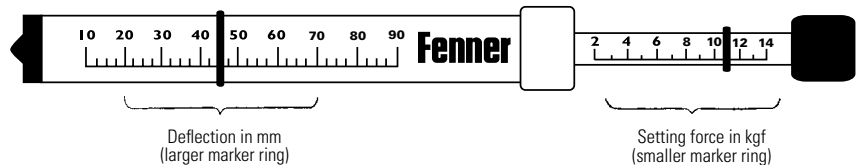
### Setting Forces Ultra PLUS 150

Belt Section	Setting force to deflect belt 16 mm per metre of span		
	Small pulley diameter (mm)	Basic setting forces	
		Newtons (N)	kilograms (kgf)
USPB	112 to 160	44	4.5
	170 to 224	54	5.5
	236 to 355	64	6.5
	over 355	69	7.0
USPC	224 to 250	74	7.5
	265 to 355	93	9.5
	over 375	118	12.0

### Setting Forces

Belt Section	Setting force to deflect belt 16 mm per metre of span				
	Small pulley diameter (mm)	Basic setting forces		1.25 x setting forces	
		Newtons (N)	kilograms (kgf)	Newtons (N)	kilograms (kgf)
SPZ XPZ & QXPZ	56 to 71	16	1.6	20	2.0
	75 to 90	18	1.8	22	2.2
	95 to 125	20	2.0	25	2.5
	over 125	22	2.2	28	2.8
SPA, XPA & QXPA	80 to 100	22	2.2	28	2.8
	106 to 140	30	3.0	38	3.9
	150 to 200	36	3.7	45	4.6
	over 200	40	4.0	50	5.1
SPB, XPB & QXPB	112 to 160	40	4.0	50	5.1
	170 to 224	50	5.1	62	6.3
	236 to 355	62	6.3	77	7.9
	over 355	65	6.6	81	8.3
SPC, & QXPC	224 to 250	70	7.1	87	8.9
	265 to 355	92	9.4	115	12.0
	over 375	115	12.0	144	15.0
gV	335 & above	150	15.0	190	19.0
Z	56 to 100	5 to 7.5	0.5 to 0.8		
A (& HA banded)	80 to 140	10 to 15	1.0 to 1.5		
B	125 to 200	20 to 30	2.0 to 3.1		
C	200 to 400	40 to 60	4.1 to 6.1		
D	355 to 600	70 to 105	7.1 to 10.7		

### Fenner Belt Tension Indicator



### Troubleshooting

#### Small radial cracks on belt side and base

Generally caused by slippage due to insufficient belt tension, but excessive heat and/or chemical fumes can also cause the same problem.

#### Belt swelling or softening

Caused by excessive contamination by oil, certain cutting fluids, water or rubber solvent.

#### Whip during running

Often caused by incorrect tensioning, particularly on long centre drives. If a slightly higher (or lower) tension does not cure the problem there may be a critical vibration frequency in the system which requires re-design or use of banded belts. Consult your local Authorised Distributor Technical Services.

#### Pulleys

Pulley groove wear can cause rapid belt failure. Check grooves for wear with a Fenner groove gauge.

# Installation and Operation of Wedge and Vee-Belt Drives

Although comparatively old in principle today's belt drive is an extremely efficient method of transmitting power between prime mover and machinery.

It owes its present high performance standards to many years of research and development by engineers and technologists, leading to significant refinements in materials and processes.

To derive maximum benefit from such advances it is important that the simple installation and operation procedures set out here are closely followed. Making these routines standard practice will ensure optimum performance and long, trouble-free life from Fenner belt drives.

## Installation

### PULLEYS

Before assembling the drive, check the pulley grooves are free from scores or sharp edges, and all dimensions conform to the relevant standard.

Drive installation is straightforward with Taper Lock – but follow all steps on the installation leaflet provided with every Taper Lock bush.

### ALIGNMENT

Good alignment of pulleys is important to avoid belt flank wear. The diagrams opposite show some of the common alignment faults.

Pulley misalignment should not exceed 1/2° angular and 10mm / metre drive centre distance, axial.

A laser alignment device is available, which facilitates quick, easy and accurate pulley alignment - consult your local Authorised Distributor.

