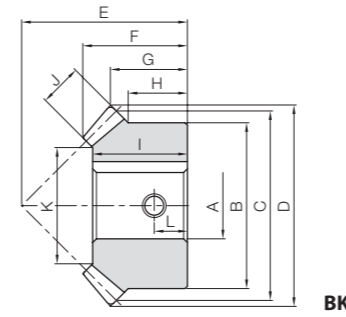
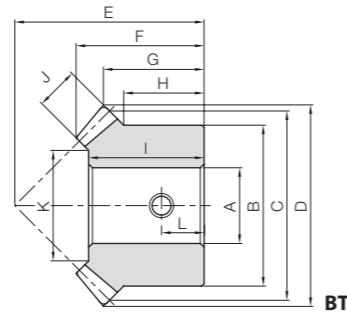




Specifications	
Precision grade	JIS B 1704: 1978 grade 4
Gear teeth	Gleason
Pressure angle	20°
Helix angle	—
Material	S45C
Heat treatment	Gear teeth induction hardened *
Tooth hardness	50 to 60HRC
Surface treatment	Black oxide coating

* Due to the gear teeth being induction hardened, no secondary operations can be performed on tooth areas including the bottom land (approx. 2 to 3 mm).



Catalog Number	Gear Ratio	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Mounting distance	Total length	Crown to back	Hub width	Hole length	
					AH7	B	C	D	E	F	G	H	I	
SMA1-20 SMB1-20	1	m1	20	BT	8	16	20	21.41	20	13.95	10.71	8	12	
10					26	30	32.12	30	21.24	16.06	13	19		
SMA1.5-20 SMB1.5-20		m1.5		BK	14	34	40	42.83	37	24.89	18.41	14	22	
15					42	50	53.54	48	32.54	24.77	19	29		
SMA2-20 SMB2-20		m2		BK	20	22	50	60	64.24	58	39.84	30.12	23	35
25						60	70	74.24	68	47.84	38.12	26	42	
SMA2.5-20 SMB2.5-20		m2.5		BK	20	30	64	80	85.65	75	50.78	37.83	27	45
32						80	100	107.07	90	60.38	43.54	30	54	
SMA3-20 SMB3-20 SMC3-20		m3		BK	20	40	80	100	107.07	90	60.38	43.54	30	54
30						80	100	107.07	90	60.38	43.54	30	54	
SMA4-20 SMB4-20 SMC4-20	m4	BK	20	30	64	80	85.65	75	50.78	37.83	27	45		
32				80	100	107.07	90	60.38	43.54	30	54			
SMA5-20 SMB5-20 SMC5-20	m5	BK	20	40	80	100	107.07	90	60.38	43.54	30	54		
30				80	100	107.07	90	60.38	43.54	30	54			
SMA1-25	1	m1	25	BT	10	20	25	26.41	23	15.16	11.21	8	14	
SMA1.5-25					m1.5	12	30	37.5	39.62	34	22.25	16.31	11.5	19
SMA2-25 SMB2-25		m2		18		40	50	52.83	40	24.33	16.41	10	20	
15				50	62.5	66.04	50	30.41	20.52	12.5	26			
SMA2.5-25 SMB2.5-25		m2.5		BK	20	50	62.5	66.04	50	30.41	20.52	12.5	26	
18					60	75	79.24	60	37.81	24.62	15	32		
SMA3-25 SMB3-25		m3		BK	25	30	60	75	79.24	60	37.81	24.62	15	32
25						75	90	96.24	75	44.81	28.62	18	39	
SMA4-25 SMB4-25		m4		BK	25	35	80	100	105.66	80	49.32	32.83	20	43
30						100	125	132.07	100	60.82	41.04	25	50	
SMA5-25	m5	BK	25	50	100	125	132.07	100	60.82	41.04	25	50		
30				125	150	158.07	125	71.82	47.04	30	60			
SMA1-30	1	m1	30	BT	12	24	30	31.41	28	17.71	13.71	10	16	
SMA1.5-30					m1.5	15	36	45	47.12	43	28.24	21.56	16	25
SMA2-30 SMB2-30		m2		20		45	60	62.83	50	29.42	21.41	12.5	25	
15				60	75	78.54	62	36.28	26.27	17	32			
SMA2.5-30 SMB2.5-30		m2.5		BK	25	60	75	78.54	62	36.28	26.27	17	32	
20					75	90	94.24	75	45.47	32.12	20	40		
SMA3-30 SMB3-30		m3		BK	30	32	70	90	94.24	75	45.47	32.12	20	40
25						90	110	116.24	90	54.47	38.12	23	47	
SMA4-30 SMB4-30		m4		BK	30	40	100	120	125.66	95	54.52	37.83	25	50
30						120	150	157.07	120	68.56	48.54	35	62	
SMA5-30	m5	BK	30	55	130	150	157.07	120	68.56	48.54	35	62		
40				150	180	187.07	150	80.56	58.54	42	74			

