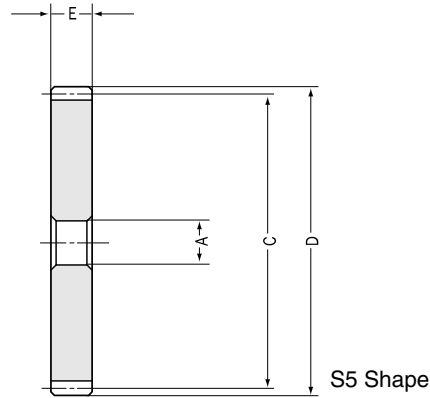
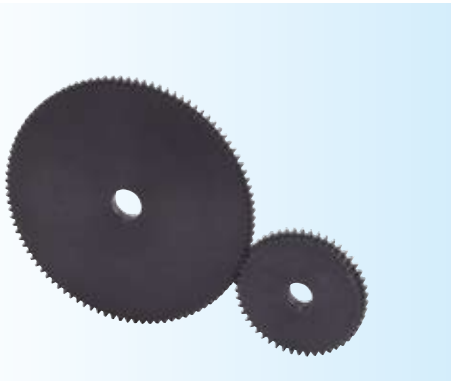




SSAY Steel, Hubless, Thin Face Spur Gears Module 1 ~ 1.25

Spur Gears
SSAY



Module 1

Catalog No.	Module m	No. of teeth z	Bore AH7	Pitch dia. C	Outside dia. D	Face width ^{NOTE 1} E	Shape	Allowable torque (N-m) ^{NOTE 2}		Allowable torque (kgf-m)	
								Bending strength	Surface durability	Bending strength	Surface durability
SSAY1- 20	1	20	6	20	22	6	S5	3.448	0.201	(0.3516)	(0.0205)
SSAY1- 24	1	24	6	24	26	6	S5	4.482	0.2952	(0.457)	(0.0301)
SSAY1- 25	1	25	6	25	27	6	S5	4.744	0.3217	(0.4838)	(0.0328)
SSAY1- 28	1	28	6	28	30	6	S5	5.545	0.4089	(0.5654)	(0.0417)
SSAY1- 30	1	30	6	30	32	6	S5	6.084	0.4737	(0.6204)	(0.0483)
SSAY1- 32	1	32	6	32	34	6	S5	6.629	0.5423	(0.676)	(0.0553)
SSAY1- 35	1	35	6	35	37	6	S5	7.453	0.6551	(0.76)	(0.0668)
SSAY1- 36	1	36	6	36	38	6	S5	7.73	0.6963	(0.7882)	(0.071)
SSAY1- 40	1	40	6	40	42	6	S5	8.844	0.8698	(0.9018)	(0.0887)
SSAY1- 45	1	45	6	45	47	6	S5	10.25	1.115	(1.045)	(0.1137)
SSAY1- 48	1	48	6	48	50	6	S5	11.1	1.277	(1.132)	(0.1302)
SSAY1- 50	1	50	8	50	52	6	S5	11.67	1.392	(1.19)	(0.1419)
SSAY1- 55	1	55	8	55	57	6	S5	13.1	1.699	(1.336)	(0.1733)
SSAY1- 56	1	56	8	56	58	6	S5	13.39	1.765	(1.365)	(0.18)
SSAY1- 60	1	60	8	60	62	6	S5	14.53	2.04	(1.482)	(0.208)
SSAY1- 70	1	70	8	70	72	6	S5	17.43	2.817	(1.777)	(0.2873)
SSAY1- 80	1	80	10	80	82	6	S5	20.34	3.735	(2.074)	(0.3809)
SSAY1-100	1	100	10	100	102	6	S5	26.19	5.981	(2.671)	(0.6099)

