
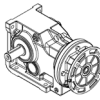

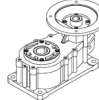
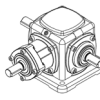
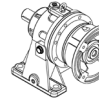
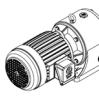
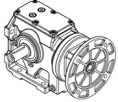
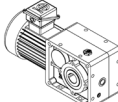
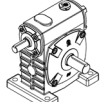

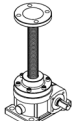


油品使用說明

Instruction for Engine Oil/Lubricant of Reducers

Type							
齒輪減速機 Gear reducer	R series helical gear reducer	K series helical gear reducer	F series helical gear reducer	Parallel shaft gear reducer	Miter bevel gear reducer	planetary gear reducer	Gear reducer

油品適用環境溫度 	 DIN (ISO)	ISO, NLGI									
								Tribol	Optimol		
-15°C ~ +40°C	CLP(CC)	VG220	Mobilgear 660 XP220	Shell Omala S2 G 220	BP Energol GR-XP 220	Kluberoil GEM 1-220 N	Meropa 220	Tribol 1100/220	Optigear BM 220	Renolin CLP 220	Carter EP 220
-20°C ~ +80°C	CLP PG	VG220	Mobil Glygoyle 220	Shell Omala S4 WE 220	BP Enersyn SG-XP 220	Klubersynth GH 6-220	Synlube CLP220	Tribol 800/220	Optiflex A 200	Renolin PG220	Carter SY 220
-20°C ~ +60°C	CLP HC	VG220	Mobil SHC630	Shell Omala S4 GX 220	-	Klubersynth GEM 4-220 N	Pinnacle EP 220	Tribol 1510/220	Optigear Synthetic X 220	Renolin Unisyn CLP 220	Carter SH 220
-40°C ~ +40°C	CLP HC	VG150	Mobil SHC629	Shell Omala S4 GX 150	-	Klubersynth GEM 4-150N	Pinnacle EP 150	-	Optigear Synthetic X 150	Renolin Unisyn CLP 150	Carter SH 150
-20°C ~ +25°C	CLP(CC)	VG150	Mobilgear 660 XP150	Shell Omala S2 G 150	BP Energol GR-XP 150	Kluberoil GEM 1-150N	Meropa 150	Tribol 1100/150	Optigear BM100	Renolin CLP 150	Carter EP 150
-40°C ~ +20°C	CLP HC	VG68	Mobil SHC626	Shell Omala S4 GX 68	-	-	-	-	-	Renolin Unisyn CLP 68	-
-20°C ~ +0°C	CLP HC	VG32	Mobil SHC624	-	-	Kulber summit HySyn FG-32	cetus PAO 46	-	Optilieb HY 32	Renolin Unisyn OL 32	Decnis SH 32

Type					
蝸輪減速機 Worm gear reducer	S series helical gear reducer	Shaft mounted gear reducer	Worm gear reducer	Aluminum alloy worm gear reducer	Worm gear linear actuator(Screw jack)

油品適用環境溫度 	 DIN (ISO)	ISO, NLGI									
								Tribol	Optimol		
0°C ~ +40°C	CLP(CC)	VG680	Mobilgear 660 XP 680	Shell Omala S2 G 680	BP Energol GR-XP 680	Kluberoil GEM 1-680 N	Meropa 680	Tribol 1100/680	Optigear BM 680	Renolin SEW 680	Carter EP 680
-20°C ~ +80°C	CLP PG	VG680	Mobil Glygoyle 680	Shell Omala S4 WE 680	BP Enersyn SG-XP 680	Klubersynth GH 6-680	Synlube CLD 680	Tribol 800/680	Optiflex A 680	Renolin PG 680	-
-20°C ~ +60°C	CLP HC	VG460	Mobil SHC 634	Shell Omala S4 GX 460	-	Klubersynth GEM 4-460N	Pinnacle EP 460	-	Optigear Synthetic X460	Renolin Unisyn CLP 460	Carter SH460
-40°C ~ +30°C	CLP HC	VG150	Mobil SHC 629	Shell Omala S4 GX 150	-	Klubersynth GEM 4-150N	-	Pinnacle EP 150	Optigear Synthetic X 150	Renolin Unisyn CLP 150	Carter SH 150
-20°C ~ +10°C	CLP(CC)	VG150	Mobilgear 600 XP 150	Shell Omala S2 G 150	BP Energol GR-XP 150	Klubersynth GEM 1-150 N	Meropa 150	Tribol 1100/150	Optigear BM 150	Renolin CLP 150	Carter EP 150
-20°C ~ +40°C	CLP PG	VG220	Mobil Glygoyle 220	Shell Omala S4 WE 220	BP Enersyn SG-XP 220	Klubersynth GH 6-220	Synlube CLP 220	Tribol 800/220	Optiflex A 220	Renolin PG 220	Carter SY 220
-40°C ~ +20°C	CLP HC	VG 68	Mobil SHC626	Shell Omala S4 GX 68	-	-	-	-	-	Renolin Unisyn CLP68	-
-40°C ~ +0°C	CLP HC	VG32	Mobil SHC 624	-	-	Kluber-Summit HySyn FG-32	Cetus PAO 46	-	Alphasyn T32	Renolin Unisyn OL 32	Dacnis SH32