[Caution on Product Characteristics] ① The dimensions of the keyway marked with * (depth) are made to old JIS Standards.
The dimensions of the keyway marked with ** are different from the JIS Standards for the bore.

Face width	Holding surface dia.	Keyway	Socket head screw	Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog Number
				Bending strength	Surface durability	Bending strength	Surface durability			
J	K	Width × Depth	Size	L						
5	9.86 10	—	M4	4	0.90	0.37	0.091	0.038	0.016 0.014	SMA1-20 SMB1-20
8	15.37	—	M4 M5	6.5	3.13	1.31	0.32	0.13	0.069 0.06	SMA1.5-20 SMB1.5-20
10	21.72	5 x 2.3 5 x 2.3	M5	7	7.17	3.05	0.73	0.31	0.14 0.13	SMA2-20 SMB2-20
12	28.06	5 x 2.3** 6 x 2.8	M6	9.5	13.7	5.90	1.39	0.60	0.27 0.26	SMA2.5-20 SMB2.5-20
15	31.57	7 x 3* 7 x 3* 6 x 2.8	M6 M8 M6	11.5	24.2	10.5	2.47	1.08	0.47 0.44 0.49	SMA3-20 SMB3-20 SMC3-20
20	43.43	7 x 3* 10 x 3.3 8 x 3.3	M8	13.5	57.3	25.4	5.85	2.59	1.00 0.96 1.07	SMA4-20 SMB4-20 SMC4-20
26	54.46	10 x 3.3** 8 x 3.3 10 x 3.3	M8	15	114	51.3	11.7	5.23	1.80 2.04 1.93	SMA5-20 SMB5-20 SMC5-20
6	15.03	—	M4	4	1.48	0.71	0.15	0.072	0.029	SMA1-25
9	19.54	4 x 1.8	M5	5.75	4.98	2.44	0.51	0.25	0.10	SMA1.5-25
12	26.06	6 x 2.8 5 x 2.3	M6 M5	5	11.8	5.90	1.20	0.60	0.19 0.20	SMA2-25 SMB2-25
15	34.57	5 x 2.3** 6 x 2.8	M6	6	23.1	11.7	2.35	1.19	0.39 0.40	SMA2.5-25 SMB2.5-25
20	37.43	7 x 3* 8 x 3.3	M8	7.5	42.3	21.6	4.31	2.20	0.63 0.69	SMA3-25 SMB3-25
25	55.29	10 x 3.3 8 x 3.3	M8	10	96.8	50.2	9.87	5.12	1.59 1.68	SMA4-25 SMB4-25
30	65.15	12 x 3.3**	M8	12.5	185	96.8	18.8	9.87	2.86	SMA5-25
6	19.03	4 x 1.8	M5	5	2.00	1.11	0.20	0.11	0.047	SMA1-30
10	25.71	5 x 2.3	M5	8	7.22	4.08	0.74	0.42	0.19	SMA1.5-30
12	36.06	6 x 2.8 5 x 2.3	M6 M5	6.25	16.0	9.20	1.63	0.94	0.32 0.35	SMA2-30 SMB2-30
15	47.57	8 x 3.3 6 x 2.8	M8 M6	8.5	31.2	18.2	3.19	1.86	0.68 0.73	SMA2.5-30 SMB2.5-30
20	53.43	10 x 3.3 8 x 3.3	M8	10	57.8	34.0	5.89	3.46	1.15 1.25	SMA3-30 SMB3-30
25	79.29	12 x 3.3 8 x 3.3	M8	12.5	131	78.3	13.4	7.99	2.81 3.03	SMA4-30 SMB4-30
30	99.15	16 x 4.3	M10	17.5	250	150	25.5	15.3	5.56	SMA5-30