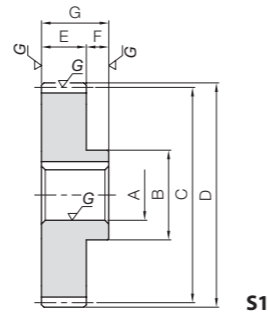


Specifications	
Precision grade	JIS grade N5 (JIS B1702-1: 1998)
Gear teeth	Standard full depth
Pressure angle	20°
Material	SCM415
Heat treatment	Carburized
Tooth hardness	55 to 60HRC



S1

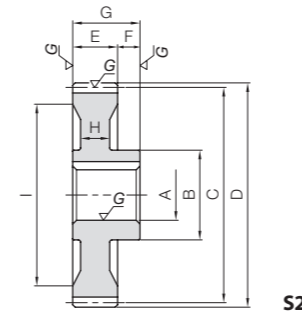
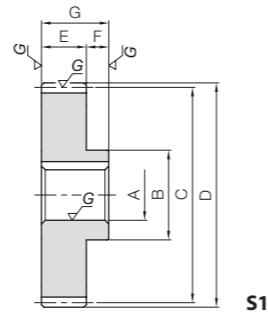
Catalog Number	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length	Web thickness	Web O.D.	
				A _{H7}	B	C	D	E	F	G	H	I	
MSG1-18	m1	18	S1	8	15	18	20	10	5	15	—	—	
MSG1-20		20		8	17	20	22						
MSG1-20**		20		10	17	20	22						
MSG1-24		24		12	20	24	26						
MSG1-25		25		25	10	20	25						27
MSG1-25					12	20	25						27
MSG1-30		30		30	10	25	30						32
MSG1-30					12	25	30						32
MSG1-40		40		15	30	40	42						
MSG1-48		48		48	12	30	48						50
MSG1-48					15	30	48						50
MSG1-50		50		12	35	50	52						
MSG1-60		60		20	40	60	62						
MSG1-70		70		20	45	70	72						
MSG1-80	80	20	45	80	82								
MSG1-100	100	20	45	100	102								
MSG1.5-15**	m1.5	15	S1	10	18	22.5	25.5	15	10	25	—	—	
MSG1.5-18		18		10	22	27	30						
MSG1.5-18		18		12	22	27	30						
MSG1.5-20		20		20	12	25	30						33
MSG1.5-20					15	25	30						33
MSG1.5-24		24		15	28	36	39						
MSG1.5-25		25		16	30	37.5	40.5						
MSG1.5-30		30		30	18	30	45						48
MSG1.5-30					18	30	45						48
MSG1.5-36		36		18	32	54	57						
MSG1.5-40		40		16	35	60	63						
MSG1.5-50		50		50	18	40	75						78
MSG1.5-50					22	40	75						78
MSG1.5-60		60		25	45	90	93						
MSG1.5-70	70	70	20	45	105	108							
MSG1.5-70			25	45	105	108							
MSG1.5-80	80	20	45	120	123								
MSG1.5-100	100	25	50	150	153								
MSG2-15**	m2	15	S1	15	24	30	34	20	10	30	—	—	
MSG2-18		18		12	30	36	40						
MSG2-18		18		15	30	36	40						
MSG2-20		20		20	15	32	40						44
MSG2-20					18	32	40						44
MSG2-24		24		18	35	48	52						
MSG2-25		25		25	16	35	50						54
MSG2-25					20	35	50						54
MSG2-30		30		22	40	60	64						
MSG2-35		35		18	40	70	74						
MSG2-40		40		40	20	45	80						84
MSG2-40					25	45	80						84
MSG2-45		45		25	45	90	94						
MSG2-48		48		22	50	96	100						
MSG2-60	60	25	55	120	124								
MSG2-80	80	35	60	160	164								

