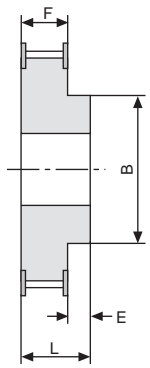
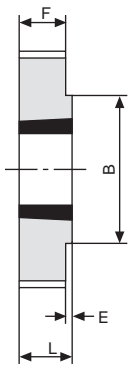


# PULLEY INFORMATION

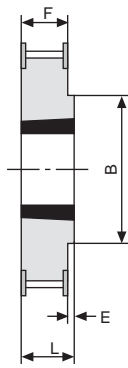
## PULLEY TYPES



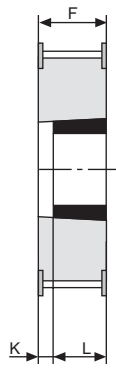
Type 1F



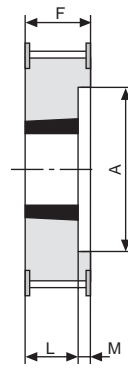
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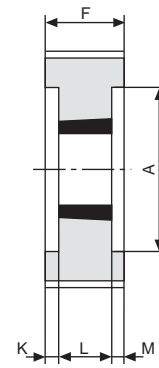
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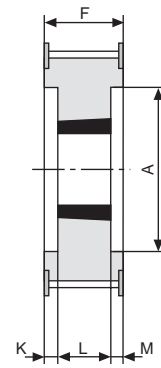
Type 3F



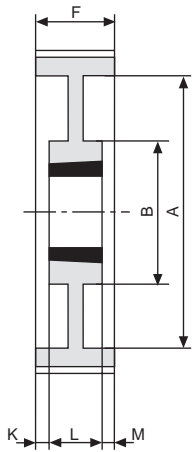
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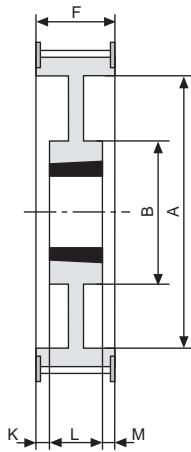
Type 6



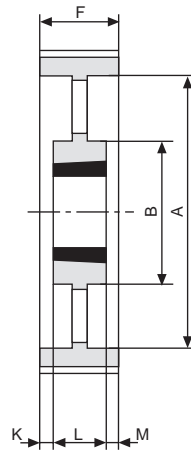
Type 6F



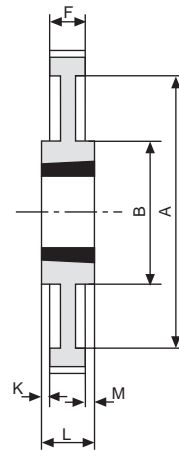
Type 7



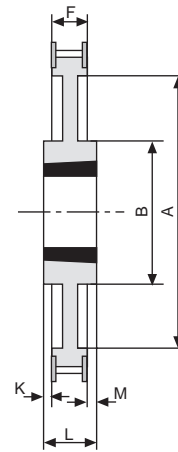
Type 7F



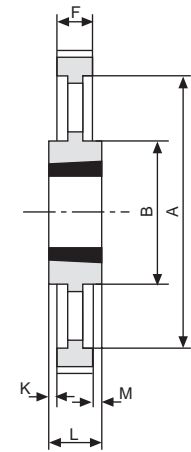
Type 8



Type 9



Type 9F



Type 10

5

# PULLEY INFORMATION

## PULLEY SPECIFICATIONS

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10 <sup>-4</sup> (kgm <sup>2</sup> )
				Metric	Inch	Pitch	Outside	Flange									
8M-22S-12	22	1F	PB	28*	1 1/8	56.02	54.42	60	-	43	10	20	-	30	-	0.43	1.68
8M-25S-12	25	2F	1108	28	1 1/8	63.66	62.06	70	-	49	2	20	-	22	-	0.25	1.26
8M-28S-12	28	2F	1108	28	1 1/8	71.30	69.70	75	-	56	2	20	-	22	-	0.37	2.35
8M-30S-12	30	2F	1210	32	1 1/4	76.39	74.79	82.5	-	60	5	20	-	25	-	0.41	2.99
8M-32S-12	32	2F	1610	42	1 5/8	81.49	79.89	87	-	66	5	20	-	25	-	0.37	3.07
8M-34S-12	34	2F	1610	42	1 5/8	86.58	84.98	91	-	69	5	20	-	25	-	0.45	4.21
8M-36S-12	36	2F	1610	42	1 5/8	91.67	90.07	97	-	76	5	20	-	25	-	0.59	6.19
8M-38S-12	38	2F	1610	42	1 5/8	96.77	95.17	102	-	78	5	20	-	25	-	0.70	8.19
8M-40S-12	40	2F	1610	42	1 5/8	101.86	100.26	106	-	85	5	20	-	25	-	0.82	10.63
8M-45S-12	45	2F	2012	50	2	114.59	112.99	120	-	92	12	20	-	32	-	1.10	18.05
8M-48S-12	48	2F	2012	50	2	112.23	120.63	128	-	103	12	20	-	32	-	1.42	26.51
8M-50S-12	50	2F	2012	50	2	127.32	125.72	135	-	104	12	20	-	32	-	1.60	32.42
8M-56S-12	56	2F	2012	50	2	142.60	141.00	150	-	104	12	20	-	32	-	2.10	53.37
8M-60S-12	60	2F	2012	50	2	152.79	151.19	158	-	111	12	20	-	32	-	2.40	70.03
8M-64S-12	64	2F	2012	50	2	162.97	161.37	168	-	111	12	20	-	32	-	2.70	89.64
8M-75S-12	75	2	2012	50	2	190.99	189.39	-	-	111	12	20	-	32	-	3.70	168.70
8M-80S-12	80	2	2012	50	2	203.72	202.12	-	-	111	12	20	-	32	-	4.40	228.26
8M-90S-12	90	2	2012	50	2	229.18	227.58	-	-	111	12	20	-	32	-	5.50	361.10

