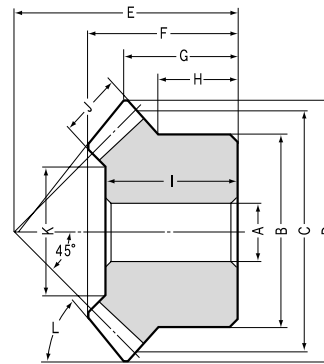




# SUM Stainless Steel Miter Gears Modules 1~3



B3 Shape

## 20 Tooth Miter Gears Modules 1~3

Catalog No.	Module	No. of teeth	Bore	Hub dia.	Pitch dia.	Outside dia.	Mounting distance	Total length	Crown to back length	Hub width	Length of bore	Face width	Holding surface dia.	Tip angle
	<i>m</i>	<i>z</i>	AH7	B	C	D	E	F	G	H	I	J	K	L
<b>SUM1 -20</b>	1	20	6	16	20	21.41	20	13.95	10.71	8	12	5	9.86	49°48'
<b>SUM1.5-20</b>	1.5	20	8	26	30	32.12	30	21.24	16.06	13	19	8	15.37	49°48'
<b>SUM2 -20</b>	2	20	12	34	40	42.83	37	24.89	18.41	14	22	10	21.72	49°48'
<b>SUM2.5-20</b>	2.5	20	14	42	50	53.54	48	32.54	24.77	19	29	12	28.06	49°48'
<b>SUM3 -20</b>	3	20	16	50	60	64.24	58	39.84	30.12	23	35	15	31.57	49°48'

## 25 Tooth Miter Gears Modules 1~3

<b>SUM1 -25</b>	1	25	6	20	25	26.41	23	15.16	11.21	8	14	6	15.03	48°51'
<b>SUM1.5-25</b>	1.5	25	10	30	37.5	39.62	34	22.25	16.31	11.5	19	9	19.54	48°51'
<b>SUM2 -25</b>	2	25	12	45	50	52.83	40	24.33	16.41	12.5	20	12	26.06	48°51'
<b>SUM2.5-25</b>	2.5	25	16	55	62.5	66.04	50	30.41	20.52	15	26	15	34.57	48°51'
<b>SUM3 -25</b>	3	25	20	65	75	79.24	60	37.81	24.62	17.5	32	20	37.43	48°51'

**CAUTION:** 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.



## Specifications

Precision grade	JIS B 1704 grade 3	Tooth hardness	Less than 187HB
Gear teeth	Gleason	Surface treatment	—
Pressure angle	20°	Tooth surface finish	Cut
Material	SUS303	Datum reference surface for gear cutting	Bore
Heat treatment	—	Secondary Operations	Possible

\*Available on special order: Same gear made from SUS304.

Shape	Allowable torque (N·m) <small>NOTE 1</small>		Allowable torque (kgf·m)		Backlash (mm)	Weight (kgf)	Catalog No.
	Bending strength	Surface durability	Bending strength	Surface durability			
B3	0.4923	0.0598	(0.0502)	(0.0061)	0.03 ~ 0.13	0.02	<b>SUM1 -20</b>
B3	1.723	0.2157	(0.1757)	(0.022)	0.05 ~ 0.15	0.07	<b>SUM1.5-20</b>
B3	3.94	0.5109	(0.4018)	(0.0521)	0.06 ~ 0.16	0.15	<b>SUM2 -20</b>
B3	7.516	1	(0.7664)	(0.102)	0.07 ~ 0.17	0.3	<b>SUM2.5-20</b>
B3	13.3	1.802	(1.356)	(0.1838)	0.08 ~ 0.18	0.5	<b>SUM3 -20</b>

Pitch Angle 45°

B3	0.812	0.1157	(0.0828)	(0.0118)	0.03 ~ 0.13	0.03	<b>SUM1 -25</b>
B3	2.741	0.408	(0.2795)	(0.0416)	0.05 ~ 0.15	0.13	<b>SUM1.5-25</b>
B3	6.496	1	(0.6624)	(0.102)	0.06 ~ 0.16	0.22	<b>SUM2 -25</b>
B3	12.69	2	(1.294)	(0.2039)	0.07 ~ 0.17	0.41	<b>SUM2.5-25</b>
B3	23.27	3.725	(2.373)	(0.3798)	0.08 ~ 0.18	0.81	<b>SUM3 -25</b>

Pitch Angle 45°

**NOTE1:** The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see page 196 for more details.