

GEAR REDUCER

HORIZONTAL



SH



SHB



SHD



SV



SVD



SVB



SHL



SVL



SHLS



SVLS



SEOM



SEOM



SNEOM



SMW28



SMW



SAM50



小型齒輪減速機系列 SMALL GEAR REDUCER

馬達KW選定表扭力曲線圖

MOTOR KW SELECTION TABLE TORQUE CURVE DRAWING

(1) 本選定表係針對標準馬達（低壓三相全密式感應電動機·E級絕緣）使用而言，對於起動頻繁、變動負載或衝擊負載等特殊負載條件者，不在此限。

(2) 馬達所需KW以 $\frac{\text{必要負載轉矩}}{\text{減速機效率}}$ 計算所得決定之

- 減速機效率2段減速時為95%，3段減速時為92%
- 必要負載轉矩，如為變動負載以其等值轉矩表示之，如負載變動循環不明時，以最大轉矩使用之。
- 一般對起動轉矩不予考慮。

選用例：60HZ地區所需低速軸運轉數
60rpm負載最大轉矩6kg-m

$$\frac{\text{負載轉矩}}{\text{效率}} = \frac{6}{0.95} = 6.3\text{kg-m}$$

負載轉矩6.3kg-m之橫線與60rpm之垂直線之交點可得知馬達使用0.4KW

$$\text{計算值 馬達KW} = \frac{6.3 \times 60}{974} = 0.39\text{KW}$$

0.39KW，可選用1/2HP馬達

$$\text{減速比} = \frac{\text{出力轉數}}{\text{馬達轉數}} = \frac{60}{1800} = \frac{1}{30}$$

(1) This selection table is for standard motor (low voltage 3-phase fully-enclosed induction motor, E class insulation). But it is exclusive for the conditions of frequent starting, variable loading or impact loading etc.

(2) KW required by the motor shall be decided from the calculation of $\frac{\text{Necessary loading torque}}{\text{Reducing efficiency}}$

- The reducing efficiency of 2-stage reducer is 95%, and the reducing efficiency of 3-stage reduce is 92%.
- Necessary loading torque, if the change loading is indicated by its equivalent value or if loading change cycle is unclear, please use the maximum torque
- In general, start torque won't be considered.

EXAMPLE OF SELECTION: 60HZ district, low speed shaft required is 60RPM, Maximum torque 6Kg-m.

$$\frac{\text{Loading torque}}{\text{Efficiency}} = \frac{6}{0.95} = 6.3\text{Kg-m.}$$

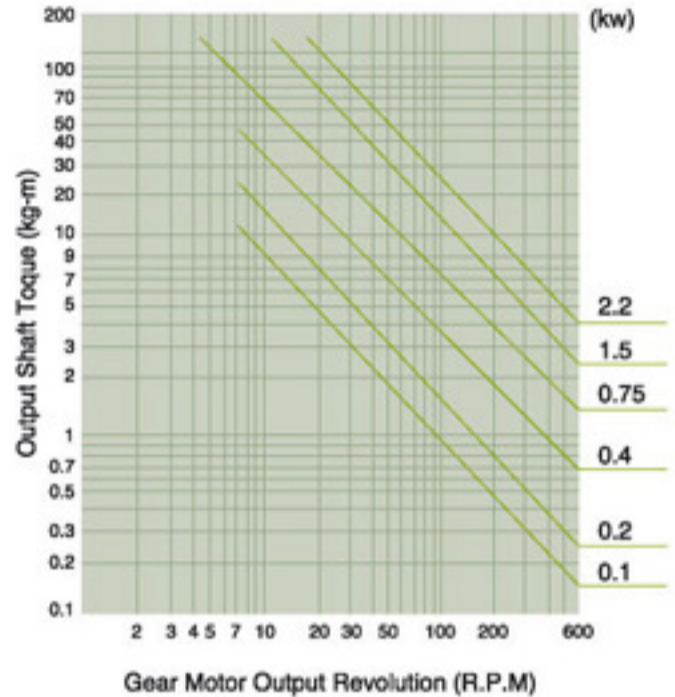
From the cross point of the cross line of loading torque 6.3Kg-m and the vertical line of 60RPM, we know the motor applied is 0.4Kw.

Calculation value:

$$\text{Motor Kw} = \frac{6.3 \times 60}{974} = 0.39\text{Kw}$$

0.39Kw can select to use of 1/2HP motor.

$$\text{Reducing ratio} = \frac{\text{Output revolving speed}}{\text{Motor RPM}} = \frac{60}{1800} = \frac{1}{30}$$



齒輪減速機性能表

GEAR REDUCER PERFORMANCE CHART.

減速比 GEAR RATIO	出力軸運轉數 OUTPUT SHAFT (R.P.M)		出力軸容許值 PERMISSIBLE VALUE FOR OUTPUT SHAFT																	
			0.1 KW			0.2 KW			0.4 KW			0.75 KW			1.5 KW			2.2 KW		
	50HZ	60HZ	型號 MODEL NO.	50HZ kg-m	60HZ kg-m	型號 MODEL NO.	50HZ kg-m	60HZ kg-m	型號 MODEL NO.	50HZ kg-m	60HZ kg-m	型號 MODEL NO.	50HZ kg-m	60HZ kg-m	型號 MODEL NO.	50HZ kg-m	60HZ kg-m	型號 MODEL NO.	50HZ kg-m	60HZ kg-m
1/3	465	570		0.17	0.13		0.3	0.25		0.75	0.6		1.6	1.0		2.5	2.0		4	3.5
1/5	300	360		0.30	0.25		0.6	0.5		1.2	1.0		2.3	1.9		4.5	3.7		6.7	5.6
1/10	150	180		0.60	0.50		1.2	1.0		2.4	2.0		4.5	3.8	12	9.0	7.5		13.4	11.2
1/15	100	120		0.09	0.75	10	1.8	1.5	11	3.6	3.0	12	6.9	5.7		13.6	11.3	13	20.0	16.8
1/20	75	90	10	1.2	1.0		2.4	2.0		4.8	4.0		9.1	7.5		18.0	15.1		26.8	22.4
1/25	60	72		1.5	1.2		3.0	2.5		6.0	5.0		11.3	9.4		22.8	18.9		33.6	28.0
1/30	50	60		1.8	1.5		3.6	3.0		7.2	6.0		13.6	11.3		27.2	22.6		40	33
1/40	37.5	45		2.3	1.9		4.6	3.9		9.3	7.8		17.5	14.6	13	35.0	29.1	14	52	43
1/50	30	36		2.9	2.4		5.8	4.8		11.6	9.7		21.9	18.3		43.7	36.4		65	54
1/60	25	30		3.5	2.9	11	7.0	5.8	12	14.0	11.6	13	26.3	21.9		52	43		67	67
1/75	20	24		4.4	3.6		8.7	7.3		17.5	14.6		32.9	27.4	14	66	55		84	84
1/100	15	18		5.8	4.9		11.6	9.7		23.3	19.4		43	36		87	73		112	112
1/120	12.5	15	11	7.0	5.8	12	14.0	11.6	13	28.0	23.3	14	52	43		88	88	15	134	134
1/150	10	12		8.7	7.3		17.5	14.6		35.0	29.2		65	54	15	110	110			
1/200	7.5	9		11.6	9.7		23.0	19.1		43.0	36.0		78	73		147	147			