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10 <sup>-4</sup> (kgm <sup>2</sup> )
				Metric	Inch	Pitch	Outside	Flange									
8M-22S-21	22	1F	PB	28*	1 1/8	56.02	54.42	60	-	43	12	30	-	42	-	0.56	2.19
8M-25S-21	25	3F	1108	28	1 1/8	63.66	62.06	70	-	-	-	30	8	22	-	0.36	1.82
8M-28S-21	28	3F	1210	32	1 1/4	71.30	69.70	75	-	-	-	30	5	25	-	0.41	2.60
8M-30S-21	30	3F	1210	32	1 1/4	76.39	74.79	82.5	-	-	-	30	5	25	-	0.56	4.08
8M-32S-21	32	3F	1610	42	1 5/8	81.49	79.89	87	-	-	-	30	5	25	-	0.52	4.31
8M-34S-21	34	3F	1610	42	1 5/8	86.58	84.98	91	-	-	-	30	5	25	-	0.61	5.72
8M-36S-21	36	3F	1610	42	1 5/8	91.67	90.07	97	-	-	-	30	5	25	-	0.70	7.13
8M-38S-21	38	3F	1610	42	1 5/8	96.77	95.17	102	-	-	-	30	5	25	-	0.92	10.72
8M-40S-21	40	3F	1610	42	1 5/8	101.86	100.26	106	-	-	-	30	5	25	-	1.06	13.75
8M-45S-21	45	2F	2012	50	2	114.59	112.99	120	-	92	2	30	-	32	-	1.30	21.33
8M-48S-21	48	2F	2012	50	2	122.23	120.63	128	-	103	2	30	-	32	-	1.60	29.88
8M-50S-21	50	2F	2012	50	2	127.32	125.72	135	-	104	2	30	-	32	-	1.83	37.08
8M-56S-21	56	2F	2012	50	2	142.60	141.00	150	-	111	2	30	-	32	-	2.40	61.00
8M-60S-21	60	2F	2517	60	2 1/2	152.79	151.19	158	-	124	15	30	-	45	-	3.20	93.37
8M-64S-21	64	2F	2517	60	2 1/2	162.97	161.37	168	-	124	15	30	-	45	-	3.80	126.15
8M-75S-21	75	2	2517	60	2 1/2	190.99	189.39	-	-	124	15	30	-	45	-	5.20	237.10
8M-80S-21	80	2	2517	60	2 1/2	203.72	202.12	-	-	124	15	30	-	45	-	6.00	311.41
8M-90S-21	90	9	2517	60	2 1/2	229.18	227.58	-	198	124	-	30	7.5	45	7.5	5.40	354.53
8M-112S-21	112	9	2517	60	2 1/2	285.21	283.61	-	253	124	-	30	7.5	45	7.5	7.40	752.44
8M-140S-21	140	10	3020	75	3	356.51	354.91	-	324	150	-	30	10.5	51	10.5	9.00	1429.86

\* Max. bore to be fitted with shallow keys PB = Plain Bored Bush

### Notes:

Pulleys of cast iron or steel material are supplied. Pulleys of either material provide required durability and service life. Gates reserves the right to supply pulleys of either material against orders for standard pulleys.

### Specification:

cast iron 220 N/mm<sup>2</sup>  
steel 220 M07

For peripheral speeds greater than 40 m/sec consult Gates.