Keyway Width x Depth	Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog Number
	Bending strength	Surface durability	Bending strength	Surface durability			
3 x 1.4	12.1	6.37	1.24	0.65	0.08~0.16	0.020	MSG1-18
3 x 1.4	14.2	8.04	1.45	0.82		0.027	MSG1-20
4 x 1.8						0.023	MSG1-20**
4 x 1.8	18.5	12.0	1.88	1.22		0.034	MSG1-24
4 x 1.8	19.6	13.1	2.00	1.33		0.041	MSG1-25
4 x 1.8						0.037	MSG1-25
4 x 1.8	25.1	19.0	2.56	1.94		0.065	MSG1-30
4 x 1.8						0.061	MSG1-30
5 x 2.3	36.5	34.6	3.72	3.53		0.10	MSG1-40
4 x 1.8	45.8	50.6	4.67	5.16		0.16	MSG1-48
5 x 2.3						0.15	MSG1-48
4 x 1.8	48.1	55.1	4.91	5.62		0.18	MSG1-50
6 x 2.8	59.9	80.6	6.11	8.22		0.27	MSG1-60
6 x 2.8	71.9	111	7.33	11.4		0.37	MSG1-70
6 x 2.8	83.9	147	8.55	15.0	0.47	MSG1-80	
6 x 2.8	103	224	10.5	22.8	0.69	MSG1-100	
4 x 1.8	30.8	14.8	3.15	1.51	0.050	MSG1.5-15**	
4 x 1.8	41.0	22.1	4.18	2.26	0.080	MSG1.5-18	
4 x 1.8					0.074	MSG1.5-18	
4 x 1.8	48.0	27.9	4.89	2.84	0.098	MSG1.5-20	
5 x 2.3					0.085	MSG1.5-20	
5 x 2.3	62.4	41.5	6.36	4.24	0.13	MSG1.5-24	
5 x 2.3	66.0	45.4	6.73	4.63	0.14	MSG1.5-25	
6 x 2.8	84.7	66.4	8.63	6.77	0.19	MSG1.5-30	
6 x 2.8	108	97.1	11.0	9.90	0.28	MSG1.5-36	
5 x 2.3	123	121	12.6	12.3	0.37	MSG1.5-40	
6 x 2.8	162	193	16.6	19.7	0.57	MSG1.5-50	
6 x 2.8					0.54	MSG1.5-50	
8 x 3.3	202	283	20.6	28.8	0.77	MSG1.5-60	
6 x 2.8	231	372	23.6	38.0	1.08	MSG1.5-70	
8 x 3.3					1.04	MSG1.5-70	
6 x 2.8	270	494	27.5	50.3	1.39	MSG1.5-80	
8 x 3.3					1.36	MSG1.5-80	
8 x 3.3	347	787	35.4	80.2	2.13	MSG1.5-100	
5 x 2.3	73.1	35.7	7.46	3.64	0.10	MSG2-15**	
4 x 1.8	97.2	53.5	9.91	5.46	0.19	MSG2-18	
5 x 2.3					0.17	MSG2-18	
5 x 2.3	114	67.6	11.6	6.89	0.22	MSG2-20	
6 x 2.8					0.20	MSG2-20	
6 x 2.8	148	101	15.1	10.3	0.30	MSG2-24	
5 x 2.3	157	110	16.0	11.2	0.33	MSG2-25	
6 x 2.8					0.31	MSG2-25	
6 x 2.8	201	161	20.5	16.5	0.45	MSG2-30	
6 x 2.8	246	223	25.1	22.7	0.64	MSG2-35	
6 x 2.8	292	294	29.7	30.0	0.84	MSG2-40	
8 x 3.3					0.79	MSG2-40	
8 x 3.3	338	377	34.5	38.4	1.00	MSG2-45	
6 x 2.8	349	411	35.6	41.9	1.20	MSG2-48	
8 x 3.3	457	658	46.6	67.1	1.84	MSG2-60	
10 x 3.3	610	1150	62.2	117	2.49	MSG2-80	





Specifications	
Precision grade	JIS grade N5 (JIS B1702-1: 1998)
Gear teeth	Standard full depth
Pressure angle	20°
Material	SCM415
Heat treatment	Carburized
Tooth hardness	55 to 60HRC