齒輪減速機標準馬達規格性能參考值

SPECIFICATION & PERFORMANCE REFERENCE VALUE FOR GEAR REDUCER MOTOR

相數 PHASE	馬力 (HP)	周率 (HZ)	電壓 (V)	電流 (A)	運轉數 (R.P.M)
三相 3φ	0.1 KW	50/60	220/380	0.7/0.4	1350/1650
	0.2 KW	50/60	220/380	1.2/0.75	1350/1650
	0.4 KW	50/60	220/380	2.1/1.3	1380/1680
	0.75 KW	50/60	220/380	3.5/2.3	1400/1700
	1.5 KW	50/60	220/380	6/3.7	1410/1720
	2.2 KW	50/60	220/380	9/6	1410/1720

相數 PHASE	馬力 (HP)	周率 (HZ)	電壓 (V)	電流 (A)	運轉數 (R.P.M)
單相 1φ	0.1 KW	50/60	110/220	3.4/1.7	1350/1650
	0.2 KW	50/60	110/220	3.6/1.8	1350/1650
	0.4 KW	50/60	110/220	7.6/3.8	1350/1650
	0.75 KW	50/60	110/220	12/6	1380/1680
	1.5 KW	50/60	110/220	28/14	1400/1700

註：指定特殊電壓，不適用上述規範參考值，另行設計。

NOTES: When the need arises to determine the special voltage frequency, please contact the LI-Ming application engineering team.



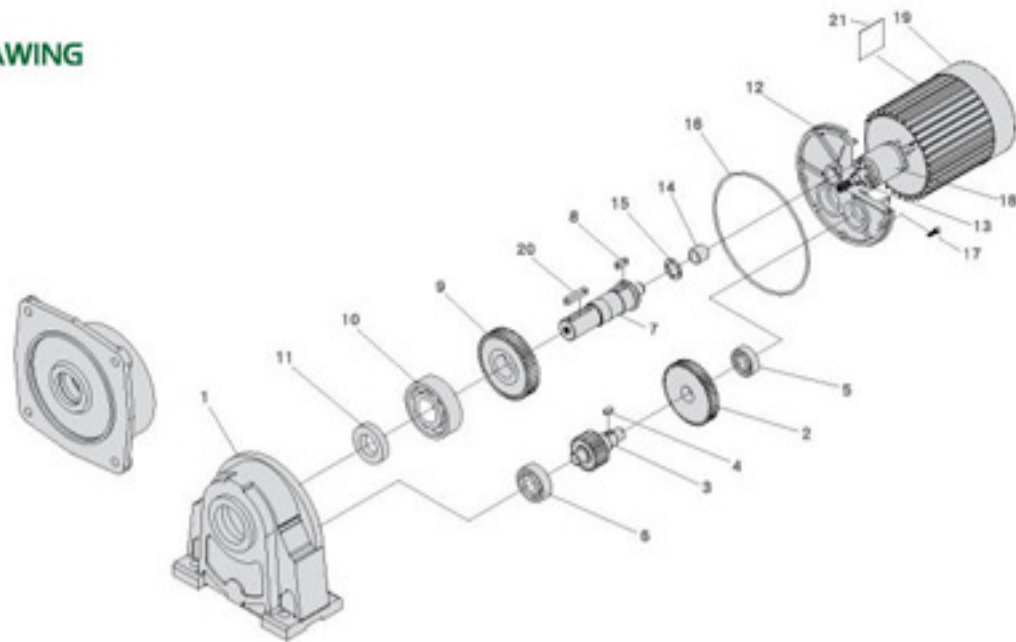
■ 二段式分解系統圖

SH 2-STAGE SYSTEM DRAWING

■ MODEL: SH(SV)

齒箱材質
Material of gear box

10 型	ADC-12
11 型	ADC-12
12 型	ADC-12
13 型	380
14 型	380
15 型	380

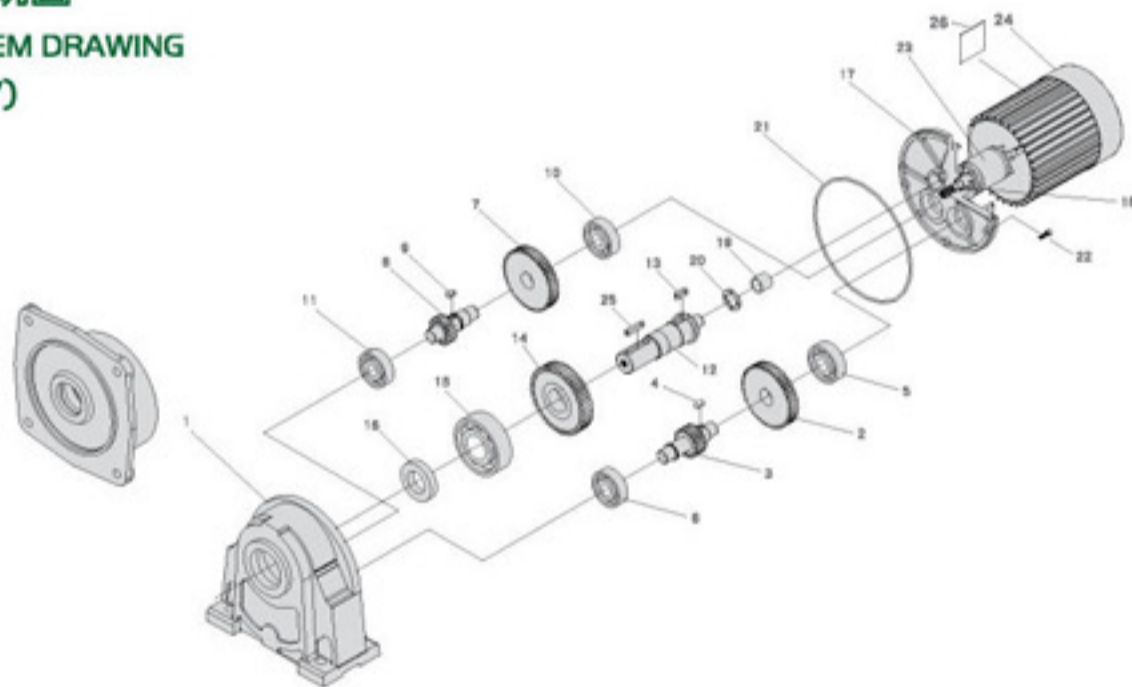


編號 No.	零件名稱 Name of parts	編號 No.	零件名稱 Name of parts	編號 No.	零件名稱 Name of parts
1	本體 Body	8	雙圓鍵 Key	15	銅墊片 Washer
2	B 齒輪 Gear B	9	D 齒輪 Gear D	16	O 形環 O-ring
3	C 齒輪 Gear C	10	軸承 Bearing	17	固定螺絲 Fixing Screw
4	雙圓鍵 Key	11	油封 Oil Seal	18	A 齒輪 Gear A
5	軸承 Bearing	12	後蓋 Rear Cover	19	馬達 Motor
6	軸承 Bearing	13	油封 Oil Seal	20	雙圓鍵 Key
7	出力軸 Output shaft	14	針狀軸承 Needle Bearing	21	銘牌 Name Plate

■ 三段式分解系統圖

SH 3-STAGE SYSTEM DRAWING

■ MODEL: SH(SV)