# PULLEY INFORMATION

## PULLEY SPECIFICATIONS

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10 <sup>-4</sup> (kgm <sup>2</sup> )
				Metric	Inch	Pitch	Outside	Flange									
8M-25S-36	25	1F	PB	32	1 1/4	63.66	62.06	70	-	49	10	45	-	55	-	1.04	5.26
8M-28S-36	28	3F	1210	32	1 1/4	71.30	69.70	75	-	-	-	45	-	-	-	0.64	4.06
8M-30S-36	30	3F	1610	42	1 5/8	76.39	74.79	82.5	-	-	-	45	-	-	-	0.59	4.30
8M-32S-36	32	3F	1610	42	1 5/8	81.49	79.89	87	-	-	-	45	-	-	-	0.79	6.55
8M-34S-36	34	3F	1610	42	1 5/8	86.58	84.98	91	-	-	-	45	-	-	-	0.93	8.71
8M-36S-36	36	3F	1610	42	1 5/8	91.67	90.07	97	-	-	-	45	-	-	-	1.15	12.07
8M-38S-36	38	3F	1610	42	1 5/8	96.77	95.17	102	-	-	-	45	-	-	-	1.39	16.27
8M-40S-36	40	3F	2012	50	2	101.86	100.26	106	-	-	-	45	-	-	-	1.34	17.37
8M-45S-36	45	3F	2012	50	2	114.59	112.99	120	-	-	-	45	-	-	-	1.87	30.69
8M-48S-36	48	3F	2012	50	2	122.23	120.63	128	-	-	-	45	-	-	-	2.20	41.09
8M-50S-36	50	3F	2012	50	2	127.32	125.72	135	-	-	-	45	-	-	-	2.70	54.71
8M-56S-36	56	3F	2517	60	2 1/2	142.60	141.00	150	-	-	-	45	-	-	-	3.00	76.26
8M-60S-36	60	3F	2517	60	2 1/2	152.79	151.19	158	-	-	-	45	-	-	-	3.80	110.88
8M-64S-36	64	3F	2517	60	2 1/2	161.97	161.37	168	-	-	-	45	-	-	-	4.50	149.40
8M-75S-36	75	2	3020	75	3	190.99	189.39	-	-	150	6	45	-	51	-	6.20	282.70
8M-80S-36	80	2	3020	75	3	203.72	202.12	-	-	150	6	45	-	51	-	7.40	383.89
8M-90S-36	90	9	3020	75	3	229.18	227.58	-	197	150	-	45	3	51	3	7.20	472.71
8M-112S-36	112	9	3020	75	3	285.21	283.61	-	253	150	-	45	3	51	3	10.40	1057.50
8M-140S-36	140	10	3020	75	3	356.51	354.91	-	324	150	-	45	3	51	3	12.70	2017.70
8M-168S-36	168	10	3525	100	4	427.81	426.21	-	396	198	-	45	10	65	10	21.50	4918.70
8M-192S-36	192	10	3525	100	4	488.92	487.32	-	457	198	-	45	10	65	10	27.00	8067.69

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10 <sup>-4</sup> (kgm <sup>2</sup> )
				Metric	Inch	Pitch	Outside	Flange									
8M-30S-62	30	1F	PB	42	1 5/8	76.39	74.79	82.5	-	63	12	72	-	84	-	2.40	17.50
8M-32S-62	32	1F	PB	50*	2	81.49	79.89	87	-	68	12	72	-	84	-	2.80	23.24
8M-34S-62	34	1F	PB	55*	2 1/4	86.58	84.98	91	-	69	12	72	-	84	-	3.00	28.11
8M-36S-62	36	1F	PB	60*	2 1/2	91.67	90.07	97	-	76	12	72	-	84	-	3.40	35.71
8M-38S-62	38	1F	PB	60	2 1/2	96.77	95.17	102	-	78	12	72	-	84	-	3.80	44.48
8M-40S-62	40	3F	2012	50	2	101.86	100.26	106	-	-	-	72	-	-	-	2.06	26.71
8M-45S-62	45	3F	2012	50	2	114.59	112.99	120	-	-	-	72	-	-	-	3.00	49.24
8M-48S-62	48	3F	2517	60	2 1/2	122.23	120.63	128	-	-	-	72	-	-	-	2.90	54.51
8M-50S-62	50	3F	2517	60	2 1/2	127.32	125.72	135	-	-	-	72	-	-	-	3.25	65.85
8M-56S-62	56	6F	2517	60	2 1/2	142.60	141.00	150	111	-	-	72	13.5	45	13.5	3.90	99.13
8M-60S-62	60	6F	2517	60	2 1/2	152.79	151.19	158	121	-	-	72	13.5	45	13.5	4.70	137.15
8M-64S-62	64	6F	2517	60	2 1/2	162.97	161.37	168	131	-	-	72	13.5	45	13.5	5.60	185.91
8M-75S-62	75	6	3020	75	3	190.99	189.39	-	159	-	-	72	10.5	51	10.5	7.50	341.87
8M-80S-62	80	6	3020	75	3	203.72	202.12	-	172	-	-	72	10.5	51	10.5	9.20	477.21
8M-90S-62	90	6	3020	75	3	229.18	227.58	-	197	-	-	72	10.5	51	10.5	7.70	505.54
8M-112S-62	112	7	3020	75	3	285.21	283.61	-	253	150	-	72	10.5	51	10.5	12.10	1230.34
8M-140S-62	140	7	3525	100	4	356.51	354.91	-	324	198	-	72	3.5	65	3.5	22.70	3606.44
8M-168S-62	168	8	3525	100	4	427.81	426.21	-	396	198	-	72	3.5	65	3.5	26.80	6131.21
8M-192S-62	192	8	3525	100	4	488.92	487.32	-	457	198	-	72	3.5	65	3.5	34.20	10219.08

\* Max. bore to be fitted with shallow keys PB = Plain Bored Bush

### Notes:

Pulleys of cast iron or steel material are supplied. Pulleys of either material provide required durability and service life. Gates reserves the right to supply pulleys of either material against orders for standard pulleys.

