



T1 Shape

Specifications

Precision	JIS N8 grade (JIS B1702-1: 1998) OLD JIS 4 grade (JIS B1702: 1976)
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	—
Tooth hardness	Less than 194HB
Surface treatment	Black oxide
Tooth surface finishing	Cut
Datum reference surface for gear cutting	Outside diameter
Secondary Operations	Possible

Module 1

Catalog No.	Module <i>m</i>	No. of teeth <i>z</i>	Bore <i>A</i>	Pitch dia. <i>C</i>	Outside dia. <i>D</i>	Face width <i>E</i>	Shape	Allowable torque (N·m) NOTE 1		Allowable torque (kgf·m)		Backlash (mm) NOTE 2	Weight (kgf)
								Bending strength	Surface durability	Bending strength	Surface durability		
SI1 - 60	1	60	58	60	90	10	T1	30.03	5.948	(3.062)	(0.6065)	0.13 ~ 0.24	0.28
SI1 - 80	1	80	78	80	110	10	T1	38.83	6.592	(3.96)	(0.6722)	0.13 ~ 0.24	0.35
SI1 - 100	1	100	98	100	130	10	T1	47.8	7.644	(4.874)	(0.7795)	0.13 ~ 0.24	0.42

Module 1.5

SI1.5- 50	1.5	50	72	75	115	15	T1	87.06	20.91	(8.878)	(2.132)	0.15 ~ 0.29	0.71
SI1.5- 60	1.5	60	87	90	130	15	T1	101.3	20.59	(10.33)	(2.1)	0.15 ~ 0.29	0.81
SI1.5- 80	1.5	80	117	120	160	15	T1	131	23.3	(13.36)	(2.376)	0.15 ~ 0.29	1
SI1.5-100	1.5	100	147	150	190	15	T1	161.3	26.97	(16.45)	(2.75)	0.17 ~ 0.32	1.3

Module 2

SI2 - 50	2	50	96	100	150	20	T1	206.3	50.3	(21.04)	(5.129)	0.16 ~ 0.33	1.5
SI2 - 60	2	60	116	120	170	20	T1	240.2	50.49	(24.49)	(5.149)	0.16 ~ 0.33	1.8
SI2 - 80	2	80	156	160	210	20	T1	310.7	57	(31.68)	(5.812)	0.16 ~ 0.33	2.3
SI2 - 100	2	100	196	200	250	20	T1	382.4	65.7	(38.99)	(6.7)	0.18 ~ 0.37	2.8

Module 2.5

SI2.5- 50	2.5	50	120	125	185	25	T1	403	100.6	(41.1)	(10.26)	0.18 ~ 0.37	2.7
SI2.5- 60	2.5	60	145	150	210	25	T1	469.1	101.1	(47.84)	(10.31)	0.18 ~ 0.37	3.3
SI2.5- 80	2.5	80	195	200	260	25	T1	606.7	113.8	(61.87)	(11.6)	0.18 ~ 0.37	4.1

Module 3

SI3 - 50	3	50	144	150	220	30	T1	696.5	177.5	(71.02)	(18.1)	0.2 ~ 0.41	4.8
SI3 - 60	3	60	174	180	250	30	T1	810.7	178.4	(82.67)	(18.19)	0.2 ~ 0.41	5.6

CAUTION: Please check for the involute interference, trochoid interference and trimming interference prior to using internal gears.

NOTE 1: The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see page 148 for more details.

NOTE 2: The backlash values shown in the table are the theoretical values of a 30 tooth SS spur gear in mesh with the internal gear.