

[Technical Calculations] Selection of Transmission Timing Belts 6 -Transmission Capacity Table-

Selection is easy with Timing Pulleys and Belts automatic calculation tool available at:
http://fawos.misumi.jp/FA_WEB/pulley_sea/

Table 28. Reference Transmission Capacity of P2M Ps -Belt Width 4mm- (W)

Rotary Speed of Small Pulley (rpm)	No. of Teeth of Small Pulley	Diameter of the Pitch Circle (mm)																
		14	15	16	18	20	22	24	25	26	28	30	32	34	36	40	42	44
100	2	2	2	2	3	3	3	3	3	4	4	5	5	6	7	7	8	9
200	3	3	4	5	5	6	7	7	7	8	9	10	11	11	13	14	15	17
400	6	6	7	8	9	10	11	12	13	14	15	16	17	19	22	24	25	28
600	8	9	10	11	12	14	16	17	18	19	20	22	23	25	29	31	33	37
800	10	11	12	13	16	18	19	20	21	23	25	27	29	31	36	38	41	46
1000	12	13	14	16	18	20	23	24	25	27	30	32	34	37	42	45	48	54
1200	14	15	16	19	21	23	26	26	28	31	34	37	40	42	48	51	54	61
1400	16	17	18	21	24	26	29	30	32	35	38	41	44	47	54	57	61	68
1450	16	18	19	21	24	27	30	31	33	36	39	42	45	48	55	59	62	70
1500	16	18	19	22	25	28	31	32	34	37	40	43	46	50	57	60	64	71
1600	17	18	20	23	26	29	32	33	35	39	43	46	49	53	60	64	67	75
1750	19	20	22	25	28	31	35	37	38	42	45	49	53	56	64	68	71	79
1800	19	21	23	25	29	32	35	37	38	42	46	50	54	57	65	69	73	81
2000	21	22	24	28	31	34	38	40	42	46	50	54	58	62	70	74	78	87
2400	24	26	28	32	36	40	44	46	48	52	56	61	65	70	80	85	89	99
3000	30	32	37	42	46	52	54	57	62	67	72	77	82	93	98	102	115	
3600	35	38	43	48	53	59	62	64	70	76	82	88	94	106	112	118	131	
4000	38	41	47	52	58	64	67	70	76	82	88	94	101	114	120	127	140	
5000	48	55	61	68	75	78	82	89	96	104	111	118	132	139	147	162		
6000	55	63	70	78	86	90	93	101	109	117	125	133	149	157	164	180		
8000	76	86	95	105	109	114	123	132	141	150	158	176	184	192	209			
10000	91	101	111	122	127	132	142	151	161	170	178	196	203	210	224			
12000	114	125	136	141	146	157	166	175	183	190	206	211	217	228				
14000	125	136	148	153	158	168	176	185	190	196	208	214	220	232				

*Because the durability in terms of hours decreases in the □□□ marked range, this range should be avoided whenever possible. For other belt widths, values above should be multiplied by the width correction coefficient shown in Table 15.

Table 29. Reference Transmission Capacity of P3M Ps -Belt Width 6mm- (W)

Rotary Speed of Small Pulley (rpm)	No. of Teeth of Small Pulley	Diameter of the Pitch Circle (mm)																
		10	12	14	15	16	18	20	22	24	25	26	28	30	32	34	36	40
100	4	5	6	6	7	8	9	10	12	12	13	14	15	17	19	20	22	23
200	8	11	12	13	14	16	18	20	23	24	25	28	31	34	36	38	45	47
400	14	17	20	22	24	27	32	35	39	41	43	47	51	56	61	65	75	79
600	19	23	28	30	33	37	42	47	53	55	58	63	69	75	81	87	100	105
800	24	29	35	38	41	46	53	59	65	68	72	79	85	92	99	107	123	129
1000	28	35	41	44	48	55	62	69	77	81	84	92	100	109	118	126	144	151
1200	33	40	47	51	55	63	71	79	88	92	97	106	115	125	135	144	164	172
1400	37	45	54	58	62	71	80	89	99	104	109	119	129	140	151	162	184	193
1450	38	46	55	59	64	72	82	90	102	106	111	122	133	144	155	166	188	197
1500	39	47	56	60	65	75	84	93	104	109	114	125	135	147	158	170	193	202
1600	41	49	59	63	68	79	88	98	109	114	120	131	142	154	166	178	202	212
1750	44	54	63	68	74	84	95	106	118	124	129	141	153	165	177	190	215	226
1800	55	65	70	75	86	97	108	120	126	131	143	155	168	181	193	219	230	
2000	59	70	75	81	93	105	117	129	135	142	155	168	182	196	209	237	249	
2400	68	81	87	93	107	121	134	148	155	162	177	192	207	223	238	270	284	
3000	95	103	112	125	142	158	175	183	191	208	226	243	261	279	316	332		
3600	110	118	127	145	163	182	201	219	238	258	278	298	318	359	377			
4000	119	128	138	158	176	196	216	226	236	257	278	299	321	342	386	405		
5000	141	152	163	186	208	231	255	267	278	302	326	351	375	399	448	470		
6000	174	187	212	238	264	291	304	317	343	370	397	424	451	505	530			
8000	232	263	293	324	356	371	387	418	448	479	508	538	597	627				
10000	308	342	377	413	430	446	480	512	545	574	604	663	696					
12000	349	386	423	460	477	495	530	562	594	620	646	699	734					
14000	424	462	500	517	534	568	597	626	645	665	704	739						