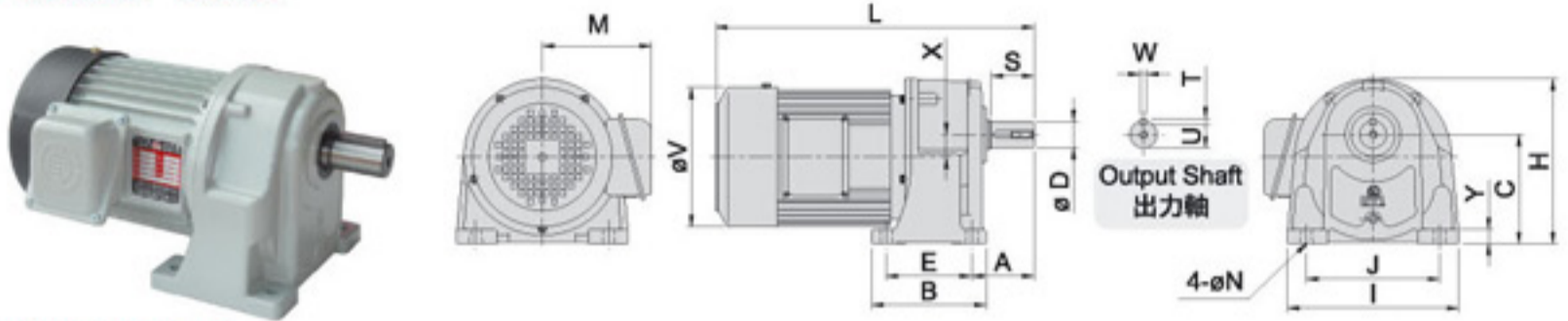
編號 No.	零件名稱 Name of parts	編號 No.	零件名稱 Name of parts	編號 No.	零件名稱 Name of parts
1	本體 Body	10	軸承 Bearing	19	針狀軸承 Needle Bearing
2	B 齒輪 Gear B	11	軸承 Bearing	20	銅墊片 Washer
3	A' 齒輪 Gear A'	12	出力軸 Output shaft	21	O 形環 O-ring
4	雙圓鍵 Key	13	雙圓鍵 Key	22	固定螺絲 Fixing screw
5	軸承 Bearing	14	D 齒輪 Gear D	23	A 齒輪 Gear A
6	軸承 Bearing	15	軸承 Bearing	24	馬達 Motor
7	B' 齒輪 Gear B'	16	油封 Oil Seal	25	雙圓鍵 Key
8	C 齒輪 Gear C	17	後蓋 Rear Cover	26	銘牌 Name Plate
9	雙圓鍵 Key	18	油封 Oil Seal		



小型齒輪減速機系列 SMALL GEAR REDUCER

■ 臥式減速機 HORIZONTAL TYPE REDUCER

■ MODEL: LK-SH



型式代號說明 LK

公司代號 COMPANY NAME	機型 TYPE	型號 MODEL	速比 GEAR RATIO	馬力 HORSE POWER	馬達 MOTOR	標準品出力軸攻牙 STANDARD OUTPUT AXLE THREADING
LK	SH 臥式 HORIZONTAL MODEL SHD 雙軸 DOUBLE SHAFT SHB 直驅 DIRECT DRIVE	10, 11, 12, 13, 14, 15	1/3 ~ 1/2000 註： 表中減速比以公稱速 比，如需實際速比，請 另告知。 Note: The reduction ratios in the table are nominal ratios. Please contact us if you need actual ratios.		A 三相 3-PHASE B 剎車 BRAKE C 特殊 SPECIAL S 單相 SINGLE PHASE	10# M6 11# M6 12# M8 13# M10 14# M12 15# M16 ★特殊品及其他除外
馬達型式容量: MOTOR MODEL CAPACITY 0.1 KW 0.2 KW 0.4 KW 0.75 KW 1.5 KW 2.2 KW						

尺寸表 Dimension

單位: m/m

馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	A	E	B	J	I	C	H	Y	N	X	L	M	V	出力軸 Output Shaft					重量 Weight (kg)約
																D	S	W	T	U	
0.1KW 1/8HPx4P	10	1/3~1/50 (1/60~1/100)	46	40	65	110	135	85	129	12	9	17	280	100	119	18	30	5	5	15	5
	11	1/60~1/200	58	65	90	130	155	95	145	13	9	18	305	100	119	22	40	7	7	18	7
0.2KW 1/4HPx4P	10	1/3~1/30 (1/40~1/60)	46	40	65	110	135	85	129	12	9	17	290	110	133	18	30	5	5	15	8
	11	1/40~1/90 (1/100~1/120)	58	65	90	130	155	95	145	13	9	18	315	110	133	22	40	7	7	18	10
0.4KW 1/2HPx4P	12	1/100~1/200	66	90	120	140	180	115	175	15	11	23	330	110	133	28	45	7	7	24	11
	11	1/3~1/30 (1/40~1/60)	58	65	90	130	155	95	145	13	9	18	320	115	147	22	40	7	7	18	12
0.75KW 1HPx4P	12	1/40~1/90 (1/100~1/200)	66	90	120	140	180	115	175	15	11	23	335	115	147	28	45	7	7	24	13
	13	1/100~1/200	78	130	165	170	210	130	202	18	13	26	365	115	147	32	55	10	8	27	16
1.5KW 2HPx4P	12	1/3~1/30 (1/40~1/60)	66	90	120	140	180	115	175	15	11	23	355	135	161	28	45	7	7	24	16
	13	1/30~1/90 (1/100~1/120)	78	130	165	170	210	130	202	18	13	26	380	135	161	32	55	10	8	27	19
2.2KW 3HPx4P	14	1/100~1/200	95	150	195	210	255	150	240	20	15	28	425	135	161	40	65	10	8	35	44
	12	(1/3~1/40)	66	90	120	140	180	115	175	15	11	23	390	150	181	28	45	7	7	24	25
1.5KW 2HPx4P	13	1/3~1/25 (1/30~1/50)	78	130	165	170	210	130	202	18	13	26	415	150	181	32	55	10	8	27	28
	14	1/60~1/100 (1/125~1/170)	95	150	195	210	255	150	240	20	15	28	460	150	181	40	65	10	8	35	46
	15	1/100~1/200	115.5	170	230	265	330	185	293	25	19	38	490	150	181	50	80	14	9	44.5	50
2.2KW 3HPx4P	13	1/3~1/25	78	130	165	170	210	130	202	18	13	26	455	150	181	32	55	10	8	27	28
	14	1/30~1/50 (1/60~1/100)	95	150	195	210	255	150	240	20	15	28	500	150	181	40	65	10	8	35	46
	15	1/60~1/100	115.5	170	230	265	330	185	293	25	19	38	515	160	212	50	80	14	9	44.5	60

- 註: 1. 表中()內數字係表示輕荷重使用。
 2. 表中重量以配合三相馬達為主，其它單相、剎車、直流、特殊等馬達重量另訂。
 3. 表中L內數字以三相為主，剎車及其它特殊馬達另訂。
 4. 馬達單頻，單雙電壓依設計所須另訂。
 5. 以上數值若有變更，恕不另行通知。

- NOTES: 1. Values shown in paranthesis () are used for light loading.
 2. Weights shown in the above chart are based on 3-phase motors, weights for single phase, brake, DC, or special motor shall be referred to specific values.
 3. Values shown in "L" column are based on 3-phase, brake for other special motor refer to specific motor refer to specific values.
 4. When the need arises to determine the special voltage frequency for single phase, please contact the Li-Ming application engineering team.
 5. Above specifications are subject to change without prior notice.

