DAILUBO

(oil-impregnated sintered bearings)

22

Metallic bearing materials









We produce oil-impregnated sintered copper and steel bearings to customer specifications.

Material properties and major applications

Materials and		Copper			Steel				
	symbols	DLC-00	DLC-07	DLC-15	DLF-98	DLF-98C	DLF-55	DLF-53	DLF-53C
(%;	Cu	Residual	Residual	Residual	1–3	1–3	25–35	38–48	38–48
<u>~</u>	Sn	8–11	8–11	8–11	-	_	_	2–4	2–4
sitio	С	-	0.5–1	1–2	-	0.2-0.8	_	_	0.2-0.8
composition (wt%)	Pb	-	_	-	-	_	_	_	_
	Zn	_	_	_	_	_	_	_	_
Chemical	Fe	_	1	1	Residual	Residual	Residual	Residual	Residual
ਹ ਨੂੰ	Other	0.5 or less	0.5 or less	0.5 or less	3 or less	3 or less	3 or less	3 or less	3 or less
Radi	ial crushing strength N/mm²	150-360	150-200	120-170	200-300	250-350	140-200	150-250	150-250
Density g/cm ³		6.4–7.2	6.2–7.0	6.2–7.0	5.6-6.4	5.6-6.4	5.8-6.5	5.8-6.5	5.8–6.5
Oil	content (min. vol%)	12	18	15	18	18	15	15	15
PV value limit in MPa·m/min		80	100	100	100	150	100	120	150
	High speed	×	0	0	0	0	0	0	0
	Medium speed	0	0	0	0	0	0	0	0
Speed	Low speed	0	0	0	0	0	0	0	0
0	Intermittent	×	0	\circ	0	0	0	0	0
	Oscillating	×	\triangle	0	\triangle	\triangle	0	0	0
Load		High	Medium	Medium	High	High	Medium	Medium	Medium
	Acoustics	0	0	0	Δ	\triangle	0	Δ	0
	Machinability	0	0	\triangle	0	\triangle	0	0	\triangle

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Symbol	Applications	Characteristics				
DLC-00	Tape recorders, carriages, miniature motors	Excellent machining and caulking properties				
DLC-07	Tape recorders, cash registers, carriages	Excellent caulking properties				
DLC-15	Fans, exhaust fans, capstans	Low-noise bearings, general purpose material for oil-impregnated sintered copper bearings				
DLF-98	Speedometers, collars, gears, boxes	Excellent machining and caulking properties, suitable for use in mechanical structures				
DLF-98C	Geared motors, spacers, steering systems	High strength, general purpose material for oil-impregnated sintered steel bearings				
DLF-55	Office automation equipment, AC motors	Low-noise bearing, alternative to copper, excellent conformability				
DLF-53	Office automation equipment, AC motors	Excellent conformability				
DLF-53C	Office automation equipment, AC motors, stepping motors					

Types of oil impregnation

ISO VG68 turbine oil or equivalent is standard, but other oils can be impregnated per customer specifications.

Dimensional tolerances

JIS B 1581 or equivalent. High-precision bearings are manufactured per customer specifications. Please inquire directly.