

1. 結構 . 特性 . 應用



機殼: 高剛性FC-25鑄鐵鑄造

齒輪: 鉻鉬鋼螺線傘齒輪 . 表面硬化處理及研磨

主軸: 碳鋼經高精度研磨處理 . 高懸重負荷能力

軸承: 配備重負荷能力之滾錐軸承

油封: 雙封唇片油封 . 兼具防塵與防漏油能力

Housing: High tensile strength cast iron (FC-25)

Gear: Cr-Mo-Steel Spiral Bevel Gear, surface hardened and polished.

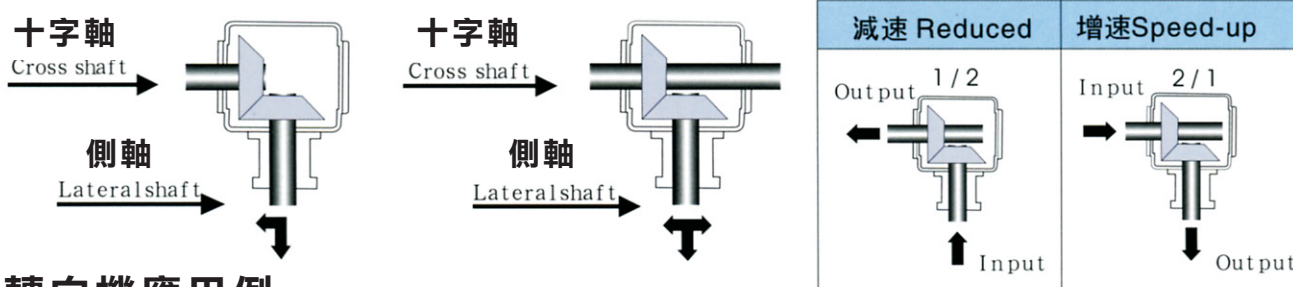
Mainshaft: Carbon alloy steel with precision grinding, high capacity for overhung and thrust loading.

Bearing: Taper roller bearings for high load capacity

Sealer: Double lip oil sealer, prevent both dust and leakage

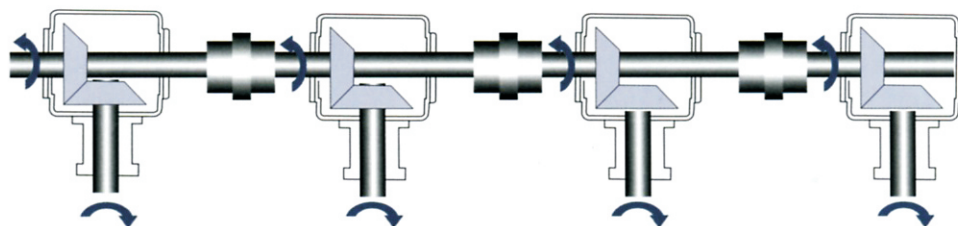
轉向機基本轉動方式

Basic type of transmission of Miter Gear box:



轉向機應用例

Examples of Applications for Miter Gear box:



特殊品

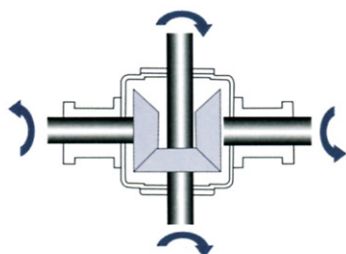
Special Design:

