

●CRITERIA FOR LUBRICATING OIL SELECTION

OPERATING TEMPERATURE OF BEARING (°C)	dn	ISO VISCOSITY GRADE OF LUBRICATING OIL(VG)	
		MEDIUM LOAD	HEAVY LOAD/SHOCK LOAD
-30~0	UP TO PERMISSIBLE ROTATING SPEED	15,22,32	32,46
0~+60	UP TO 15000	32,46,68	100
	15000~80000	32,46	68
	80000~150000	22,32	32
	150000~500000	10	22,32
+60~+100	UP TO 15000	150	220
	15000~80000	100	150
	80000~150000	68	100,150
	150000~500000	32	68
+100~+150	UP TO PERMISSIBLE ROTATING SPEED	320	

NOTE: 1. IF HEAVY LOADS OCCUR AT LOW SPEEDS, A HIGHER VISCOSITY LUBRICATING OIL SHOULD BE USED.
 2. THIS TABLE IS FOR OIL BATH LUBRICATION SYSTEM AND RECIRCULATING OIL SYSTEMS.
 3. dn = BEARING BORE DIAMETER d(mm) X ROTATING SPEED n(r.p.m)

●COMMON OIL BRANDS AND EFFICIENCY

Manufacturer	Brand	Code	Lubricant Base	Flash Point (°C)	Viscosity (m ² /s)	Operating Temperature (°C)	Approved Standard
Shell Oil Co.	Aero Shell Fluid 31	AF1	Diester	237	14.33 (40°C)	-40~+204	MIL-PRF-83282D
	Aero Shell Fluid 12	AF2	Diester	220	8.9 (54.4°C)	-50~+205	MIL-PRF-6085D
	Aero Shell Fluid 3	AF3	Mineral	155	10.0 (38°C)	-47~+115	MIL-PRF-7870C
Anderson Oil Co.	Windsor Lube L-245X	WL2	Diester	215	14.0 (38°C)	-55~+175	MIL-PRF-6085D
Dupont, E.I.	Krytox 143AZ	KAZ	Fluorinated	-	12.4 (40°C)	-54~+149	-
Kluber Lub.	Isoflex PDB38	PDB	Diester	210	12.0 (40°C)	-55~+100	-
Anderol Co.	Anderol 402	A42	Diester	227	12.4 (40°C)	-54~+177	MIL-PRF-6085D
Nippon Oil Corp.	Antitrust P2100	002	Mineral	166	13.0 (40°C)	-20~+115	VV-L-800c

●COMMON GREASE BRANDS AND EFFICIENCY

Manufacturer	Brand	Code	Thickening Agent	Lubricant Base	Drop Point (°C)	Cone Penetration: Worked (80 strokes)	Operating Temperature (°C)	Approved Standard
Shell Oil Co.	Alvania 1S	AV1	Lithium	Mineral	182	323	-35~+120	-
	Alvania 2S	AV2	Lithium	Mineral	185	275	-25~+120	-
	Alvania 3S	AV3	Lithium	Mineral	185	242	-20~+135	-
	Alvania RLQ	RLQ	Lithium	Mineral	195	275	-30~+120	-
	Aero Shell NO.7	AG7	Microgel	Diester	260	296	-73~+149	MIL-PRF-83282D
	Aero Shell NO.14	AG4	Calcium	Diester	148	273	-54~+93	MIL-G-25537C
	Aero Shell NO.15	AG5	Fluorotelomer	Silicone	260	290	-73~+232	MIL-G-25013E
	Aero Shell NO.16	AG6	Microgel	Polyester, Mineral	260	308	-54~+204	MIL-G-25760A
	Aero Shell NO.17	AG8	Microgel	Diester	260	295	-73~+149	MIL-G-21164D
	Aero Shell NO.22	AG2	Microgel	Synthetic Hydrocarbon	260	275	-65~+204	MIL-PRF-81322F
	Alvania EP2	AE2	Lithium	Mineral	184	284	-20~+110	-
	Retinax CL2	RXA	Lithium	Mineral	181	284	-15~+130	-
	Shell Cassida HDS2	HS2	Aluminum Complex	PAO	240	280	-30~+120	NSF(USDA)H1
	Shell Cassida RLS2	RL2	Aluminum Complex	PAO	240	275	-35~+120	NSF(USDA)H1
	Kyodo Yushi	Multemp PS NO.2	PS2	Lithium	Diester, Mineral	190	275	-55~+130
Multemp SRL		SRL	Lithium	Diester, Mineral	191	245	-40~+150	-
Kluber Lub.	Staburags NBU12	NB2	Barium	Mineral	220	270	-35~+150	NSF(USDA)H2
	Staburags NBU12/300KP	NB3	Barium	Mineral	220	300	-35~+150	-
	Staburags NBU8 EP	NB8	Barium	Mineral	220	280	-35~+150	NSF(USDA)H2
	Isoflex NBU15	NB5	Barium	Diester, Mineral	200	280	-40~+130	MIL-G-25760A
	Isoflex TOPAS NB52	B52	Barium	Synthetic Hydrocarbon	220	280	-60~+160	-
	Isoflex Alltime SL2	AS2	Lithium	Diester	180	280	-70~+150	-
	Isoflex LDS18 Special A	L8A	Lithium	Diester	190	280	-60~+130	MIL-G-23827B
	Isoflex Super LDS18	SL8	Lithium	Diester	190	280	-60~+130	MIL-G-7118A
	Isoflex PDB38 CX2000	PDC	Lithium	Synthetic	-	-	-70~+120	-
	Barielta IEL	IEL	PTFE	Fluorinated	-	280	-35~+220	-
	Barielta IEL/V	IEV	PTFE	Fluorinated	-	280	-65~+200	-
	Barielta IMI	IMI	PTFE	Fluorinated	-	280	-50~+220	-
	Barielta IMI/V	IMV	PTFE	Fluorinated	-	280	-50~+220	-
Barielta L55/2	L55	PTFE	Fluorinated	-	280	-35~+260	NSF(USDA)H2	
Barielta IS	BS1	PTFE	Fluorinated	-	280	-35~+260	-	
Dow Corning Co.	Molykote 33M	M3M	Lithium	Silicone	200	260	-70~+180	-
	Molykote 33L	M3L	Lithium	Silicone	200	300	-70~+180	-
	Molykote 44M	M4M	Lithium	Silicone	210	260	-40~+200	-
	Molykote BR2 Plus	BR2	Lithium	Mineral	180	280	-30~+150	-
	Molykote FS3451	F35	PTFE	Fluorinated	232	310	-40~+200	-
Dupont, E.I.	Krytox 240AC	K24	PFPE	Fluorinated	-	282	-35~+288	MIL-G-27617
	Krytox 240AZ	K2Z	PFPE	Fluorinated	-	285	-54~+149	MIL-G-27617
Esso Standard	Beacon325	B32	Lithium	Diester	190	274	-60~+120	-
	Templex N3	TX3	Lithium Complex	Mineral	260	230	-30~+160	-
Mobil Oil Co.	Mobil NO.28	MG2	Bentnrite	Synthetic Hydrocarbon	262	280	-62~+204	MIL-G-81322E
	Mobilux EP2	MGE	Lithium	Mineral	202	280	-30~+130	-
Caltex	Chevron RPM Grease SRI-2	SRI2	Lithium	Mineral	243	280	-30~+175	-
Nippon Grease Co.	Nig Ace W	NAW	Diurea	Synthetic	268	256	-30~+150	-
Shinetsu Chemical Co.	Silcolube G40M	G40	Lithium	Silicone	210	260	-30~+200	MIL-L-15719A