*Because the durability in terms of hours decreases in the □□□ marked range, this range should be avoided whenever possible. For other belt widths, values above should be multiplied by the width correction coefficient shown in Table 15.

Table 30. Reference Transmission Capacity of P5M Ps -Belt Width 10mm- (W)

Rotary Speed of Small Pulley (rpm)	No. of Teeth of Small Pulley	Diameter of the Pitch Circle (mm)																	
		12	14	16	18	20	22	24	25	26	28	30	32	34	36	40	42	44	48
100	23	26	31	35	41	46	52	55	58	64	70	76	81	86	103	110	118	133	158
200	46	53	63	72	81	92	104	109	115	126	138	151	164	177	205	220	235	267	316
400	77	90	106	122	138	155	173	182	192	211	231	251	272	294	337	361	385	434	514
600	105	123	144	165	188	211	235	247	259	284	310	337	365	394	452	482	513	577	684
800	131	153	179	205	234	262	291	306	322	353	385	417	451	485	556	592	629	706	837
1000	156	182	212	243	276	309	343	361	379	415	453	491	530	570	651	694	738	825	977
1200	179	209	244	280	316	355	394	414	435	476	518	561	605	650	742	790	838	937	1110
1400	201	235	274	319	355	399	443	465	487	532	580	628	677	726	828	880	933	1040	1230
1450	242	282	323	365	409	453	476	499	546	594	643	694	745	850	903	957	1070	1260	
1500	248	288	333	374	420	466	489	512	560	609	659	711	762	869	925	981	1090	1290	
1600	261	303	348	393	441	489	514	538	588	639	691	745	799	910	970	1030	1140	1350	
1750	278	325	372	420	471	522	548	575	628	683	738	795	852	970	1040	1100	1220	1430	
1800	332	380	430	481	532	559	586	640	696	753	810	868	929	1050	1110	1240	1460		
2000	360	412	465	520	576	605	633	691	751	812	874	937	1000	1130	1200	1330	1570		
2400	413	472	532	595	658	691	723	789	857	925	992	1060	1120	1280	1350	1500	2030		
3000	557	628	701	775	812	850	926	1000	1080	1150	1240	1400	1485	1570	1730	2120			
3600	638	719	801	883	925	966	1050	1140	1230	1310	1400	1580	1670	1760	1940	2250			
4000	776	865	953	997	1040	1130	1220	1320	1450	1500	1690	1785	1880	2060	2380				
5000	911	1010	1110	1160	1210	1320	1420	1520	1620	1720	1920	2010	2110	2300	2610				
6000	1140	1260	1310	1370	1480	1580	1690	1790	1900	2100	2190	2290	2460	2720					
8000	1490	1550	1600	1720	1830	1930	2020	2120	2270	2330	2400	2480	2480						
10000	1710	1760	1860	1940	2020	2080	2130	2170	2160	2150	2040								
12000	1770	1810	1880	1910	1940	1900													
14000	1750	1760	1710	1660															

*Because the durability in terms of hours decreases in the □□□ marked range, this range should be avoided whenever possible. For other belt widths, values above should be multiplied by the width correction coefficient shown in Table 15.

Table 31. Reference Transmission Capacity of P8M Ps -Belt Width 15mm- (kW)

Rotary Speed of Small Pulley (rpm)	No. of Teeth of Small Pulley	Diameter of the Pitch Circle (mm)																
		20	22	24	26	28	30	32	34	36	38	40	44	48	50	56	60	64
100	0.16	0.17	0.19	0.21	0.23	0.26	0.31	0.41	0.44	0.48	0.51	0.56	0.60	0.63	0			