減速機負載特徵表 Charge Characteristic Chart

<A> 均勻負載 Uniform load 中等沖擊負載 Moderate shock load <C> 強烈沖擊負載 Heavy shock load

風機類 Air blowers	負載類別	起重機類 Hoist	負載類別
風機 (軸向與徑向) Air blower(axial or radial)	A	轉臂式起重傳動齒輪裝置 Bracket swing gear assembly	B
冷卻塔風扇 Fan of cooling tower	B	卷揚機齒輪傳動裝置 Hoist gear assembly	A
引風機 Induced draught fan	B	吊桿起落齒輪傳動裝置 Derrick gear assembly	B
螺旋活塞式風機 Rotary piston type fan	B	轉向齒輪傳動裝置 Steering gear assembly	B
蝸輪式風機 Turbo-fan	A	行走齒輪傳動裝置 Moving gear assembly	C
建築機械類 Construction machinery	負載類別	塑料機器類 Plastic equipments	負載類別
混凝土攪拌機 Concrete mixer	B	壓光機 Glazing press	B
卷揚機 Hoist	B	擠壓機 Ejecting press	B
路面建築機器 Road building machinery	B	螺旋壓出機 Spiral extruding machine	B
鑽孔機 Boring mill	B	混合機 Mixing machine	B
化工機械類 Chemical machinery	負載類別	石料 & 陶土料加工機械類 Stone porcelain clay processing equipments	負載類別
攪拌機 (液體) Mixer(liquid)	A	球磨機 Ball crusher	B
攪拌機 (半液體) Mixer(half liquid)	B	擠壓料碎機 Ejecting press and breaker	C
離心機 (重型) Centrifuge(heavy)	B	破碎機 Breaker	C
離心機 (輕型) Centrifuge(light)	A	壓碎機 Brick press	C
冷卻混筒 Cooling rolling drum	B	錘料碎機 Beating crusher	C
乾燥滾筒 Dry rolling drum	B	轉爐 Converter	C
攪拌機 Mixer	B	筒型磨機 Cylinder mill	C
壓縮機類 Compressor	負載類別	洗衣類 Washing machine	負載類別
活塞式壓縮機 Piston type compressor	C	滾筒 Rolling drum	B
渦輪式壓縮機 Turbo-compressor	B	洗衣機 Washing machine	B
水處理設備類 Water treatment equipments	負載類別	水處理設備類 Water treatment equipments	負載類別
鼓風機 Air blast	B	螺桿泵 Screw pump	B