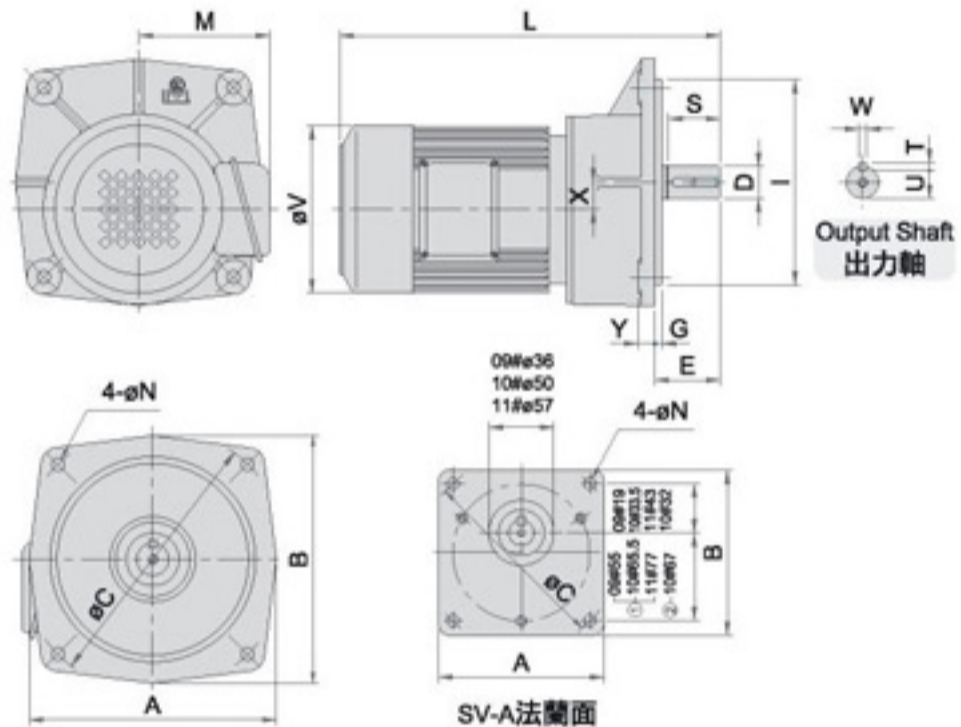


小型齒輪減速機系列 SMALL GEAR REDUCER

■ 立式減速機

VERTICAL TYPE REDUCER

■ MODEL: LK-SV



尺寸表 Dimension

單位: m/m

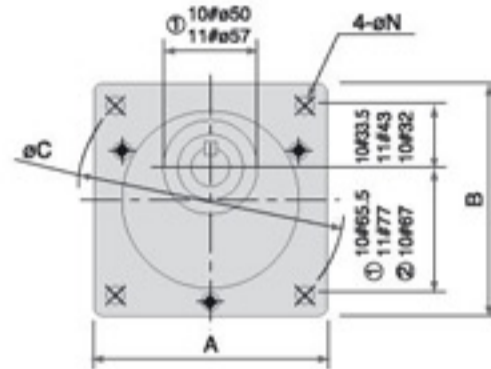
馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	尺寸 (mm)													出力軸 Output Shaft			重量 Weight (kg)	
			A	B	C	M	N	I	E	G	Y	X	L	V	D	S	W	T		U
60W	SV-A09	1/3~1/230	92	92	104	95	7		39.5	4.5	10.5	18	268	98	12	33	4	4	9.5	4
90W		1/3~1/100(1/110~1/230)	92	92	104	95	7		39.5	4.5	10.5	18	283	98	15	33	5	5	12	
0.1 KW 1/8HPx4P	SV-A10	1/3~1/50(1/60~1/100)	122	122	140	100	9		33		10	17	285	119	18	30	5	5	15	5
	SV-B10		158	158	170	100	9	120	36	3	10	17	285	119	18	30	5	5	15	5
	SV-A11	1/60~1/200	145	145	170	100	11		46	4	12	18	300	119	22	40	7	7	18	7
	SV-11		174	174	185	100	11	140	50	4	12	18	300	119	22	40	7	7	18	7
0.2 KW 1/4HPx4P	SV-A10	1/3~1/30(1/40~1/60)	122	122	140	110	9		33		10	17	290	133	18	30	5	5	15	5
	SV-B10		158	158	170	110	9	120	36	3	10	17	290	133	18	30	5	5	15	8
	SV-A11	1/40~1/90(1/100~1/120)	145	145	170	110	11		46	4	12	18	315	133	22	40	7	7	18	10
	SV-11		174	174	185	110	11	140	50	4	12	18	315	133	22	40	7	7	18	10
0.4 KW 1/2HPx4P	12	1/100~1/200	217	217	235	110	11	180	58	6	15	23	330	133	28	45	7	7	24	11
	SV-A11	1/3~1/30(1/40~1/60)	145	145	170	115	11		46	4	12	18	320	147	22	40	7	7	18	12
	SV-11		174	174	185	115	11	140	50	4	12	18	320	147	22	40	7	7	18	12
	12	1/40~1/90(1/100~1/120)	217	217	235	115	11	180	58	6	15	23	335	147	28	45	7	7	24	13
0.75 KW 1HPx4P	13	1/100~1/200	250	250	280	115	13	220	66	5	17	26	365	147	32	55	10	8	27	16
	12	1/3~1/30(1/40~1/60)	217	217	235	135	11	180	58	6	15	23	350	161	28	45	7	7	24	16
	13	1/30~1/90(1/100~1/120)	250	250	280	135	13	220	66	5	17	26	380	161	32	55	10	8	27	19
1.5 KW 2HPx4P	14	1/100~1/200	260	276	310	135	18	230	77	5	20	28	425	161	40	65	10	8	35	44
	12	(1/3~1/40)	217	217	235	150	11	180	58	6	15	23	390	181	28	45	7	7	24	25
	13	1/3~1/25(1/30~1/50)	250	250	280	150	13	220	66	5	17	26	415	181	32	55	10	8	27	28
2.2 KW 3HPx4P	14	1/60~1/100(1/125~1/170)	260	276	310	150	18	230	77	5	20	28	460	181	40	65	10	8	35	48
	13	1/3~1/25	250	250	280	150	13	220	66	5	17	26	455	181	32	55	10	8	27	28
	14	1/30~1/50(1/60~1/100)	260	276	310	150	18	230	77	5	20	28	500	181	40	65	10	8	35	48

- 註: 1.表中()內數字係表示輕荷重使用。
2.表中重量以配合三相馬達為主, 其它單相、剎車、直流、特殊等馬達重量另訂。
3.表中L內數字以三相為主, 剎車及其它特殊馬達另訂。
4.馬達單速、單雙電壓依設計所需另訂。
5.以上數值若有變更, 恕不另行通知。

NOTES:

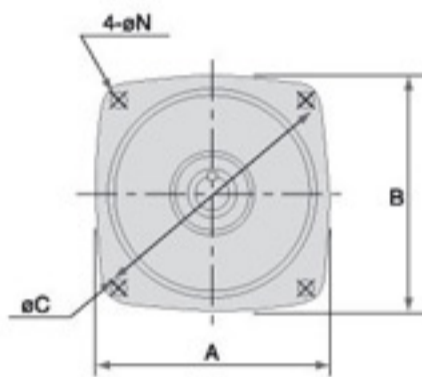
- 1.Values shown in paranthesis () are used for light loading.
2.Weights shown in the above chart are based on 3-phase, motors, weights for single phase, brake, DC, or special motor shall be referred to specific values.
3.Values shown in "L" column are based on 3-hase, brake for other special motor refer to specific values.
4.When the need arises to determine the special voltage frequency for single phase, please contact the Li-Ming application engineering team.
5.Above specifications are subject to change without prior notice.