### BELT INSTALLATION

When the pulleys have been correctly positioned on the shafts, the belts can be installed to complete the drive.

The drive centre distance should be reduced prior to the installation of the belts so that they may be fitted without the use of force. Under no circumstances must belts be prised into the grooves. Belts and pulley grooves can easily be damaged by using sharp tools to stretch the belts over the pulley rim.

The installation allowance given in the table opposite is the minimum recommended reduction in centre distance for the various belt sections and lengths to allow for correct fitting.

The take-up allowance given in the same table should be added on to the calculated centre distance to allow for belt stretch/bedding in.

### GUARDS

Where guards are necessary it is desirable to use mesh materials to permit adequate ventilation.

Guards should be generously sized to allow for incidental belt flap.

### TENSIONING PULLEYS

If tensioning (jockey) pulleys are to be used on wedge belt drives, they must be grooved pulleys working on the inside of the drive, preferably on the slack side.

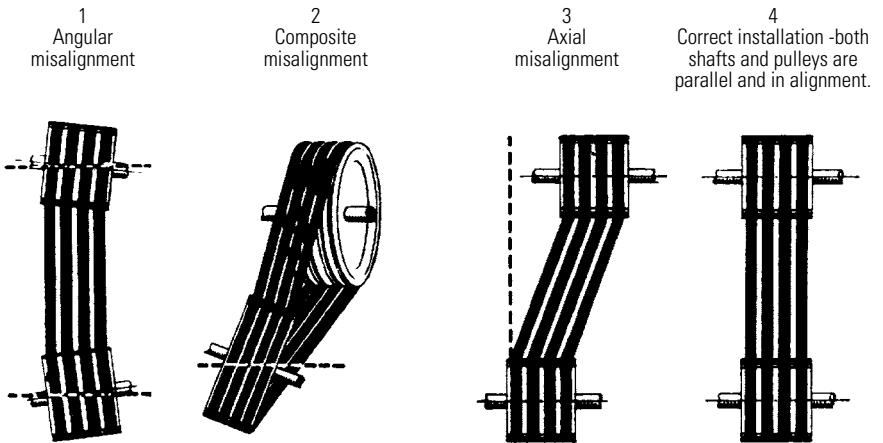
The pulley should be positioned as close as possible to the large pulley. Flat tensioning pulleys, bearing on the outside of the drive are permissible only with V and not with wedge belts. They should be positioned

within one third of the centre distance from the small pulley.

The tensioning pulley must have at least the same diameter as the small pulley of the drive.

Tensioning pulley movement must allow for passing the belts over the outside diameter of one of the drive pulleys on installation, and should also allow for belt stretch/bedding in.

**The modern wedge belt drive is a highly efficient power transmission medium, but optimum performance will not be achieved without correct tension and alignment.**



INSTALLATION AND TAKE-UP ALLOWANCE						
Belt Pitch Length (mm)	Installation Allowances					Take-up (mm)
	SPZ Z	SPA A	SPB B	SPC C	8V D	
410 to 530	20	25	30	50	65	5
530 to 840						10
850 to 1160						15
1170 to 1500						20
1510 to 1830						25
1840 to 2170						30
2180 to 2830						40
2840 to 3500						50
3520 to 4160						60
4170 to 5140						70
5220 to 6150	20	25	30	50	65	85
6180 to 7500						105
7600 to 8500						125
8880 to 10170						145
10600 to 12500						175

## Ultra PLUS 150

INSTALLATION AND TAKE-UP ALLOWANCE			
Belt Pitch Length (mm)	Installation Allowances		Take-up (mm)
	USPB	USPC	
2180 to 2830	30	50	20
2840 to 3500			25
3520 to 4160			30
4170 to 5140			35
5220 to 6150			45
6180 to 7500			55
7600 to 8500			65
8880 to 10170			75
10600 to 12500			90

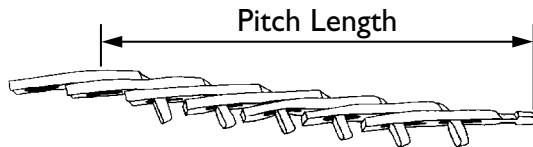
## Taper Lock

All Fenner V and wedge belt pulleys use Taper Lock shaft fixing.