兩側旋向相反

Two sides rotate in opposite directions

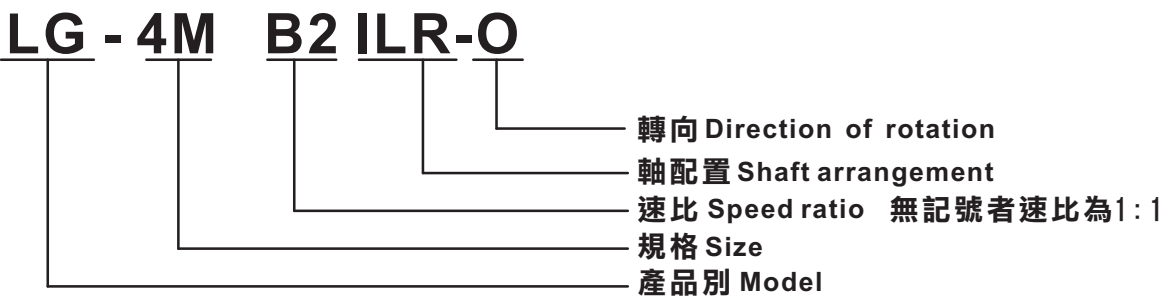
雙出力軸

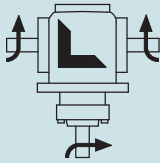
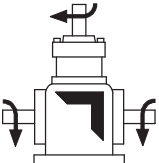
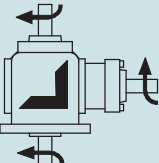
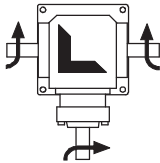
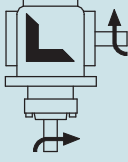
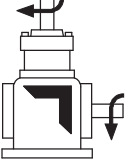
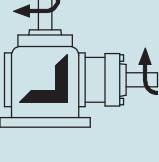
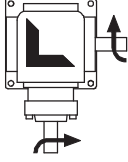
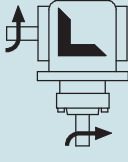
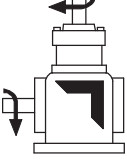
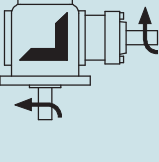
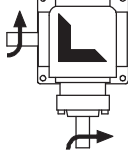
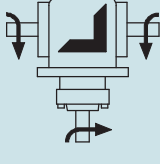
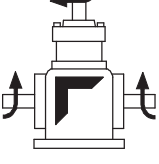
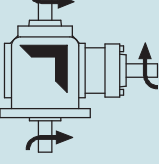
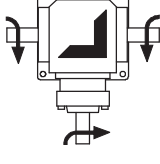
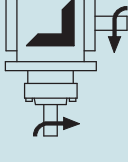
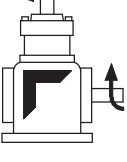
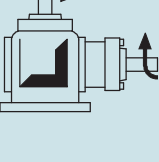
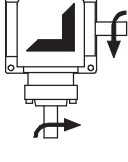
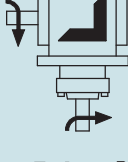
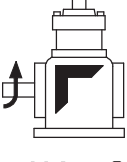
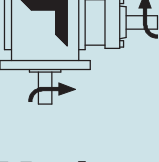
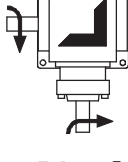
Dual output shaft