### Specification:

cast iron 220 N/mm<sup>2</sup>  
steel 220 M07

For peripheral speeds greater than 40 m/sec consult Gates.

# PULLEY INFORMATION

## PULLEY SPECIFICATIONS

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10 <sup>-4</sup> (kgm <sup>2</sup> )
				Metric	Inch	Pitch	Outside	Flange									
14M-28S-20	28	3F	2012	50	2	124.78	121.98	128	-	-	-	33	-	-	-	1.66	32.30
14M-30S-20	30	3F	2012	50	2	133.69	130.89	138	-	-	-	33	-	-	-	2.20	49.15
14M-32S-20	32	3F	2012	50	2	142.60	139.80	154	-	-	-	33	-	-	-	3.20	81.33
14M-34S-20	34	2F	2517	60	2 1/2	151.52	148.72	160	-	117	12	33	-	45	-	3.00	86.09
14M-36S-20	36	2F	2517	60	2 1/2	160.43	157.63	168	-	117	12	33	-	45	-	3.60	115.82
14M-38S-20	38	2F	2517	60	2 1/2	169.34	166.54	183	-	117	12	33	-	45	-	4.00	143.38
14M-40S-20	40	2F	2517	60	2 1/2	178.25	175.45	188	-	117	12	33	-	45	-	4.70	186.66
14M-44S-20	44	2F	3020	75	3	196.08	193.28	211	-	144	18	33	-	51	-	5.60	269.13
14M-48S-20	48	2F	3020	75	3	213.90	211.11	226	-	144	18	33	-	51	-	6.80	388.90
14M-50S-20	50	2F	3020	75	3	222.82	220.02	240	-	144	18	33	-	51	-	7.70	477.87
14M-56S-20	56	9F	3020	75	3	249.55	246.76	256	207	144	-	33	9	51	9	7.70	599.39
14M-60S-20	60	9	3020	75	3	267.38	264.58	-	224	159	-	33	9	51	9	8.50	759.60
14M-64S-20	64	9	3020	75	3	285.21	282.41	-	242	159	-	33	9	51	9	10.20	1037.15
14M-72S-20	72	9	3020	75	3	320.86	318.06	-	278	159	-	33	9	51	9	11.50	1479.92
14M-80S-20	80	9	3020	75	3	356.51	353.71	-	314	159	-	33	9	51	9	13.50	2144.80
14M-90S-20	90	10	3020	75	3	401.07	398.27	-	360	159	-	33	9	51	9	14.20	2855.21
14M-112S-20	112	10	3020	75	3	499.11	496.31	-	456	159	-	33	9	51	9	18.10	5636.13
14M-140S-20	140	10	3020	75	3	623.89	621.09	-	581	159	-	33	9	51	9	22.90	11149.96

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10 <sup>-4</sup> (kgm <sup>2</sup> )
				Metric	Inch	Pitch	Outside	Flange									
14M-28S-37	28	5F	2012	50	2	124.78	121.98	128	88	-	-	51	-	32	19	2.20	42.81
14M-30S-37	30	6F	2517	60	2 1/2	133.69	130.89	138	98	-	-	51	3	45	3	2.50	55.85
14M-32S-37	32	6F	2517	60	2 1/2	142.60	139.80	154	100	-	-	51	3	45	3	3.00	76.25
14M-34S-37	34	6F	2517	60	2 1/2	151.52	148.72	160	109	-	-	51	3	45	3	3.80	109.05
14M-36S-37	36	5F	2517	60	2 1/2	160.43	157.63	168	117	-	-	51	-	45	6	4.30	138.34
14M-38S-37	38	5F	2517	60	2 1/2	169.34	166.54	183	126	-	-	51	-	45	6	5.10	182.81
14M-40S-37	40	5F	2517	60	2 1/2	178.25	175.45	188	135	-	-	51	-	45	6	6.00	238.30
14M-44S-37	44	3F	3020	75	3	196.08	193.28	211	-	-	-	51	-	-	-	7.00	336.41
14M-48S-37	48	3F	3020	75	3	213.90	211.11	226	-	-	-	51	-	-	-	9.00	514.72
14M-50S-37	50	3F	3020	75	3	222.82	220.02	240	-	-	-	51	-	-	-	10.00	620.61
14M-56S-37	56	7F	3020	75	3	249.55	246.76	256	207	144	-	51	0	51	0	9.20	715.88
14M-60S-37	60	7	3020	75	3	267.38	264.58	-	224	159	-	51	0	51	0	10.20	911.52
14M-64S-37	64	7	3020	75	3	285.21	282.41	-	242	159	-	51	0	51	0	12.20	1240.51
14M-72S-37	72	7	3020	75	3	320.86	318.06	-	278	159	-	51	0	51	0	13.40	1724.43
14M-80S-37	80	7	3020	75	3	356.51	353.71	-	314	159	-	51	0	51	0	16.10	2557.88
14M-90S-37	90	8	3020	75	3	401.07	398.27	-	360	159	-	51	0	51	0	17.20	3458.43
14M-112S-37	112	8	3020	75	3	499.11	496.31	-	456	159	-	51	0	51	0	23.00	7161.94
14M-140S-37	140	10	3525	100	4	623.89	621.09	-	581	206	-	51	7	65	7	41.00	19948.49
14M-168S-37	168	10	3525	100	4	748.66	745.87	-	706	206	-	51	7	65	7	51.50	36081.66
14M-192S-37	192	10	4030	115	4 1/2	855.61	852.82	-	812	215	-	51	12.5	76	12.5	60.00	54905.14