Module 1.25

SSAY1.25- 20	1.25	20	8	25	27.5	8	S5	7.183	0.4295	(0.7325)	(0.0438)
SSAY1.25- 24	1.25	24	8	30	32.5	8	S5	9.337	0.6315	(0.9521)	(0.0644)
SSAY1.25- 25	1.25	25	8	31.25	33.75	8	S5	9.885	0.6884	(1.008)	(0.0702)
SSAY1.25- 28	1.25	28	8	35	37.5	8	S5	11.55	0.8738	(1.178)	(0.0891)
SSAY1.25- 30	1.25	30	10	37.5	40	8	S5	12.68	1.011	(1.293)	(0.1031)
SSAY1.25- 32	1.25	32	10	40	42.5	8	S5	13.81	1.159	(1.408)	(0.1182)
SSAY1.25- 35	1.25	35	10	43.75	46.25	8	S5	15.52	1.4	(1.583)	(0.1428)
SSAY1.25- 36	1.25	36	10	45	47.5	8	S5	16.1	1.487	(1.642)	(0.1516)
SSAY1.25- 40	1.25	40	10	50	52.5	8	S5	18.43	1.855	(1.879)	(0.1892)
SSAY1.25- 45	1.25	45	10	56.25	58.75	8	S5	21.36	2.376	(2.178)	(0.2423)
SSAY1.25- 48	1.25	48	10	60	62.5	8	S5	23.12	2.72	(2.358)	(0.2774)
SSAY1.25- 50	1.25	50	12	62.5	65	8	S5	24.31	2.964	(2.479)	(0.3022)
SSAY1.25- 55	1.25	55	12	68.75	71.25	8	S5	27.29	3.617	(2.783)	(0.3688)
SSAY1.25- 56	1.25	56	12	70	72.5	8	S5	27.89	3.756	(2.844)	(0.383)
SSAY1.25- 60	1.25	60	12	75	77.5	8	S5	30.28	4.345	(3.088)	(0.4431)
SSAY1.25- 70	1.25	70	15	87.5	90	8	S5	36.3	6.018	(3.702)	(0.6137)
SSAY1.25- 80	1.25	80	15	100	102.5	8	S5	42.37	7.975	(4.321)	(0.8132)
SSAY1.25-100	1.25	100	15	125	127.5	8	S5	54.57	12.81	(5.565)	(1.306)

NOTE 1: Due to the thin face width, if you wish to perform secondary operations on these gears, please use care to avoid side run out and deformation. If you heat treat them, there is the possibility of warping these gears.

NOTE 2: The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see page 27 for more details.



Steel, Hubless, Thin Face Spur Gears

Specifications

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

Backlash (mm) <small>NOTE 3</small>	Weight (kgf)	Catalog No.
0.08 ~ 0.18	0.01	SSAY1- 20
0.1 ~ 0.22	0.02	SSAY1- 24
0.1 ~ 0.22	0.02	SSAY1- 25
0.1 ~ 0.22	0.03	SSAY1- 28
0.1 ~ 0.22	0.03	SSAY1- 30
0.1 ~ 0.22	0.04	SSAY1- 32
0.1 ~ 0.22	0.04	SSAY1- 35
0.1 ~ 0.22	0.05	SSAY1- 36
0.1 ~ 0.22	0.06	SSAY1- 40
0.12 ~ 0.26	0.07	SSAY1- 45
0.12 ~ 0.26	0.08	SSAY1- 48
0.12 ~ 0.26	0.09	SSAY1- 50
0.12 ~ 0.26	0.11	SSAY1- 55
0.12 ~ 0.26	0.12	SSAY1- 56
0.12 ~ 0.26	0.13	SSAY1- 60
0.12 ~ 0.26	0.18	SSAY1- 70
0.12 ~ 0.26	0.23	SSAY1- 80
0.16 ~ 0.32	0.37	SSAY1-100

0.08 ~ 0.18	0.03	SSAY1.25- 20
0.1 ~ 0.22	0.04	SSAY1.25- 24
0.1 ~ 0.22	0.05	SSAY1.25- 25
0.1 ~ 0.22	0.06	SSAY1.25- 28
0.1 ~ 0.22	0.06	SSAY1.25- 30
0.1 ~ 0.22	0.07	SSAY1.25- 32
0.1 ~ 0.22	0.09	SSAY1.25- 35
0.1 ~ 0.22	0.1	SSAY1.25- 36
0.1 ~ 0.22	0.12	SSAY1.25- 40
0.12 ~ 0.26	0.15	SSAY1.25- 45
0.12 ~ 0.26	0.17	SSAY1.25- 48
0.12 ~ 0.26	0.19	SSAY1.25- 50
0.12 ~ 0.26	0.23	SSAY1.25- 55
0.12 ~ 0.26	0.23	SSAY1.25- 56
0.12 ~ 0.26	0.27	SSAY1.25- 60
0.12 ~ 0.26	0.37	SSAY1.25- 70
0.12 ~ 0.26	0.48	SSAY1.25- 80
0.16 ~ 0.32	0.76	SSAY1.25-100

NOTE 3: The backlash values shown in the table are the theoretical values of a pair of identical gears in mesh.