■ 立式雙軸式 VERTICAL TYPE REDUCER ■ MODEL: LK-SVD

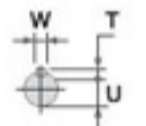


SVD-A法蘭面

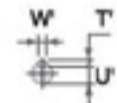
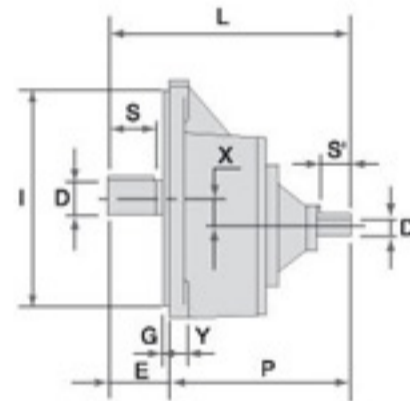
- ① 型號Model : 09,10, 11 有凸托架 (WITH CONVEX TRAILER)
- ② 型號Model : 10 無凸托架 (WITHOUT CONVEX TRAILER)



SVD (B法蘭面)
型號Model : 10, 11, 12, 13, 14



出力軸
Output shaft



入力軸
Input shaft

尺寸表 Dimension

單位: m/m

馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	尺寸 (mm)													出力軸 Output Shaft					入力軸 Input Shaft					重量 Weight (kg)
			A	B	C	N	I	X	G	Y	E	P	L	D	S	W	T	U	D'	S'	W'	T'	U'			
0.1 KW 1/8HPx4P	SVD-A10	1/3~1/50(1/60~1/100)	122	122	140	9	/	17	/	10	33	134	167	18	30	5	5	15	11	20	4	4	9	3		
	SVD-B10		158	158	170	9	120	17	3	10	36	131	167	18	30	5	5	15	11	20	4	4	9	3		
	SVD-A11	1/60~1/200	145	145	170	11	/	18	4	12	46	140	185	22	40	7	7	18	11	20	4	4	9	6		
	SVD-11		174	174	185	11	140	18	4	12	50	140	190	22	40	7	7	18	11	20	4	4	9	6		
0.2 KW 1/4HPx4P	SVD-A10	1/3~1/30(1/40~1/60)	122	122	140	9	/	17	/	10	33	146	179	18	30	5	5	15	12	25	4	4	9	3		
	SVD-B10		158	158	170	9	120	17	3	10	36	143	179	18	30	5	5	15	12	25	4	4	10	3		
	SVD-A11	1/40~1/90(1/100~1/120)	145	145	170	11	/	18	4	12	46	155	200	22	40	7	7	18	12	25	4	4	10	6		
	SVD-11		174	174	185	11	140	18	4	12	50	155	205	22	40	7	7	18	12	25	4	4	10	6		
0.4 KW 1/2HPx4P	12	1/100~1/200	217	217	235	11	180	23	6	15	58	160	220	28	45	7	7	24	12	25	4	4	10	7		
	SVD-A11	1/3~1/30(1/40~1/60)	145	145	170	11	/	18	4	12	46	165	210	22	40	7	7	18	14	30	5	5	11	6		
	SVD-11		174	174	185	11	140	18	4	12	50	165	215	22	40	7	7	18	14	30	5	5	11	6		
	12	1/40~1/90(1/100~1/120)	217	217	235	11	180	23	6	15	58	170	230	28	45	7	7	24	14	30	5	5	11	7		
0.75 KW 1HPx4P	13	1/100~1/200	250	250	280	13	220	26	5	17	66	190	260	32	55	10	8	27	14	30	5	5	11	10		
	12	1/3~1/30(1/40~1/60)	217	217	235	11	180	23	6	15	58	190	250	28	45	7	7	24	19	35	5	5	16	8		
	13	1/30~1/90(1/100~1/120)	250	250	280	13	220	26	5	17	66	210	280	32	55	10	8	27	19	35	5	5	16	11		
1.5 KW 2HPx4P	14	1/100~1/200	260	278	310	18	230	28	5	20	77	242	319	40	65	10	8	35	19	35	5	5	16	34		
	12	(1/3~1/40)	217	217	235	11	180	23	6	15	58	210	270	28	45	7	7	24	24	40	7	7	20	8		
	13	1/3~1/25(1/30~1/50)	250	250	280	13	220	26	5	17	66	225	295	32	55	10	8	27	24	40	7	7	20	11		
2.2 KW 3HPx4P	14	1/60~1/100(1/125~1/170)	260	278	310	18	230	28	5	20	77	257	334	40	65	10	8	35	24	40	7	7	20	34		
	14	1/30~1/50(1/60~1/100)	260	278	310	18	230	28	5	20	77	257	334	40	65	10	8	35	24	40	7	7	20	34		

註: 表中 () 內數字係表示輕荷重使用。 NOTE: Values shown in parenthesis () are used for light loading.

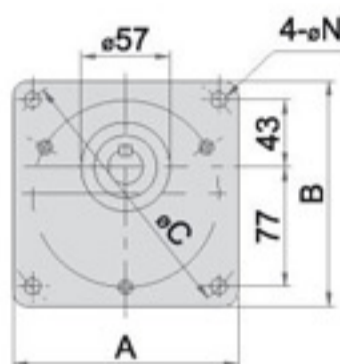


小型齒輪減速機系列 SMALL GEAR REDUCER

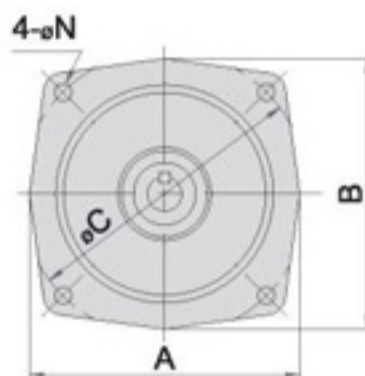
■ 立式馬達插入式減速機

VERTICAL MOTOR-DRIVEN REDUCER

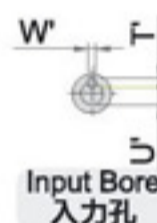
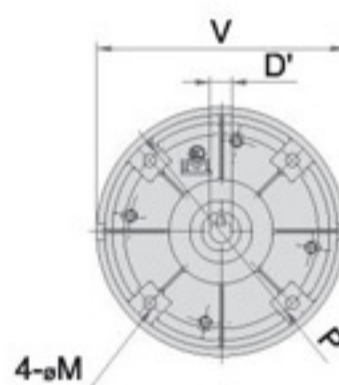
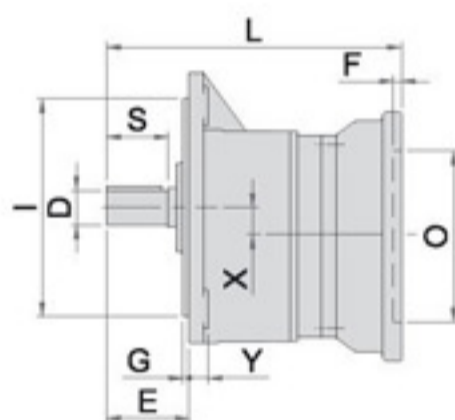
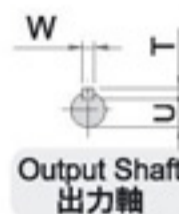
■ MODEL: LK-SVB



