



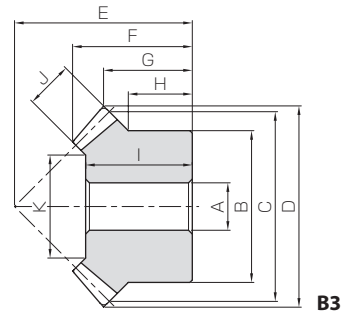
SUM Stainless Steel Miter Gears

Module 1 ~ 4

SUM



Specifications	
Precision grade	JIS B 1704 : 1978 grade 3
Gear teeth	Gleason
Pressure angle	20°
Material	SUS303
Heat treatment	—
Tooth hardness	(less than 187HB)



Catalog No.	Gear ratio	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Mounting distance	Total length	Crown to back length	Hub width
					AH7	B	C	D	E	F	G	H
SUM1-20	1	m1	20	B3	6	16	20	21.41	20	13.95	10.71	8
SUM1.5-20		m1.5	20	B3	8	26	30	32.12	30	21.24	16.06	13
SUM2-20		m2	20	B3	12	34	40	42.83	37	24.89	18.41	14
SUM2.5-20		m2.5	20	B3	14	42	50	53.54	48	32.54	24.77	19
SUM3-20		m3	20	B3	16	50	60	64.24	58	39.84	30.12	23
SUM4-20		m4	20	B3	20	64	80	85.65	75	50.78	37.83	27
SUM1-25	1	m1	25	B3	6	20	25	26.41	23	15.16	11.21	8
SUM1.5-25		m1.5	25	B3	10	30	37.5	39.62	34	22.25	16.31	11.5
SUM2-25		m2	25	B3	12	45	50	52.83	40	24.33	16.41	12.5
SUM2.5-25		m2.5	25	B3	16	55	62.5	66.04	50	30.41	20.52	15
SUM3-25		m3	25	B3	20	65	75	79.24	60	37.81	24.62	17.5
SUM4-25		m4	25	B3	28	80	100	105.66	80	49.32	32.83	20
SUM1-30	1	m1	30	B3	8	24	30	31.41	28	17.71	13.71	10
SUM1.5-30		m1.5			10	36	45	47.12	43	28.24	21.56	16
SUM2-30		m2			12	45	60	62.83	50	29.43	21.41	12.5
SUM2.5-30		m2.5			16	60	75	78.54	62	36.28	26.27	17
SUM3-30		m3			20	70	90	94.24	75	45.47	32.12	20

- [Caution on Product Characteristics] ① The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see page 272 for more details.
- ② Dimensions of the outside diameter, the overall length and crown to back length are all theoretical values, and some differences will occur due to the corner chamfering of the gear tips.



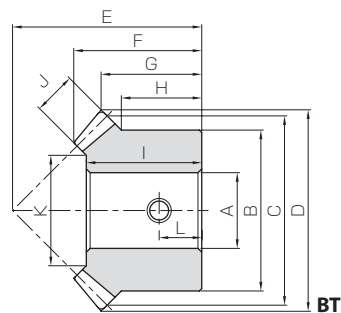
SUMA Finished Bore Stainless Steel Miter Gears

Module 1 ~ 4

SUMA



Specifications	
Precision grade	JIS B 1704 : 1978 grade 3
Gear teeth	Gleason
Pressure angle	20°
Material	SUS303
Heat treatment	—
Tooth hardness	(less than 187HB)



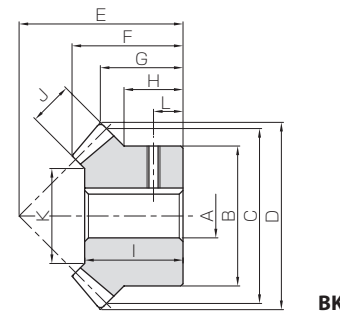
Catalog No.	Gear ratio	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Mounting distance	Total length	Crown to back length	Hub width	Length of bore
					AH7	B	C	D	E	F	G	H	I
SUMA1-20	1	m1	20	BT	6	16	20	21.41	20	13.95	10.71	8	12
SUMA1.5-20		m1.5	20	BT	8	26	30	32.12	30	21.24	16.06	13	19
SUMA2-20		m2	20	BK	12	34	40	42.83	37	24.89	18.41	14	22
SUMA2.5-20		m2.5	20	BK	14	42	50	53.54	48	32.54	24.77	19	29
SUMA3-20		m3	20	BK	16	50	60	64.24	58	39.84	30.12	23	35
SUMA4-20		m4	20	BK	20	64	80	85.65	75	50.78	37.83	27	45
SUMA1-25	1	m1	25	BT	6	20	25	26.41	23	15.16	11.21	8	14
SUMA1.5-25		m1.5	25	BT	10	30	37.5	39.62	34	22.25	16.31	11.5	19
SUMA2-25		m2	25	BK	12	45	50	52.83	40	24.33	16.41	12.5	20
SUMA2.5-25		m2.5	25	BK	16	55	62.5	66.04	50	30.41	20.52	15	26
SUMA3-25		m3	25	BK	20	65	75	79.24	60	37.81	24.62	17.5	32
SUMA4-25		m4	25	BK	30	80	100	105.66	80	49.32	32.83	20	43

- [Caution on Product Characteristics] ① Keyways are made according to JIS B1301 standards and Js 9 tolerances. For products with a tapped hole, a set screw is included as an accessory.
- ② The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see page 272 for more details.
- ③ Dimensions of the outside diameter, the overall length and crown to back length are all theoretical values, and some differences will occur due to the corner chamfering of the gear tips.

