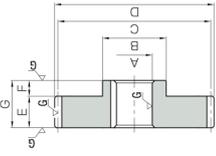




Specifications	
Precision grade	JIS grade NS (JIS B1702:1, 1998)
Gear teeth	Standard full depth
Pressure angle	20°
Material	SCM415
Heat Treatment	Carburized
Tooth hardness	55 to 60HRC



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Catalog Number	Module	No. of teeth	Shape	Bore A ₁₇	Hub dia. B	Pitch dia. C	Outside dia. D	Face width E	Hub width F	Total Length G	Web thickness H	Web O.D. I
MSGA1-18	m1	18	51	8	15	18	20	10	5	15		
MSGA1-20		8		17	20	22						
MSGB1-20**		10		20	24	26						
MSGA1-24		12		20	25	27						
MSGB1-24		12		20	25	27						
MSGA1-25		10		25	30	32						
MSGB1-25		10		25	30	32						
MSGA1-30		10		25	35	37						
MSGB1-30		15		25	36	38						
MSGA1-35		15		25	36	38						
MSGB1-35	15	25	36	38								
MSGA1-36	12	30	40	42								
MSGB1-36	12	30	40	42								
MSGA1-40	12	30	45	47								
MSGB1-40	15	30	48	50								
MSGA1-45	15	30	48	50								
MSGB1-45	15	30	48	50								
MSGA1-48	12	35	50	52								
MSGB1-48	12	35	50	52								
MSGA1-50	15	40	55	57								
MSGB1-50	15	40	55	57								
MSGA1-55	15	40	60	62								
MSGB1-55	20	40	60	62								
MSGA1-60	20	45	70	72								
MSGB1-60	20	45	70	72								
MSGA1-70	25	45	80	82								
MSGB1-70	25	45	80	82								
MSGA1-80	20	45	100	102								
MSGB1-80	20	45	100	102								
MSGA1-100	25	45	100	102								
MSGB1-100	25	45	100	102								

[Caution on Product Characteristics]

- Although the dimensions of the keyway are made to the JIS B1301 (Jis9) tolerance, there may be some deviations due to the effects of the heat treatment.
- The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 24 for more details.
- The backlash values shown in the table are the theoretical values for the backlash in the normal direction of a pair of identical gears in mesh.
- Products marked with "*" have a small amount of material between the corner of the keyway and the tooth root. This mode of failure must be considered when selecting these gears.

For details, please see our web site.

*** For products not categorized in our KHK Stock Gear series, custom gear production services with short lead times are available. Please see Page 16 for more details about custom-made orders.**

Keyway Width x Depth	Allowable torque (N·m)	Allowable torque (kgf·m)	Backlash (mm)	Weight (kg)	Catalog Number
3 x 1.4	12.1	6.37		0.020	MSGA1-18
3 x 1.4	14.2	8.04		0.027	MSGA1-20
4 x 1.8	18.5	12.0		0.038	MSGB1-20**
4 x 1.8	19.6	13.1		0.034	MSGA1-24
4 x 1.8	19.6	13.1		0.041	MSGB1-24
4 x 1.8	25.1	19.0		0.065	MSGA1-25
4 x 1.8	25.1	19.0		0.037	MSGB1-25
4 x 1.8	30.7	26.2		0.061	MSGA1-30
5 x 2.3	30.7	26.2	0.08~0.16	0.061	MSGB1-30
4 x 1.8	31.9	27.8		0.085	MSGA1-35
5 x 2.3	31.9	27.8		0.073	MSGB1-35
4 x 1.8	36.5	34.6		0.085	MSGA1-36
5 x 2.3	36.5	34.6		0.077	MSGB1-36
4 x 1.8	42.3	44.3		0.11	MSGA1-40
5 x 2.3	42.3	44.3		0.10	MSGB1-40
4 x 1.8	45.8	50.6		0.14	MSGA1-45
5 x 2.3	45.8	50.6		0.13	MSGB1-45
4 x 1.8	48.1	55.1		0.16	MSGA1-48
5 x 2.3	48.1	55.1		0.15	MSGB1-48
4 x 1.8	54.0	67.3		0.18	MSGA1-50
5 x 2.3	54.0	67.3		0.17	MSGB1-50
6 x 2.8	59.9	80.6		0.26	MSGA1-55
8 x 3.3	59.9	80.6		0.23	MSGB1-55
6 x 2.8	71.9	111	0.10~0.18	0.29	MSGA1-60
8 x 3.3	71.9	111		0.27	MSGB1-60
6 x 2.8	83.9	147		0.37	MSGA1-70
8 x 3.3	83.9	147		0.35	MSGB1-70
6 x 2.8	103	224		0.47	MSGA1-80
8 x 3.3	103	224		0.44	MSGB1-80
6 x 2.8	10.5	22.8		0.69	MSGA1-100
8 x 3.3	10.5	22.8		0.66	MSGB1-100

[Caution on Secondary Operations]

① No secondary operations can be performed on these precision finished gears due to the applied carburizing process. For products which are different in specifications, such as bore size, we accept custom-made gear orders and provide a price quote.