SVB-A法蘭面
型號Model:11



SVB (B法蘭面)
型號Model:11, 12, 13, 14



尺寸表 Dimension

單位: m/m

馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	SVB-A													出力軸 Output Shaft				入力孔 Input Bore				重量 Weight (kg)			
			A	B	C	N	I	E	G	Y	X	L	F	O	P	M	V	D	S	W	T	U	D'		W'	T'	U'
0.1 KW 1/8HPx4P	SVB-A11	1/60~1/200	145	145	170	11	/	46	4	12	18	185	5	110	130	8	160	22	40	7	7	18	11	4	4	9	6
	SVB-11		174	174	185	11	140	50	4	12	18	190	5	110	130	8	160	22	40	7	7	18	11	4	4	9	6
0.2 KW 1/4HPx4P	SVB-A10	1/3~1/30 (1/40~1/60)	122	122	140	9	/	33	/	10	17	164	5	110	130	8	160	18	30	5	5	15	11	4	4	9	3
	SVB-10		158	158	170	9	120	36	3	10	17	164	5	110	130	8	160	18	30	5	5	15	11	4	4	9	3
	SVB-A11	1/40~1/90	145	145	170	11	/	46	4	12	18	185	5	110	130	8	160	22	40	7	7	18	11	4	4	9	6
	SVB-11		174	174	185	11	140	50	4	12	18	190	5	110	130	8	160	22	40	7	7	18	11	4	4	9	6
0.4 KW 1/2HPx4P	12	1/100~1/200	217	217	235	11	180	58	6	15	23	210	5	110	130	8	160	28	45	7	7	24	11	4	4	9	7
	SVB-A11	1/3~1/30	145	145	170	11	/	46	4	12	18	185	5	110	130	8	160	22	40	7	7	18	14	5	5	11.5	5
	SVB-11		174	174	185	11	140	50	4	12	18	190	5	110	130	8	160	22	40	7	7	18	14	5	5	11.5	5
	12	1/40~1/90	217	217	235	11	180	58	6	15	23	210	5	110	130	8	160	28	45	7	7	24	14	5	5	11.5	7
0.75 KW 1HPx4P	13	1/100~1/200	250	250	280	13	220	66	5	17	26	235	5	110	130	8	160	32	55	10	8	27	14	5	5	11.5	10
	12	1/3~1/30	217	217	235	11	180	58	6	15	23	225	5	130	165	10	200	28	45	7	7	24	19	6	6	16	6
	13	1/30~1/90	250	250	280	13	220	66	5	17	26	250	5	130	165	10	200	32	55	10	8	27	19	6	6	16	10
1.5 KW 2HPx4P	14	1/100~1/200	260	276	310	18	230	77	5	20	28	292	5	130	165	10	200	40	65	10	8	35	19	6	6	16	34
	12	(1/3~1/20)	217	217	235	11	180	58	6	15	23	235	5	130	165	10	200	28	45	7	7	24	24	8	7	20.5	7
	13	1/3~1/25	250	250	280	13	220	66	5	17	26	260	5	130	165	10	200	32	55	10	8	27	24	8	7	20.5	10
	14	1/60~1/100	260	276	310	18	230	77	5	20	28	302	5	130	165	10	200	40	65	10	8	35	24	8	7	20.5	34

註: 表中()內數字係表示輕荷重使用。

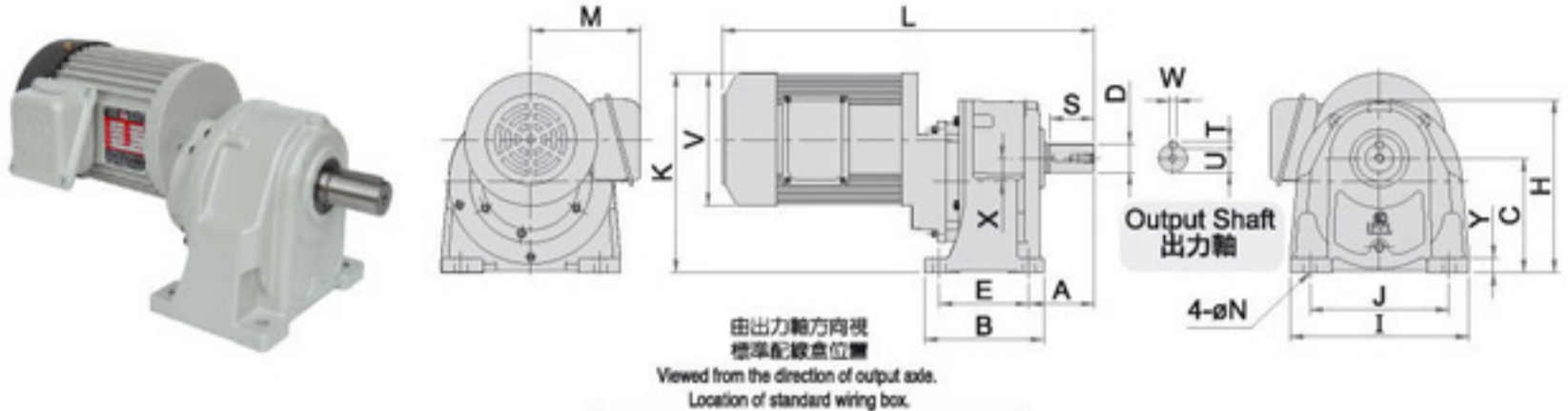
NOTE: Values shown in parenthesis () are used for light loading.



■ 臥式多速比減速機

HORIZONTAL HIGH REDUCTION GEAR REDUCER

■ MODEL: LK-SHL



最大容許扭力 Max. Permissible Torque		11	12	13	14	15
型號 Model No.		11	12	13	14	15
扭力 Torque kg-m		10	20	40	75	110

