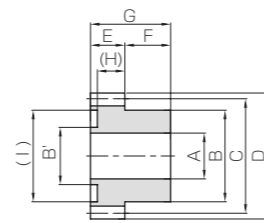
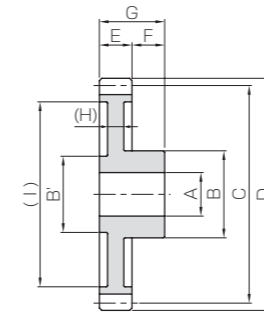


Specifications	
Precision grade	JIS grade N12 (JIS B1702-1:1998)*
Gear teeth	Standard full depth
Pressure angle	20°
Material	Duracon (M90-44)
Heat Treatment	—
Tooth hardness	(110 to 120HRR)

* The precision grade of these products is equivalent to the value shown in the table.



S8B



S9

Catalog Number	Module	No. of teeth	Shape	Bore 1	Bore 2	Hub dia. 1	Hub dia. 2	Pitch dia.	Outside dia.	Face width	Hub width
				A	(A')	B	B'	C	D	E	F
KDS1-12	m1	12	S8B	4	—	8	6	12	14	6	6
KDS1-15		8				7	15	17			
KDS1-16		10				8	16	18			
KDS1-18		10				8	18	20			
KDS1-20		11.7				9	20	22			
KDS1-24		24	5	—	11.7	9	24	26	6	6	
KDS1-25		11.7			9	25	27				
KDS1-28		11.7			9	28	30				
KDS1-30		14			12	30	32				
KDS1-32		14			12	32	34				
KDS1-35		35	6	—	14	12	35	37	6	6	
KDS1-36		14			12	36	38				
KDS1-40		16			14	40	42				
KDS1-45		16			14	45	47				
KDS1-48		16			14	48	50				
KDS1-50		50	8	—	16	14	50	52	8	8	
KDS1-56		18			15.6	56	58				
KDS1-60		18			15.6	60	62				
KDS1-64		18			15.6	64	66				
KDS1-70		18			15.6	70	72				
KDS1-72	72	18	15.6	72	74	80	82	8	8		
KDS1-80	80										

- [Caution on Product Characteristics]
- 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.
 - The bore tolerance is -0.05 to -0.30, but it may be slightly higher at the center of the hole.
 - For the dimensional accuracy of each part, see the dimensional tolerance of molded items in the separate table.

Total Length	Web thickness	Web O.D.	Hole depth	Allowable torque (N·m)	Allowable torque (kgf·m)	Backlash (mm)	Weight (g)	Catalog Number	
G	(H)	(I)	(J)	Bending strength	Bending strength				
12	(5.5)	(8.5)	—	0.44	0.045	0~0.60	1.10	KDS1-12	
	(5)	(11)		0.65	0.066		1.49	KDS1-15	
	(3)	(11.5)		0.71	0.073		1.87	KDS1-16	
		(13.5)		0.83	0.085		2.15	KDS1-18	
		(15)		0.96	0.098		2.85	KDS1-20	
		(17)		1.22	0.12		3.81	KDS1-24	
		(20)		1.28	0.13		3.76	KDS1-25	
	14	(3)		(23)	1.48		0.15	4.39	KDS1-28
				(24)	1.61		0.16	5.46	KDS1-30
				(26.5)	1.75		0.18	5.86	KDS1-32
(29)			1.96	0.20	6.73	KDS1-35			
(30)			2.04	0.21	7.01	KDS1-36			
(34)			2.33	0.24	8.39	KDS1-40			
(39.5)			2.69	0.27	9.87	KDS1-45			
(40)			2.92	0.30	12.0	KDS1-48			
(42.5)			3.07	0.31	12.6	KDS1-50			
(48.5)			3.49	0.36	15.8	KDS1-56			
(52.5)	3.78	0.39	17.6	KDS1-60					
(56.5)	4.07	0.41	19.4	KDS1-64					
(62.5)	4.50	0.46	22.4	KDS1-70					
14	(3)	(64)	4.65	0.47	23.7	KDS1-72			
		(72.5)	5.23	0.53	27.9	KDS1-80			

- [Caution on Secondary Operations]
- As it is a molded item, bubbles may form inside the material. Avoid performing secondary operations.

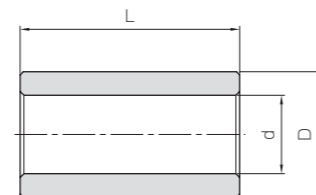


BB
Sintered Metal Bushings

Sintered Metal Bushings



When using the injection molded spur gear with an idler gear (bearing metal press fitting) and diameter smaller than the inside diameter of the molded gear, please press fit the following standard bushing.



T8

Catalog Number	Inner dia. $d^{+0.02/0}$	Outside dia. $D^{+0.02/-0.01}$	Length $L^{0/-0.3}$	Gear example
KBB30507	3	5	7	DS0.5
KBB30608	3	6	8	DS0.5, DS0.8
KBB40609	4	6	9	DS0.8
KBB40612	4	6	12	DS1
KBB50812	5	8	12	DS1
KBB50814	5	8	14	DS1

Material: Oil-free copper alloy



Dimensional tolerance of molded item (unit: mm)

Dimensional classification	Grade	Rough grade
	3 or less	±0.20
4 to 6	±0.25	±0.30
7 to 10	±0.30	±0.35
11 to 18	±0.35	±0.40
19 to 30	±0.40	±0.50
Over 30	±0.50	