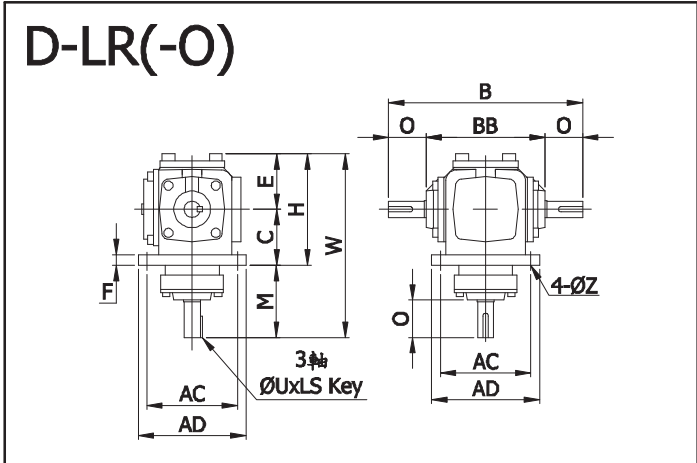
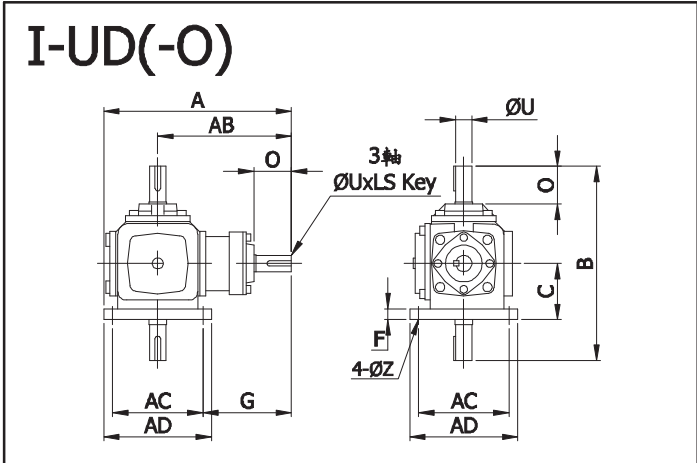
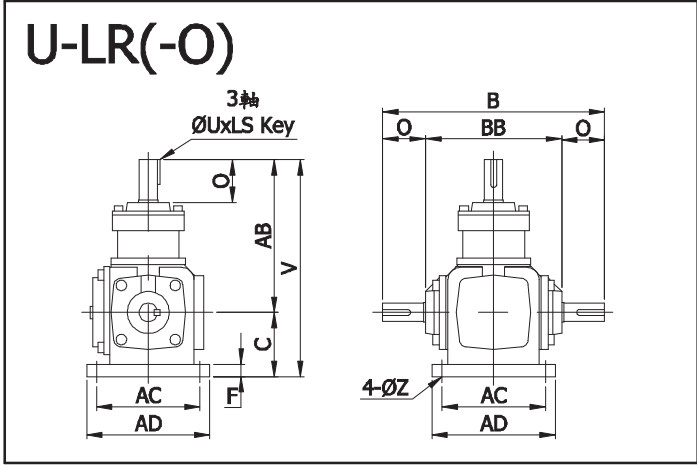
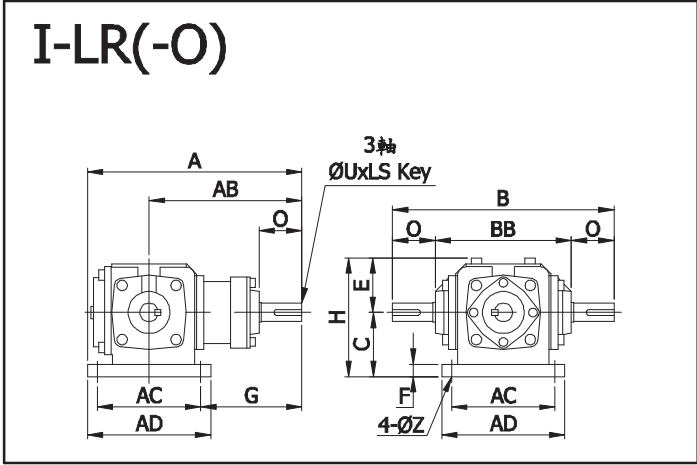
單出力軸 Single output shaft		雙出力軸 Dual output shaft	
2 Shaft Type	3 Shaft Type	3 Shaft Type	4 Shaft Type

2. 樣式說明 How to order



 DLR	 ULR	 IUD	 ILR
 DR	 UR	 IU	 IR
 DL	 UL	 ID	 IL
 DLR-O	 ULR-O	 IUD-O	 ILR-O
 DR-O	 UR-O	 IU-O	 IR-O
 DL-O	 UL-O	 ID-O	 IL-O

3. 尺寸規格表



尺寸規格表 DIMENSIONS(M M)

機型 MODEL	外型尺寸												固定尺寸				側軸 十字軸			GD ² (Kgf-m) ²	油量 (L)	重量 (kg)
	A	AB	B	BB	C	E	H	G	M	O	V	W	AC	AD	F	Z	ØU	LS	Key			
LG 2M	174	124	180	110	52	50	102	82	72	35	176	174	84	100	10	9	15	33	5x5	0.00016	0.2	3.2
LG 4M	258	180	232	151	76	72	148	117.5	103	40	256	251	125	155	16	11	19*	38	6x6	0.00048	0.3	10.5
LG 6M	317	222	314	206	90	92	182	146	132	54	312	314	152	190	20	14	25	50	8x7	0.00448	1.2	21
LG 7M	372	265	350	220	100	90	190	178	165	65	365	355	174	210	20	14	32	62	10x8	0.01125	1.6	31
LG 8M	425	308	416	260	115	111	226	210.5	192	78	423	419	195	235	22	14	40	75	12x8	0.01536	2.0	45
LG 10M	502	360	480	290	140	118	258	240	220	95	500	478	240	285	25	16	45	90	14x9	0.07365	3.5	78
LG 12M	585	415	550	339	175	165	340	270	240	106	590	580	290	360	32	21	50	100	14x9	0.08158	7	124
LG 16M	650	455	630	410	200	186	386	290	255	110	655	641	330	390	40	25	60	105	18x11	0.27200	10.5	190