尺寸表 Dimension

單位：m/m

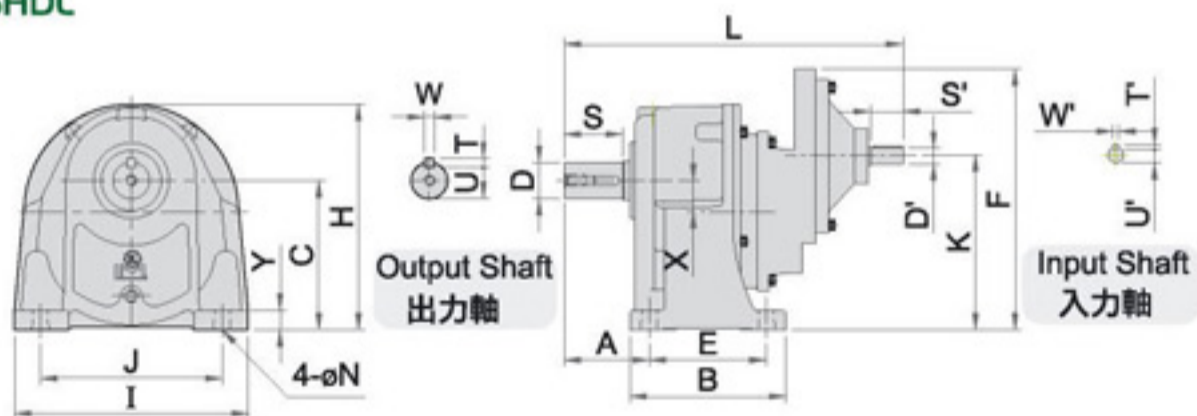
馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	A	E	B	J	I	C	H	Y	N	X	L	M	V	K	出力軸 Output Shaft					重量 Weight (kg) ^①
																	D	S	W	T	U	
0.1 KW 1/8HPx4P	11	1/200	58	65	90	130	155	95	145	13	9	18	350	100	119	175	22	40	7	7	18	12
0.2 KW 1/4HPx4P	12		66	90	120	140	180	115	175	15	11	23	375	110	133	200	28	45	7	7	24	14
0.4 KW 1/2HPx4P	13		78	130	165	170	210	130	202	18	13	26	425	115	147	229	32	55	10	8	27	19
0.75 KW 1HPx4P	14	1/2000	95	150	195	210	255	150	240	20	15	28	480	135	161	270	40	65	10	8	35	48
1.5 KW 2HPx4P	15		1/200~1/700	115.5	170	230	265	330	185	293	25	19	38	555	150	181	295	50	80	14	9	44.5

註：多速比減速機以定轉速設計，請參考齒箱最大容許扭力。 Note: This multistage gear reducer is designed to rotate at fixed speed. Please refer to the maximum allowable torque of the gear box.

■ 臥式多速雙軸減速機

HORIZONTAL HIGH GEAR REDUCER

■ MODEL: LK-SHDL



尺寸表 Dimension

單位：m/m

馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	A	E	B	J	I	C	H	Y	N	X	K	L	F	出力軸 Output Shaft					入力軸 Input Shaft					重量 Weight (kg) ^①
																D	S	W	T	U	D'	S'	W'	T'	U'	
0.1 KW 1/8HPx4P	11	1/200	58	65	90	130	155	95	145	13	9	18	114	240	172	22	40	7	7	18	11	20	4	4	9	9
0.2 KW 1/4HPx4P	12		66	90	120	140	180	115	175	15	11	23	135	265	202	28	45	7	7	24	12	25	4	4	10	10
0.4 KW 1/2HPx4P	13		78	130	165	170	210	130	202	18	13	26	161	320	232	32	55	10	8	27	14	30	5	5	11	13
0.75 KW 1HPx4P	14	1/2000	95	150	195	210	255	150	240	20	15	28	190	380	267	40	65	10	8	35	19	35	5	5	16	37
1.5 KW 2HPx4P	15		1/200~1/700	115.5	170	230	265	330	185	293	25	19	38	205	432	292	50	80	14	9	44.5	24	40	7	7	20

註：多速比減速機以定轉速設計，請參考齒箱最大容許扭力。 Note: This multistage gear reducer is designed to rotate at fixed speed. Please refer to the maximum allowable torque of the gear box.

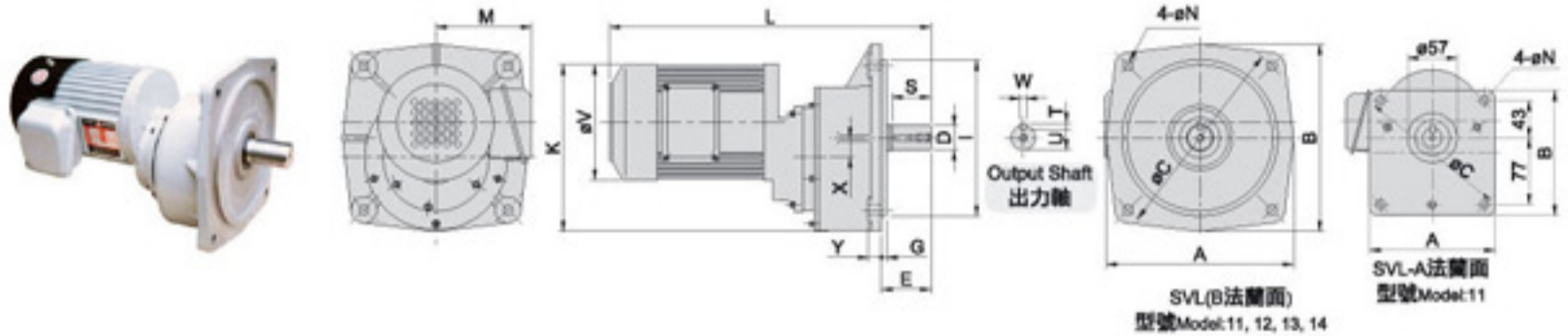


小型齒輪減速機系列 SMALL GEAR REDUCER

■ 立式多速比減速機

VERTICAL HIGH REDUTION GEAR REDUCER

■ MODEL: LK-SVL



尺寸表 Dimension

單位：m/m

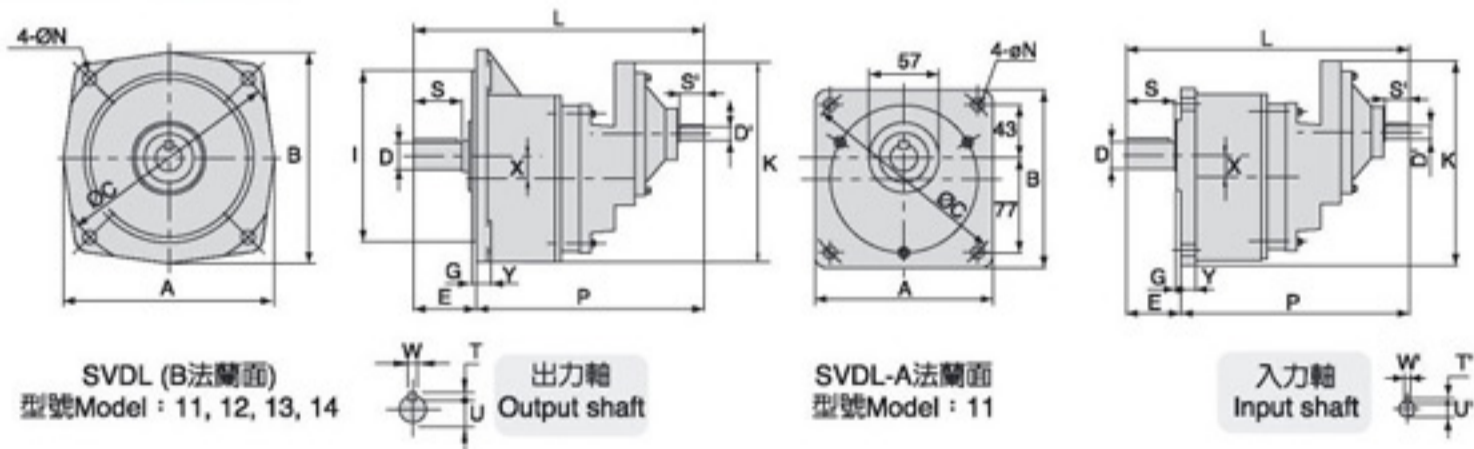
馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	A	B	C	M	N	I	E	G	Y	X	L	V	K	出力軸 Output Shaft					重量 Weight (kg)約
																D	S	W	T	U	
0.1 KW 1/8HPx4P	SVL-A11	1/200	145	145	170	100	11	46	4	12	18	350	119	168	22	40	7	7	18	12	
0.1 KW 1/8HPx4P	SVL-11		174	174	185	100	11	140	50	4	12	18	350	119	22	40	7	7	18	12	
0.2 KW 1/4HPx4P	12	1/2000	217	217	235	110	11	180	58	6	15	23	375	133	28	45	7	7	24	14	
0.4 KW 1/2HPx4P	13		250	250	280	115	13	220	66	5	17	26	425	147	32	55	10	8	27	19	
0.75 KW 1HPx4P	14		260	276	310	135	18	230	77	5	20	28	477	161	40	65	10	8	35	48	