傳送運輸機類 Transmission freighter	負載類別	挖泥機類 Land dredger	負載類別
平板傳送機 Pan conveyer	B	鼓式傳送機 Drum-type conveyer	C
平衡秤升降器 Balance lifter	B	鼓式轉動機 Drum-type rotation wheel	C
槽式傳送機 Trough conveyer	B	挖泥頭 Dredger head	C
帶式傳送機 (大件) Ribbon conveyer(large piece)	C	機動絞車 Power crab	B
帶式傳送機 (碎料) Ribbon conveyer(small piece)	B	泵 Pump	B
鼓式麵粉傳送機 Drum-type flour conveyer	A	泵轉動齒輪傳動裝置 Pump turning gear assembly	B
鏈式傳送機 Chain conveyer	B	行走齒輪傳動裝置 (履帶) Moving gear assembly(apron wheel)	C
環式傳送機 Ring type conveyer	B	行走齒輪傳動裝置 (鐵軌) Moving gear assembly (track)	B
貨物升降機 Lifter	B	泵類 PUMPS	負載類別
卷揚機 Hoist	B	離心泵 (稀液體) Centrifugal pump (thin liquid)	A
連桿式傳送機 Crank-connecting conveyer	B	離心泵 (半液體) Centrifugal pump(half liquid)	B
載入升降機 Lifter	B	活塞泵 Displacement pump	C
螺旋式傳送機 Worm conveyer	B	柱塞泵 Plunger pump	C
鋼帶式傳送機 Steel-band conveyer	B	壓力泵 Force pump	C
鏈式槽型傳送機 Chain reed-type conveyer	B		
絞車運輸機 Crab freighter	B		
製紙機類 Papering machine	負載類別	食品工業機械類 Foodstuff processing machinery	負載類別
壓光機 Glazing press	C	灌注及裝箱機器 Placer or box filler	A
多層紙板機 Multilayer paper board machine	C	甘蔗壓榨機 Cane crusher	A
乾燥滾筒 Drying cylinder	C	甘蔗切斷機 Cane cutter	B
上光滾筒 Glazing cylinder	C	甘蔗粉碎機 Cane crusher	C
攪漿機 Masher	C	攪拌機 Mixer	B
攪漿擦碎機 Mashing and breaking machine	C	醬狀物吊筒 Paste bucket	B
吸水滾 Suction roll	C	包裝機 Packager	A
潮紙滾壓機 Wet paper roller machine	C	糖和甜菜切斷機 Beet slicer	B
吸水滾壓機 Water absorbing roller machine	C	糖和甜菜清洗機 Beet washing machine	B
威羅機 Welon machine	C		

橡膠機械類 Rubber equipment	負載類別	紡織機械類 Textile machinery	負載類別
壓光機 Glazing press	B	送料機 Feeding machine	B
擠壓機 Ejecting press	C	織布機 Loom machine	B
混合攪拌機 Mixing stir machine	B	印染機 Dyeing machine	B
捏合機 Kneading machine	B	精制筒 Purified drum	B
滾壓機 Roller machine	C	威羅機 Welon machine	B
金屬滾軋機械類 Metal roller machine	負載類別	金屬加工機床類 Metal processing machine tools	負載類別
鋼環剪斷機 Steel cutter	C	動力軸 Power shaft	A
鏈式輸送機 Chain conveyer	B	鍛造機 Drop hammer	C
冷軋機 Cold mill	C	鍛錘 Machine tool and necessary	C
連鑄成套運送機 Continuous casting equipments	B	機床與輔助裝置 Machine tool and necessary	A
冷床 Cold bed	B	機床與主要傳動裝置 Machine tool and main driving equipment	B
剪料機頭 Cropper	C	金屬刨床 Metal facing machine	C
交叉轉彎輸送機 Cross steering transmitter	B	板材矯直機床 Plate-leveling machine tool	C
除鏽機 Deruster	C	沖床 Backing-out punch	C
重型和中型板軋機 Heavy and medium steel mill	C	沖壓機床 Press machine tool	C
棒材切軋機 Bar mill	C	剪床 Cutting machine	B
棒材轉運機械類 Bar transmission equipments	B	薄板彎曲機床 Sheet bending machine tool	B
棒材堆料機 Bar pusher	B	發動及轉換器類 Motor and conversion equipments	負載類別
推床 Push bed	B	頻率轉換器 Frequency converter	C
剪板機 Shears	C	發動機 Motor	C
板材擺升降台 Lumber elevator platform	B	焊接發動機 Welding motor	C
軋軋調整裝置 Roll adjusting equipments	B	石油工業機械類 Petroleum processing machinery	負載類別
輓式矯直機 Roller leveling machine	B	輸油管油泵 Pump of oil pipe line	B
軋鋼機軋道 (重型) Mill rolling way (heavy)	C	轉子鑽井設備 Rotary drilling equipment	C
軋鋼機軋道 (輕型) Mill rolling way (light)	B	木料加工機床 Wood processing machine tool	負載類別
薄板軋機 Sheet rolling mill	C	剝皮機 Barker	C
修整剪切機 Trimming shears	B	刨床 Facing machine	B
焊管機 Pipe welder	C	鋸床 Saw bench	C
焊管機 (帶材與線材) Soldering machine(belt material and wire rod)	B	木材加工機床 Wood processing machine tool	A
線材拉拔機 Wire drawbench	B		

NOTE:

A series of horizontal dashed lines for writing notes.