Stainless Steel Miter Gears Additional Products

Length of bore	Face width	Holding surface dia.	Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog No.
			Bending strength	Surface durability	Bending strength	Surface durability			
I	J	K							
12	5	9.86	0.49	0.060	0.050	0.0061	0.03~0.13	0.019	SUM1-20
19	8	15.37	1.72	0.22	0.18	0.022	0.05~0.15	0.074	SUM1.5-20
22	10	21.72	3.94	0.51	0.40	0.052	0.06~0.16	0.15	SUM2-20
29	12	28.06	7.52	1.00	0.77	0.10	0.07~0.17	0.30	SUM2.5-20
35	15	31.57	13.3	1.80	1.36	0.18	0.08~0.18	0.52	SUM3-20
45	20	43.43	31.5	4.39	3.22	0.45	0.12~0.27	1.15	SUM4-20
14	6	15.03	0.81	0.12	0.083	0.012	0.03~0.13	0.035	SUM1-25
19	9	19.54	2.74	0.41	0.28	0.042	0.05~0.15	0.11	SUM1.5-25
20	12	26.06	6.50	1.00	0.66	0.10	0.06~0.16	0.24	SUM2-25
26	15	34.57	12.7	2.00	1.29	0.20	0.07~0.17	0.46	SUM2.5-25
32	20	37.43	23.3	3.73	2.37	0.38	0.08~0.18	0.80	SUM3-25
43	25	55.29	53.2	8.79	5.43	0.90	0.12~0.27	1.72	SUM4-25
16	6	19.03	1.10	0.18	0.11	0.02	0.03~0.13	0.057	SUM1-30
25	10	25.72	3.96	0.68	0.40	0.07	0.05~0.15	0.21	SUM1.5-30
25	12	36.06	8.77	1.55	0.89	0.16	0.06~0.16	0.37	SUM2-30
32	15	47.57	17.1	3.10	1.75	0.32	0.07~0.17	0.76	SUM2.5-30
40	20	53.43	31.7	5.86	3.23	0.60	0.08~0.18	1.32	SUM3-30

- [Caution on Secondary Operations] ① Please read “Caution on Performing Secondary Operations” (Page 274) when performing modifications and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK's system for quick modification of KHK stock gears is also available.



Face width	Holding surface dia.	Keyway	Set Screw		Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog No.
			Width×Depth	Size	L	Bending strength	Surface durability	Bending strength	Surface durability		
J	K										
5	9.86	—	M4	4	4	0.49	0.060	0.050	0.0061	0.03~0.13	SUMA1-20
8	15.37	—	M4	6.5	6.5	1.72	0.22	0.18	0.022	0.05~0.15	SUMA1.5-20
10	21.72	4 x 1.8	M4	7	7	3.94	0.51	0.40	0.052	0.06~0.16	SUMA2-20
12	28.06	5 x 2.3	M5	9.5	9.5	7.52	1.00	0.77	0.10	0.07~0.17	SUMA2.5-20
15	31.57	5 x 2.3	M5	11.5	11.5	13.3	1.80	1.36	0.18	0.08~0.18	SUMA3-20
20	43.43	6 x 2.8	M5	13.5	13.5	31.5	4.39	3.22	0.45	0.12~0.27	SUMA4-20
6	15.03	—	M4	4	4	0.81	0.12	0.083	0.012	0.03~0.13	SUMA1-25
9	19.54	—	M4	6	6	2.74	0.41	0.28	0.042	0.05~0.15	SUMA1.5-25
12	26.06	4 x 1.8	M4	6.5	6.5	6.50	1.00	0.66	0.10	0.06~0.16	SUMA2-25
15	34.57	5 x 2.3	M5	7.5	7.5	12.7	2.00	1.29	0.20	0.07~0.17	SUMA2.5-25
20	37.43	6 x 2.8	M5	9	9	23.3	3.73	2.37	0.38	0.08~0.18	SUMA3-25
25	55.29	8 x 3.3	M6	10	10	53.2	8.79	5.43	0.90	0.12~0.27	SUMA4-25

- [Caution on Secondary Operations] ① Please read “Caution on Performing Secondary Operations” (Page 274) when performing modification and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK's system for quick modification of KHK stock gears is also available.