*4M 2：1 軸心有Ø16 Key 5x5x30L & Ø19 6x6x30L 兩種

4. 選用計算 . 傳達能力

十字轉向機機型選用：
步驟一：決定補正係數(表一)。
步驟二：選擇適當轉向機需滿足扭力
或kw值需求在(表二)(表三)指
示速比及出力軸轉速。

電動機electric motor 負荷性質 load conditions	使用時間 operation time			
	0.5	2	10	24
均一負荷 uniform load	0.9	1.0	1.0	1.25
	(0.9)	(1.0)	(1.25)	(1.50)
中負荷 moderate shock	1.0	1.0	1.25	1.50
	(1.0)	(1.25)	(1.50)	(1.75)
重負荷 heavy shock	1.0	1.25	1.50	1.75
	(1.25)	(1.50)	(1.75)	(2.0)

表(2) 速比1：1 Table(2) Speed ratio 1：1

R.P.M.		3000	2000	1750	1450	1150	870	580	300	100	10
Model	KW	2.89	2.06	1.82	1.52	1.21	0.95	0.62	0.33	0.11	0.008
	Kgf-m	0.91	0.98	0.99	1.00	1.01	1.04	1.04	1.07	1.10	1.13
LG 4M	KW	6.55	5.06	4.76	4.19	3.56	2.94	2.08	1.10	0.37	0.03
	Kgf-m	2.08	2.41	2.60	2.76	2.95	3.23	3.42	3.51	3.63	3.73
LG 6M	KW	19.3	15.8	14.5	12.6	10.7	8.9	6.24	3.34	1.15	0.11
	Kgf-m	6.16	7.53	7.90	8.33	8.92	9.77	10.28	10.62	11.05	11.47
LG 7M	KW		23.0	21.0	18.7	15.6	12.9	9.69	5.39	1.87	0.18
	Kgf-m		10.9	11.4	12.3	13.0	14.1	15.9	17.1	17.8	18.5
LG 8M	KW		48.7	44.4	38.76	31.8	24.6	16.8	9.0	3.14	0.32
	Kgf-m		23.2	24.2	25.5	26.4	27.0	27.7	28.7	30.0	31.2
LG 10M	KW		67.1	63.4	55.5	47.3	37.9	26.0	13.9	4.8	0.5
	Kgf-m		31.0	34.5	36.5	39.2	41.5	42.7	44.4	46.4	48.6
LG 12M	KW			91.3	81.6	69.5	57.3	42.2	22.7	7.9	0.83
	Kgf-m			50.8	53.7	57.7	62.9	69.5	72.4	75.9	79.7

表(3) 速比2：1 Table(3) Speed ratio 2：1

R.P.M.		3000	2000	1750	1450	1150	870	580	300	100	10
Model	KW										
	Kgf-m										
LG 4M	KW	4.72	3.65	3.37	2.82	2.26	1.73	1.17	0.61	0.20	0.01
	Kgf-m	3.00	3.48	3.68	3.71	3.76	3.79	3.85	3.94	4.04	4.20
LG 6M	KW	13.26	9.09	8.02	6.71	5.43	4.14	2.83	1.49	0.51	0.05
	Kgf-m	8.4	8.6	8.7	8.8	9.01	9.09	9.35	9.52	9.86	10.03
LG 7M	KW		12.07	10.79	9.01	7.26	5.57	3.79	2.01	0.68	0.06
	Kgf-m		11.47	11.73	11.90	12.07	12.24	12.49	12.83	13.17	13.60
LG 8M	KW		16.06	14.36	11.90	9.60	7.39	5.03	2.66	0.91	0.09
	Kgf-m		15.3	15.6	15.6	15.8	16.2	16.57	17	17.51	18.1
LG 10M	KW		27.2	23.9	20.0	16.1	12.4	8.5	4.5	1.5	0.16
	Kgf-m		25.1	26.1	26.4	26.7	27.2	27.9	28.8	29.8	30.9
LG 12M	KW			41.0	34.0	26.9	20.4	13.8	7.4	2.55	0.26
	Kgf-m			44.7	44.7	44.7	44.7	45.4	47.0	48.7	50.8

