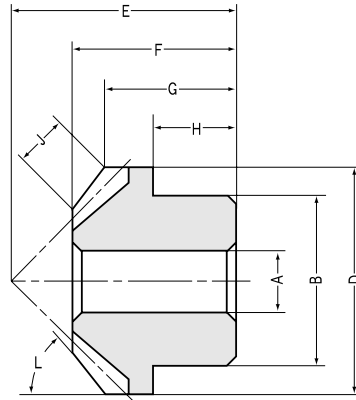




# DB Injection Molded Bevel Gears Modules 0.5~1



B1 Shape

## Gear Ratio 2 ■ Modules 0.5~1

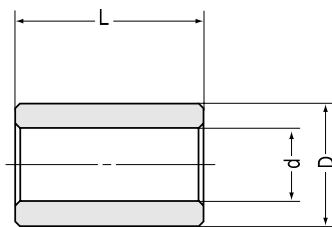
Catalog No.	Module	No. of teeth	Bore NOTE 1	Hub dia.	Pitch dia.	Outside dia.	Mounting distance	Total length	Crown to back length	Hub width	Length of bore	Face width
	<i>m</i>	<i>z</i>	A	B	C	D	E	F	G	H	I	J
<b>DB0.5-4020</b>	0.5	40	4	12	20	20.29	12	8.33	7.29	4	7	2.5
<b>DB0.5-2040</b>		20	3	8	10	11.2	16	8.46	6.3	4	8.46	
<b>DB0.8-4020</b>	0.8	40	5	15	32	32.47	18	11.91	10.47	6	10	3.5
<b>DB0.8-2040</b>		20	4	12	16	17.92	24	11.5	8.48	5	11.5	
<b>DB1 -4020</b>	1	40	6	18	40	40.59	22	14.45	12.58	7	12	4.5
<b>DB1 -2040</b>		20	5	15	20	22.4	30	14.49	10.6	7	14.49	

**NOTE1:** The bore tolerance is generally  $-0.05$  to  $-0.1$  but may be + value at the central portion of the hole. Re-machining the bore is not recommended since reworking material may expose voids.



# BB Sintered Metal Bushings

The table shows a series of standard metal bushings that can be pressed into standard injection molded gears. They can be used as bearing metal on idler gears or to reduce the bore of the gears.



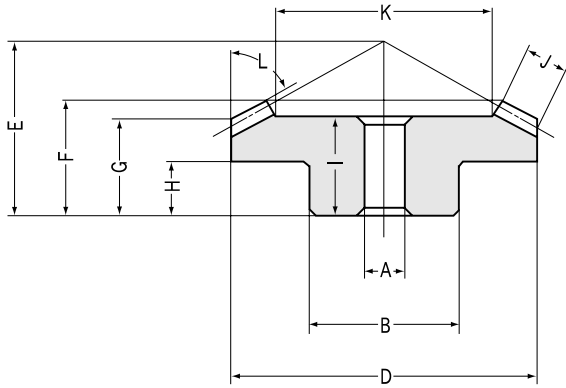
(unit: mm)

Catalog No.	I.D. of bushing	O.D. of bushing	Length	Products that can use the bushing
	$d_0^{+0.02}$	$D_{-0.01}^{+0.02}$	$L_{-0.3}^0$	
<b>BB30507</b>	3	5	7	DS0.5, DM0.8, DB0.8
<b>BB30608</b>	3	6	8	DS0.5, DS0.8, DM1
<b>BB40609</b>	4	6	9	DS0.8, DM1
<b>BB40612</b>	4	6	12	DS1, DB1
<b>BB50812</b>	5	8	12	DS1
<b>BB50814</b>	5	8	14	DS1, DM1.5

**Material:** Oil impregnated sintered bronze.



# Injection Molded Bevel Gears



B9 Shape

## Specifications

Precision grade	JIS B 1704 grade 8	Tooth hardness	110~120HRR
Gear teeth	Gleason	Surface treatment	—
Pressure angle	20°	Tooth surface finish	Injection molded
Material	Duracon(M90-44)	Datum reference surface for tooth forming	Bore
Heat treatment	—	Secondary Operations	Not recommended (may expose voids)

Holding surface dia.	Tip angle	Shape	Allowable torque (N-m) NOTE 2		Allowable torque (kgf-m)		Backlash (mm)	Weight (kgf)	Catalog No.
			Bending strength	Surface durability	Bending strength	Surface durability			
14.41 —	65°36' 30°29'	B9 B1	0.3236 0.1216	—	(0.033 ) (0.0124)	—	0.03 ~ 0.09	2 1	<b>DB0.5-4020</b> <b>DB0.5-2040</b>
24.17 —	65°36' 30°29'	B9 B1	1.085 0.407	—	(0.1106) (0.0415)	—	0.03 ~ 0.11	6 3	<b>DB0.8-4020</b> <b>DB0.8-2040</b>
29.94 —	65°36' 30°29'	B9 B1	1.887 0.708	—	(0.1924) (0.0722)	—	0.03 ~ 0.13	12 6	<b>DB1 -4020</b> <b>DB1 -2040</b>

NOTE 2: The allowable torques shown in the table are the calculated values using the Lewis formula. Pitch Angle Gear: 63°26' Pinion: 26°34'

### Dimensional tolerance table (unit: mm)

Range	Tolerance
below 3	±0.2
3 up to 6	±0.25
6 up to 10	±0.3
10 up to 18	±0.35
18 up to 30	±0.4
over 30	±0.5