OIL & GREASE COMPATIBILITY **GUIDE**

TECHNICAL INFORMATION EDUCATION SERIES

GULF ELECTROQUIP
ELECTRIC MOTORS AND GENERATORS

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LUBRICATION

LUBRICATING OIL VISCOSITY CONVERSIONS

ISO Viscosity Grade	AGMA Grade (approx.)	SAE Viscosity # (approx.)	SAE Gear Lubricant # (approx.)	Viscosity SUS @ 104° F (approx.)	Viscosity SUS @ 210° F (approx.)	Viscosity Centistokes Cst @ 104° F
32	--	10W	75W	150	40	28.8 - 35.2
46	1	10	--	215	43	41.4 - 50.6
68	2	20	80W	315	50	61.2 - 74.8
100	3	30	--	465	60	90.0 - 110
150	4	40	85W	700	75	135 - 165
220	5	50	90	1000	95	198 - 242
320	6	60	--	1500	110	288 - 352
460	7	70	140	2150	130	414 - 506

GREASE CLASSIFICATIONS

NLGI* GROUP	TEMPERATURE RANGE		APPLICATION
	° F	° C	
1	-40 to 250	-40 to 121	General Purposes
2	0 to 300	-18 to 149	High Temperature
3	32 to 200	0 to 93	Medium Temperature
4	-67 to 225	-55 to 107	Low Temperature
5	to 450	to 232	Extreme High Temperature

* NLGI stands for National Lubricating Grease Institute.

MOTOR BEARING GREASE RELUBRICATION INTERVALS (IN MONTHS)

RPM	HP Range	8 hrs/day Clean	8 hsr/day Dirty	24 hrs/day Clean	24 hrs/day Dirty
3600	0.5 - 7.5	12	6	6	3
	10 - 40	9	4	4	2
	50 - 150	9	4	4	2
1800	0.5 - 7.5	36	18	18	9
	10 - 40	24	9	12	4
	50 - 150	18	9	9	4
1200	0.5 - 7.5	48	24	24	12
	10 - 40	36	12	18	6
	50 - 150	12	12	12	6

NLGI GREASE COMPATIBILITY CHART

	Aluminum Complex	Barium	Calcium	Calcium 12-hydroxy	Calcium Complex	Clay	Lithium	Lithium 12-hydroxy	Lithium Complex	Polyurea
Aluminum Complex	X	I	I	C	I	I	I	I	C	I
Barium	I	X	I	C	I	I	I	I	I	I
Calcium	I	I	X	C	I	C	C	B	C	I
Calcium 12-hydroxy	C	C	C	X	B	C	C	C	C	I
Calcium Complex	I	I	I	B	X	I	I	I	C	C
Clay	I	I	C	C	I	X	I	I	I	I
Lithium	I	I	C	C	I	I	X	C	C	I
Lithium 12-hydroxy	I	I	B	C	I	I	C	X	C	I
Lithium Complex	C	I	C	C	C	I	C	C	X	I
Polyurea	I	I	I	I	C	I	I	I	I	X

B = Borderline Compatibility; C = Compatible; I = Incompatible.

EASA
The Electro•Mechanical Authority

Source: Mechanical Reference Handbook
Electrical Apparatus Service Association

ISO CERTIFICATION 9001:2015

OVER 60 YEARS

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