Detailed instructions for fitting and dismantling Taper Lock products are included with Taper Lock bushes.

## PowerTwist PLUS Installation and Tensioning

### 1. How to Measure



Correct way to measure:  
PowerTwist Plus – end of tab to first empty holes (right to left, above)

### 2. Assembly - PowerTwist PLUS



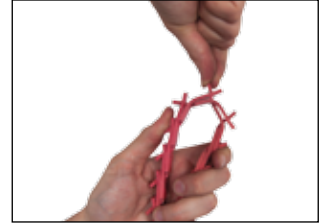
Always work with the belt inside out, tabs pointing outward



Place end tab through two links at once.



Flex belt further and insert second tab through end link by twisting tab with thumb.



Ensure tab returns to position across belt. Reverse belt so tabs run inside.

### 3. Installation

**Make PowerTwist Plus belts to the correct pitch length and then install them as you would an endless belt.**

1. Move motor to reduce centre distance.
2. Place all belts in correct position.

Where it is necessary to thread belts through confined spaces, or around shafts without moving bearings, it is possible to make the belts "in site". Some reduction in pulley centre distance is still necessary for ease of assembly.

3. Move motor back into position, applying correct tension.
4. Secure motor tightly.

#### Method of Belt tensioning using Fenner Belt Tension indicator

1. Calculate the deflection distance in mm on a basis of 16mm per metre of span.  
Centre Distance (m) x 16 = Deflection (mm)
2. Set the lower marker ring at the deflection distance required in mm on the lower scale.
3. Set the upper marker ring against the bottom edge of the top tube.
4. Place the belt tension indicator on top of the belt at the centre of span, and apply a force at right angles to the belt deflecting it to the point where the lower marker ring is level with the top of an adjacent belt\*.
5. Read off the force value indicated by the top edge of the upper marker ring.
6. Compare this force to the kgf value shown in the table opposite.
7. If a Fenner Belt Tension Indicator is not available, a spring balance and rule will suffice.

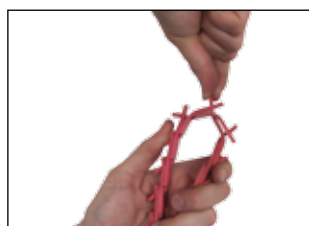
#### CAUTION

When properly installed, initial tension may appear excessive. Tension drops to normal when drive begins to run.

### 5. Disassembly - PowerTwist PLUS



Turn belt inside out with tabs pointing outwards. Bend back as far as possible; hold with one hand. Twist one tab 90° parallel with slot.



Pull end of link over tab.



Rotate belt end with tab at 90° to line of belt.



Pull belt end through two links.

Determine the required pitch length of the belt. Measure PowerTwist Plus from the second empty hole on the last link to the end tab. Subtract one link in every 24 for Z, A, B sections, one link in every 20 for C section. For multiple belt drives, count the number of links in the initial belt and make additional belts the same number of links. Lay the original belt on a table and lay the additional belts side by side to ensure the correct length and matched sets.

### 4. Retensioning

It is important to retension all drives after an initial run-in period. On fixed centre drives, it may be necessary to remove a link from each belt for proper retensioning.

Belt Section	Force required to deflect belt 16mm per metre of span		
	Small Pulley Diameter (mm)	Newton (N)	Kilogram-force (kgf)
Z	56 to 90	10 to 15	1.0 to 1.5
A	80 to 140	15 to 20	1.5 to 2.0
B	125 to 200	25 to 35	2.6 to 3.6
C	200 to 400	45 to 65	4.6 to 6.6

\*NOTE: For single belt drives a straight edge should be placed across the two pulleys to act as a datum for measuring the amount of deflection.

If the measured force falls within the values given, the drive should be satisfactory. A measured force below the lower value indicates under-tensioning.

A new drive should be tensioned to the higher value to allow for the normal drop in tension during the running-in period.

After the drive has been running for 30 minutes, the tension should be checked and re-adjusted to the higher value, if necessary.