\* Max. bore to be fitted with shallow keys PB = Plain Bored Bush

### Notes:

Pulleys of cast iron or steel material are supplied. Pulleys of either material provide required durability and service life. Gates reserves the right to supply pulleys of either material against orders for standard pulleys.

### Specification:

cast iron 220 N/mm<sup>2</sup>  
steel 220 M07

For peripheral speeds greater than 40 m/sec consult Gates.



# PULLEY INFORMATION

## PULLEY SPECIFICATIONS

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10 <sup>-4</sup> (kgm <sup>2</sup> )
				Metric	Inch	Pitch	Outside	Flange									
14M-34S-68	34	1F	PB	100	4	151.52	148.72	160	-	132	20	84	-	104	-	10.50	301.33
14M-36S-68	36	1F	PB	100	4 1/4	160.43	157.63	168	-	131	20	84	-	104	-	11.70	376.42
14M-38S-68	38	1F	PB	115*	4 1/2	169.34	166.54	183	-	141	20	84	-	104	-	13.40	481.46
14M-40S-68	40	1F	PB	125*	5	178.25	175.45	188	-	156	20	84	-	104	-	15.40	611.63
14M-44S-68	44	6F	3020	75	3	196.08	193.28	211	153	-	-	84	16.5	51	16.5	9.20	442.14
14M-48S-68	48	5F	3020	75	3	213.90	211.11	226	171	-	-	84	-	51	33	11.30	646.26
14M-50S-68	50	6F	3525	100	4	222.82	220.02	240	180	-	-	84	9.5	65	9.5	15.50	775.76
14M-56S-68	56	6F	3525	100	4	249.55	246.76	256	207	-	-	84	9.5	65	9.5	16.80	1307.78
14M-60S-68	60	6	3525	100	4	267.38	264.58	-	224	-	-	84	9.5	65	9.5	20.40	1823.05
14M-64S-68	64	6	3525	100	4	285.21	282.41	-	242	-	-	84	9.5	65	9.5	23.60	2399.67
14M-72S-68	72	7	3525	100	4	320.86	318.06	-	278	178	-	84	9.5	65	9.5	20.30	2612.89
14M-80S-68	80	7	3525	100	4	356.51	353.71	-	314	178	-	84	9.5	65	9.5	21.30	3384.02
14M-90S-68	90	8	3525	100	4	401.07	398.27	-	360	178	-	84	9.5	65	9.5	24.40	4966.46
14M-112S-68	112	8	3525	100	4	499.11	496.31	-	456	178	-	84	9.5	65	9.5	32.70	10182.40
14M-140S-68	140	8	3525	100	4	623.89	621.09	-	581	206	-	84	9.5	65	9.5	55.00	26760.16
14M-168S-68	168	8	3525	100	4	748.66	745.87	-	706	206	-	84	9.5	65	9.5	71.00	49743.65
14M-192S-68	192	8	4030	115	4 1/2	855.61	852.82	-	812	215	-	84	4	76	4	80.50	73664.39

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10 <sup>-4</sup> (kgm <sup>2</sup> )
				Metric	Inch	Pitch	Outside	Flange									
14M-36S-90	36	1F	PB	110	4 1/4	160.43	157.63	168	-	131	30	106	-	136	-	14.50	466.50
14M-38S-90	38	1F	PB	115	4 1/2	169.34	166.50	183	-	141	30	106	-	136	-	17.50	627.29
14M-40S-90	40	1F	PB	125	5 1/2	178.25	175.45	188	-	156	30	106	-	136	-	19.10	758.59
14M-44S-90	44	1F	PB	140	6 1/2	196.08	193.28	211	-	169	30	106	-	136	-	23.90	1150.95
14M-48S-90	48	6F	3525	100	4	213.90	211.11	226	171	-	-	106	20	66	20	12.70	726.33
14M-50S-90	50	6F	3525	100	4	222.82	220.02	240	180	-	-	106	20	66	20	14.50	899.88
14M-56S-90	56	6F	3525	100	4	249.55	246.76	256	207	-	-	106	20	66	20	19.00	1479.04
14M-60S-90	60	6	3525	100	4	267.38	264.58	-	224	-	-	106	20	66	20	22.50	2010.71
14M-64S-90	64	6	3525	100	4	285.21	282.41	-	242	-	-	106	20	66	20	24.00	2433.77
14M-72S-90	72	7	3525	100	4	320.86	318.06	-	278	178	-	106	20	66	20	22.60	2908.37
14M-80S-90	80	7	4030	115	4 1/2	356.51	353.71	-	314	215	-	106	15	76	15	27.00	4289.60
14M-90S-90	90	7	4030	115	4 1/2	401.07	398.27	-	360	215	-	106	15	76	15	34.10	6856.54
14M-112S-90	112	8	4535	125	5	499.11	496.31	-	456	215	-	106	8	90	8	46.00	14323.87
14M-140S-90	140	8	4535	125	5	623.89	621.09	-	581	215	-	106	8	90	8	61.00	29679.45
14M-168S-90	168	8	5040	130*	5	748.66	745.87	-	706	267	-	106	2	102	2	90.00	63055.33
14M-192S-90	192	8	5040	130*	5	855.61	852.82	-	812	267	-	106	2	102	2	108.50	93796.27