To Select correct model for miter gear box：
Step 1：Determine the service factor (table 1)
Step 2：Select the proper gear box which satisfies both
torque or kw requirement at the specified speed
ratio and shaft rpm(table2,3)

扭力需求≥使用扭力*補正係數
kw值需求≥使用kw值*補正係數

Torque requiremnet≥Applied torque * Service factor
kw Requirement≥Applied kw * Service factor

註一：均一負荷及連續運轉其補正係數為1.0
註二：每小時啟動停止10回合以上採用()內數值

Note1:The service factor for uniform load and continuous
operation is 10
Note2:Use the number in ()for stap over 10 cycles per hour .

5. 潤滑 . 安裝 Lubrication and Mounting

潤滑：

適當的潤滑油使用，可以發揮轉向機的效率，並提高其運轉的壽命。

▲初期使用二週或100-200小時，為初摩耗期，這之間可能有少許金屬摩耗粉粒，請務必清潔內部，並換新潤滑油。

▲長期使用時，每半年~一年或者1000~2000小時，更換一次潤滑油。

潤滑油的種類：

本產品潤滑油採用中國石油多效齒輪油85#~140#，低轉速、輕負荷條件，建議採用多效齒輪油85#，重負荷、高溫的條件，建議採用多效齒輪油140#。

Lubrication:

Proper application of lubricating oil will raise the efficiency and prolong the life of the Miter Gears.

▲The first two weeks or first 100 to 200 hours are break-in period. There might be some tiny metal powders during this time. Please clean interior and replace with new lubricating oil after break-in.

▲For normal operation, replace lubricating oil every six months to one year or 1000 to 2000 hours whichever comes sooner.

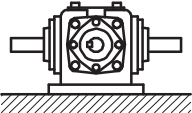
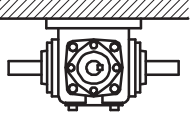
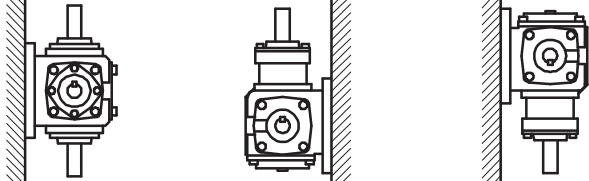
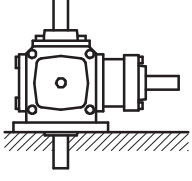
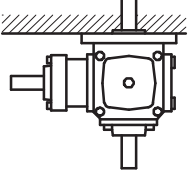
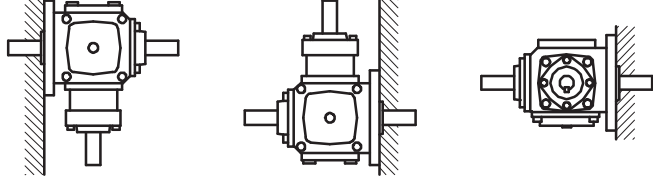
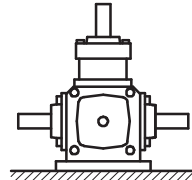
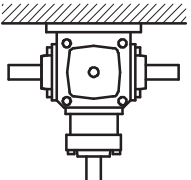
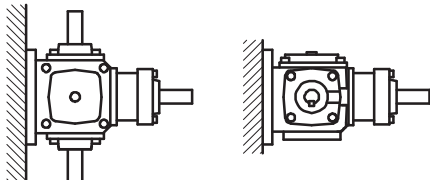
The choices of lubricating oil :

The product use Universal Gear Oil 85# to 140# by China Petroleum Corp. Use Universal Gear Oil 120# for heavy load and high temperature .

Note : For special operation , please contact the manufacturer or our dealer.

安裝：

Mounting

	臥式 Horizontal	吊掛式 Over Hung	側壁式 Side Wall
ILR ILR-O IR IR-O IL IL-O			
IUD IUD-O IU IU-O ID ID-O			
ULR ULR-O UR UR-O UL UL-O			
DLR DLR-O DR DR-O DL DL-O	