Catalog Number	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length	Web thickness	Web O.D.
				A _{H7}	B	C	D	E	F	G	H	I
MSGA2.5-15 MSGB2.5-15**	m2.5	15	S1	15	30	37.5	42.5	25	12	37	—	—
MSGB2.5-20				18	40	50	55					
MSGB2.5-24		22		40	60	65						
MSGB2.5-25		22		40	60	65						
MSGB2.5-25		25		45	62.5	67.5						
MSGB2.5-36		30		55	90	95						
MSGA2.5-40 MSGB2.5-40		25		55	100	105						
MSGB2.5-40		32		55	100	105						
MSGA2.5-55		30		70	137.5	142.5						
MSGB2.5-60		40		70	150	155						
MSGA2.5-70	70	S2	40	85	175	180	—	—	17	150		
MSGA3-15 MSGB3-15**	m3	15	S1	18	36	45	51	30	15	45	—	—
MSGB3-20				22	45	60	66					
MSGB3-25		25		55	75	81						
MSGA3-30 MSGB3-30		28		60	90	96						
MSGB3-30		35		60	90	96						
MSGA3-40 MSGB3-40		30		70	120	126						
MSGB3-40		40		70	120	126						
MSGA3-45		30		70	135	141						
MSGB3-48		40		70	144	150						
MSGB3-50		50		S2	40	70	150					
MSGA3-60	60	S2	35	80	180	186	—	—	—	156		
MSGB4-15**	m4	15	S1	30	48	60	68	40	20	60	—	—
MSGB4-18				18	50	72	80					
MSGA4-20 MSGB4-20		28		60	80	88						
MSGB4-20		32		60	80	88						
MSGA4-24		28		60	96	104						
MSGA4-25 MSGB4-25		30		60	100	108						
MSGB4-25		35		60	100	108						
MSGA4-30 MSGB4-30		40		70	120	128						
MSGB4-30		40		70	120	128						
MSGA4-36		40		70	144	152						
MSGA4-40 MSGB4-40	40	80	160	168								
MSGB4-40	45	80	160	168								
MSGB4-45	45	80	180	188								
MSGB4-50	50	S2	50	85	200	208	—	—	26	168		

Keyway Width x Depth	Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog Number
	Bending strength	Surface durability	Bending strength	Surface durability			
5 x 2.3	143	71.0	14.6	7.24	0.10~0.20	0.23	MSGA2.5-15
6 x 2.8							MSGB2.5-15**
6 x 2.8	222	134	22.7	13.7		0.39	MSGB2.5-20
6 x 2.8	289	201	29.4	20.5		0.56	MSGB2.5-24
8 x 3.3	306	220	31.2	22.4		0.60	MSGB2.5-25
8 x 3.3	498	471	50.8	48.0		1.26	MSGB2.5-36
8 x 3.3	543	560	55.3	57.1		1.61	MSGA2.5-40
10 x 3.3						1.52	MSGB2.5-40
8 x 3.3	804	1090	82.0	112		3.06	MSGA2.5-55
12 x 3.3	892	1310	90.9	134		3.45	MSGB2.5-60
12 x 3.3	1020	1730	104	176	4.24	MSGA2.5-70	
6 x 2.8	247	124	25.2	12.7	0.10~0.20	0.40	MSGA3-15
6 x 2.8						0.35	MSGB3-15**
8 x 3.3	384	236	39.1	24.1		0.67	MSGB3-20
10 x 3.3	528	386	53.9	39.3		1.06	MSGB3-25
8 x 3.3	677	565	69.1	57.7		1.60	MSGA3-30
10 x 3.3						1.48	MSGB3-30
8 x 3.3	938	988	95.6	101		2.86	MSGA3-40
12 x 3.3						2.66	MSGB3-40
8 x 3.3	1090	1260	111	129		3.57	MSGA3-45
12 x 3.3	1180	1450	120	147		3.83	MSGB3-48
12 x 3.3	1240	1570	126	161	3.62	MSGB3-50	
10 x 3.3	1470	2200	150	224	5.31	MSGA3-60	
8 x 3.3	585	302	59.7	30.8	0.10~0.20	0.83	MSGB4-15**
8 x 3.3						1.24	MSGB4-18
8 x 3.3	777	455	79.3	46.4		1.72	MSGA4-20
8 x 3.3	910	574	92.8	58.6		1.63	MSGB4-20
8 x 3.3	1130	819	115	83.5		2.41	MSGA4-24
8 x 3.3	1190	896	122	91.4		2.56	MSGA4-25
10 x 3.3						2.44	MSGB4-25
10 x 3.3	1530	1320	156	134		3.69	MSGA4-30
12 x 3.3	1940	1930	198	197		3.54	MSGB4-30
12 x 3.3						5.11	MSGB4-36
12 x 3.3	2120	2290	216	234	6.49	MSGA4-40	
14 x 3.8					6.33	MSGB4-40	
14 x 3.8	2460	2930	251	299	8.01	MSGB4-45	
14 x 3.8	2800	3650	285	372	8.37	MSGB4-50	