\* Max. bore to be fitted with shallow keys      PB = Plain Bored Bush

### Notes:

Pulleys of cast iron or steel material are supplied. Pulleys of either material provide required durability and service life. Gates reserves the right to supply pulleys of either material against orders for standard pulleys.

### Specification:

cast iron 220 N/mm<sup>2</sup>

steel 220 M07

For peripheral speeds greater than 40 m/sec consult Gates.

# PULLEY INFORMATION

## PULLEY SPECIFICATIONS

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10 <sup>-4</sup> (kgm <sup>2</sup> )
				Metric	Inch	Pitch	Outside	Flange									
14M-38S-125	38	1F	PB	115*	4 1/2	169.34	166.54	183	-	141	20	141	-	161	-	20.30	727.65
14M-40S-125	40	1F	PB	125*	5	178.25	175.45	188	-	156	20	141	-	161	-	23.00	913.48
14M-44S-125	44	1F	PB	140*	5 1/2	196.08	193.28	211	-	169	20	141	-	161	-	28.80	1384.10
14M-48S-125	48	1F	PB	160*	6 1/4	213.90	211.11	226	-	185	20	141	-	161	-	34.60	1978.83
14M-50S-125	50	6F	3525	100	4	222.82	220.02	240	180	-	-	141	38	65	38	16.80	1042.62
14M-56S-125	56	6F	3525	100	4	249.55	246.76	256	207	-	-	141	38	65	38	21.60	1681.43
14M-60S-125	60	6	4030	115	4 1/2	267.38	264.58	-	224	-	-	141	32.5	76	32.5	25.60	2287.85
14M-64S-125	64	6	4030	115	4 1/2	285.21	282.41	-	242	-	-	141	32.5	76	32.5	29.70	3024.16
14M-72S-125	72	7	4030	115	4 1/2	320.86	318.06	-	278	215	-	141	32.5	76	32.5	30.00	3860.66
14M-80S-125	80	7	4030	115	4 1/2	356.51	353.71	-	314	215	-	141	32.5	76	32.5	33.40	5306.40
14M-90S-125	90	7	4030	115	4 1/2	401.07	398.27	-	360	215	-	141	32.5	76	32.5	39.40	7947.12
14M-112S-125	112	8	4535	125	5	499.11	496.31	-	456	215	-	141	26	89	26	56.00	17437.76
14M-140S-125	140	8	4535	125	5	623.89	621.09	-	581	215	-	141	26	89	26	73.00	35518.03
14M-168S-125	168	8	5040	125	5	748.66	745.87	-	706	267	-	141	19.5	102	19.5	101.00	70762.02
14M-192S-125	192	8	5040	125	5	855.61	852.82	-	812	267	-	141	19.5	102	19.5	121.50	111182.90

## Minimum stock bores for Plain Bored (PB) pulleys

Pulley	Minimum bore (mm)	Pulley	Minimum bore (mm)
8M-22S-12	12.00	14M-34S-68	40.00
8M-22S-21	12.00	14M-36S-68	40.00
8M-25S-36	12.00	14M-38S-68	40.00
8M-30S-62	20.00	14M-40S-68	40.00
8M-32S-62	20.00	14M-36S-90	50.00
8M-34S-62	20.00	14M-38S-90	50.00
8M-36S-62	20.00	14M-40S-90	50.00
8M-38S-62	20.00	14M-44S-90	50.00
		14M-38S-125	50.00
		14M-40S-125	50.00
		14M-44S-125	50.00
		14M-48S-125	50.00

\* Max. bore to be fitted with shallow keys PB = Plain Bored Bush

### Notes:

Pulleys of cast iron or steel material are supplied. Pulleys of either material provide required durability and service life. Gates reserves the right to supply pulleys of either material against orders for standard pulleys.

### Specification:

cast iron 220 N/mm<sup>2</sup>  
steel 220 M07

For peripheral speeds greater than 40 m/sec consult Gates.

# PULLEY INFORMATION

## PULLEY TOLERANCES

Pulleys for Poly Chain® GT2 belts are precision made to close tolerances. Inaccurate manufacturing or reboring may result in poor drive performance. Strict adherence to the standard tolerances (as shown in table below) is highly recommended.

### Bore tolerances of plain bored pulleys

Bore (mm)	Tolerances (mm)
up to 25	+ 0.0254 - 0.0000
25 to 50	+ 0.0381 - 0.0000
50 to 75	+ 0.0508 - 0.0000
75 up	+ 0.0635 - 0.0000

Outside diameter range mm	Outside diameter tolerance mm	Pitch to pitch tolerance	
		adjacent	90°
over 50 to 100	+ 0.10 - 0.000	+ 0.025	+ 0.13
over 100 to 180	+ 0.13 - 0.000	+ 0.025	+ 0.13
over 180 to 300	+ 0.15 - 0.000	+ 0.025	+ 0.15
over 300 to 500	+ 0.18 - 0.000	+ 0.025	+ 0.18
over 500	+ 0.20 - 0.000	+ 0.025	+ 0.20

#### Radial run-out\*

For outside diameters 200 mm and under ..... 0.1 mm  
 For each additional 25 mm of diameter, add ..... 0.013 mm

#### Axial run-out\*

For diameters 25 mm and under ..... 0.025 mm  
 For each additional 25 mm up to 250 mm, add ..... 0.025 mm  
 For each additional 25 mm over 250 mm, add ..... 0.013 mm

\* Total indicator reading

### Balancing

Stock pulleys are statically balanced to ISO 1940 (1973) to class G16.

**Caution:** stock pulleys should not be used on drives where rim surface speeds exceed 40 m/s. Specially made, dynamically balanced pulleys should be used.

### Pulley tooth profile and surface quality

The tooth profile of these pulleys was designed and developed by the Gates Corporation to operate with the Gates Poly Chain® GT belts and following generations such as Poly Chain® GT2.

The tooth surface should be free of any surface defects and should be 3 µm or better.

### Note

**It is essential that a “side fitting” key is used when assembling a bush and pulley on its shaft in drives subjected to heavy or shock loads.**



# PULLEY INFORMATION

## BUSHES: BORES AND KEYWAYS

### Bores and keyways in millimetres

Bore diameter	Keyway		Shallow keyway depth	Bush reference											
				Type											
	Width	Depth		1008	1108	1210	1610	2012	2517	3020	3525	4030	4535	5040	
				Prefix											
			029A-	029B-	029C-	029G-	029K-	029M-	029P-	029J-	029X-	029Y-	029Z-		
9	3	1.4	-	009	009										
10	3	1.4	-	010	010										
11	4	1.8	-	011	011	011									
12	4	1.8	-	012	012	012	012								
13	5	2.3	-	013	013	013	013								
14	5	2.3	-	014	014	014	014	014							
15	5	2.3	-	015	015	015	015	015							
16	6	2.8	-	016	016	016	016	016	016						
18	6	2.8	-	018	018	018	018	018	018						
19	6	2.8	-	019	019	019	019	019	019						
20	6	2.8	-	020	020	020	020	020	020						
22	6	2.8	-	022	022	022	022	022	022						
24	8	3.3	1.3*	024*	024	024	024	024	024						
25	8	3.3	1.3*	025*	025	025	025	025	025	025					
28	8	3.3	1.3*		028*	028	028	028	028	028	028				
30	8	3.3	-			030	030	030	030	030	030				
32	10	3.3	-			032	032	032	032	032	032				
35	10	3.3	-				035	035	035	035	035				
38	10	3.3	-				038	038	038	038	038				
40	12	3.3	-				040	040	040	040	040	040			
42	12	3.3	-				042	042	042	042	042	042			
45	14	3.8	-					045	045	045	045	045			
48	14	3.8	-					048	048	048	048	048			
50	14	3.8	-					050	050	050	050	050			
55	16	4.3	-						055	055	055	055	055		
60	18	4.4	-						060	060	060	060	060		
65	18	4.4	-						065	065	065	065	065		
70	20	4.9	-							070	070	070	070	070	
75	20	4.9	-							075	075	075	075	075	
80	22	5.4	-								080	080	080	080	
85	22	5.4	-								085	085	085	085	
90	25	5.4	-								090	090	090	090	
95	25	5.4	-								095	095	095	095	
100	28	6.4	4,4*								100*	100	100	100	
105	28	6.4	-									105	105	105	
110	28	6.4	-									110	110	110	
115	32	7.4	5,4*									115*	115	115	
120	32	7.4	-										120	120	
125	32	7.4	-										125	125	

Keyways conform to European standard.

\* Shallow key required.

For detailed bush information refer to supplier's catalogue.



# PULLEY INFORMATION

## BUSHES: BORES AND KEYWAYS

### Bores and keyways in inches

Bore diameter	Keyway		Shallow keyway depth	Bush reference											
	Width	Depth		Type											
				1008	1108	1210	1610	2012	2517	3020	3525	4030	4535	5040	
				Prefix											
			019A-	019B-	019C-	019G-	019K-	019M-	019P-	019J-	019X-	019Y-	019Z-		
0.375	0.125	0.062	-	006	006										
0.5	0.125	0.062	-	008	008		008								
0.625	0.187	0.093	-	010	010	010	010								
0.75	0.187	0.093	-	012	012	012	012	012	012						
0.875	0.25	0.125	-	014	014	014	014	014	014						
1	0.25	0.125	0.062	100*	100	100	100	100	100						
1.125	0.312	0.125	0.078		102*	102	102	102	102						
1.25	0.312	0.125	-			104	104	104	104	104					
1.375	0.375	0.125	-				106	106	106	106					
1.5	0.375	0.125	-				108	108	108	108	108				
1.625	0.437	1.156	0.125				110	110	110	110	110				
1.75	0.437	1.156	-					112	112	112	112	112			
1.875	0.5	1.156	-					114	114	114	114	114			
2	0.5	1.156	-					200	200	200	200	200			
2.125	0.625	0.218	-						202	202	202	202			
2.25	0.625	0.218	-						204	204	204	204	204		
2.375	0.625	0.218	-						206	206	206	206	206		
2.5	0.625	0.218	-						208	208	208	208	208		
2.625	0.75	0.25	-							210	210	210	210		
2.75	0.75	0.25	-							212	212	212	212	212	
2.875	0.75	0.25	-							214	214	214	214	214	
3	0.75	0.25	-							300	300	300	300	300	
3.125	0.875	0.312	-								302	302	302	302	
3.25	0.875	0.312	-								304	304	304	304	
3.375	0.875	0.312	-								306	306	306	306	
3.5	0.876	0.312	-								308	308	308	308	
3.75	1	0.375	0.312								312	312	312	312	
4	1	0.375	0.218								400*	400	400	400	
4.25	1.125	0.437	-									404	404	404	
4.5	1.125	0.437	0.343									408*	408	408	
4.75	1.125	0.437	-										412	412	
5	1.125	0.437	0.343										500*	500	

Keyways conform to European standard.

\* Shallow key required.

For detailed bush information refer to supplier's catalogue.

# PULLEY INFORMATION

## BUSHES: INSTALLATION INSTRUCTIONS



Step 1: insert bush into pulley



Step 2: insert screws and locate on shaft




Step 3: tighten screws finger tight

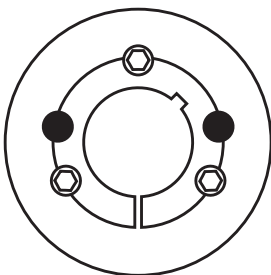
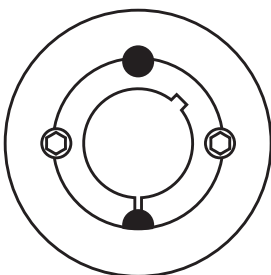


Step 4: tighten screws alternately



### To install


- A. Remove any protective coating from the bore and outside of bush, and bore of hub. After ensuring that the mating tapered surfaces are completely clean and free from oil or dirt, you can insert the bush in the hub so that the holes line up.
- B. Now sparingly oil the thread and point of the grub screws, or the thread and under head of the caps screws. Place the screws loosely in the holes threaded in the hub, shown thus  in the diagram.
- C. Clean the shaft and fit the hub to the shaft as one unit and locate them in the desired position, remembering that the bush will nip the shaft first and then the hub will be slightly drawn on to the bush.
- D. Using a hexagon wrench tighten the screws gradually and alternately to the torque shown on page 68.
- E. Hammer against the large-end of the bush, using a block or sleeve to prevent damage. (This will ensure that the bush is seated squarely in the bore). The screws



will now turn a little more. Repeat this alternate hammering and screw tightening once or twice to achieve a maximum grip on the shaft.

- F. If a key is to be fitted, place it in the shaft keyway before fitting the bush. It is essential that it is a parallel key and side fitting only and has TOP CLEARANCE.
- G. After the drive has been running under a load for a short time stop and check the tightness of the screws.
- H. Fill the empty holes with grease to exclude dirt.

### To remove

- A. Slacken all screws by several turns, remove one or two according to the number of jacking off holes shown thus  in diagram. Insert the screws in jacking off holes after oiling the thread and point of grub screws or the thread and under head of the cap screws.
- B. Tighten the screws alternately until the bush is loosened in the hub and the assembly is free on the shaft.
- C. Remove the assembly from the shaft.

# PULLEY SPECIFICATIONS

Bush size	1008	1108	1210	1610	2012	2517	3020	3525	4030	4535	5040
Screw tightening torque (Nm)	5.7	5.7	20	20	31	49	92	115	172	195	275
Screw details	qty	2	2	2	2	2	2	2	3	3	3
	size (BSW)	1/4"	1/4"	3/8"	3/8"	7/16"	1/2"	5/8"	1/2"	5/8"	1/4"
Large end diam. (mm)	35.0	38.0	47.5	57.0	70.0	85.5	108.0	127.0	146.0	162.0	177.5
Approx. mass (kg)	0.1	0.1	0.2	0.3	0.7	1.5	2.7	3.8	7.7	7.5	11.1

## PULLEY DIAMETERS

$$\text{Pitch diameter} = \frac{\text{No of grooves} \times \text{pitch}}{\pi}$$

$$\text{Outside diameter} = \text{Pitch diameter} - (2 \times \text{PLD})$$

Pitch	Radial PLD
-------	------------

8 mm	0.8 mm
------	--------

14 mm	1.4 mm
-------	--------