註：多速比減速機以定轉速設計，請參考齒箱最大容許扭力。 Note: This multistage gear reducer is designed to rotate at fixed speed. Please refer to the maximum allowable torque of the gear box.

■ 立式多速比雙軸減速機

VERTICAL HIGH REDUTION GEAR REDUCER

■ MODEL: LK-SVDL



尺寸表 Dimension

單位：m/m

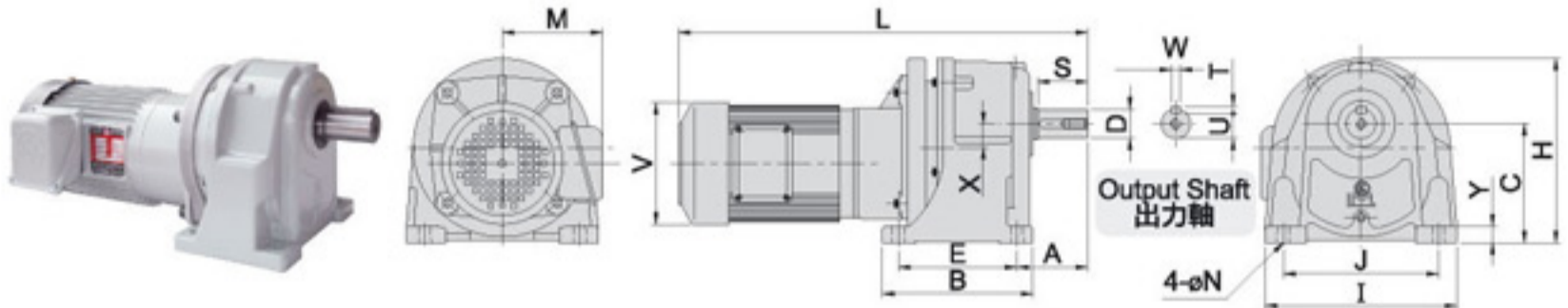
馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	A	B	C	N	I	X	G	Y	E	P	L	K	出力軸 Output Shaft					入力軸 Input Shaft					重量 Weight (kg)約
															D	S	W	T	U	D'	S'	W'	T'	U'	
0.1 KW 1/8HPx4P	SVDL-A11	1/200	145	145	170	11	18	4	12	46	189	235	168	22	40	7	7	18	11	20	4	4	9	9	
0.1 KW 1/8HPx4P	SVDL-11		174	174	185	11	140	18	4	12	50	190	240	22	40	7	7	18	11	20	4	4	9	9	
0.2 KW 1/4HPx4P	12	1/2000	217	217	235	11	180	23	6	15	58	207	265	28	45	7	7	24	12	25	4	4	10	10	
0.4 KW 1/2HPx4P	13		250	250	280	13	220	26	5	17	66	254	320	32	55	10	8	27	14	30	5	5	11	13	
0.75 KW 1HPx4P	14		260	276	310	18	230	28	5	20	77	302	379	40	65	10	8	35	19	35	5	5	16	37	

註：多速比減速機以定轉速設計，請參考齒箱最大容許扭力。 Note: This multistage gear reducer is designed to rotate at fixed speed. Please refer to the maximum allowable torque of the gear box.

■ 臥式高速比多段減速機

HORIZONTAL, HIGH GEAR RATION & MULTI-STAGE REDUCER

■ MODEL: LK-SHLS



尺寸表 Dimension

單位：m/m

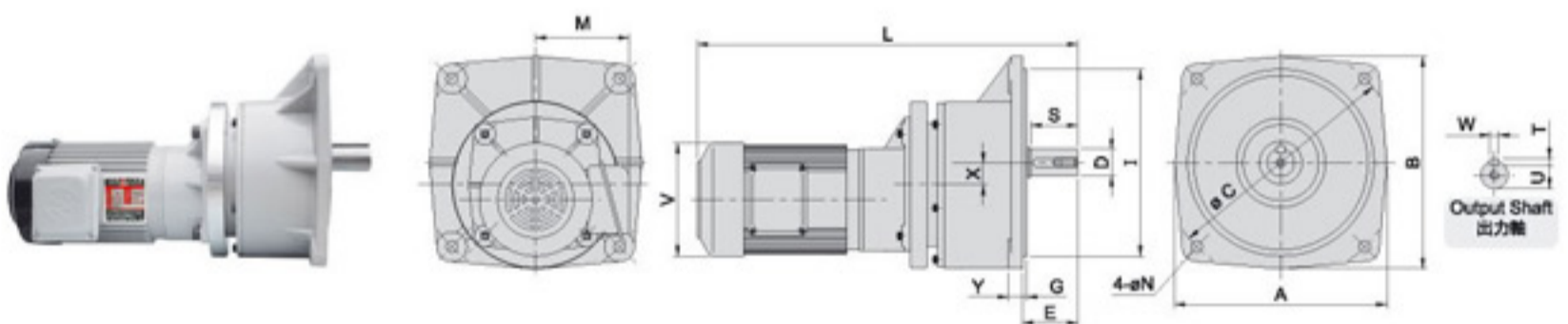
馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	A	E	B	J	I	C	H	Y	N	X	L	M	V	出力軸 Output Shaft					重量 Weight (kg)
																D	S	W	T	U	
60 W	11	1/2000 以上	58	65	90	130	155	95	145	13	9	18	373	95	98	22	40	7	7	18	10
90 W	11		58	65	90	130	155	95	145	13	9	18	388	95	98	22	40	7	7	18	10
0.1 KW 1/8HPx4P	12		66	90	120	140	180	115	175	15	11	23	415	100	119	28	45	7	7	24	12
0.2 KW 1/4HPx4P	13		78	130	165	170	210	130	202	18	13	26	449	110	133	32	55	10	8	27	18
0.4 KW 1/2HPx4P	14		95	150	195	210	255	150	240	20	15	28	515	115	147	40	65	10	8	35	35
0.75 KW 1HPx4P	15	1/700以上	115.5	170	230	265	330	185	293	25	19	38	579	135	161	50	80	14	9	44.5	58

註：多速比減速機以定轉速設計，請參考齒箱最大容許扭力。 Note: This multistage gear reducer is designed to rotate at fixed speed. Please refer to the maximum allowable torque of the gear box.

■ 立式高速比多段減速機

VERTICAL, HIGH GEAR RATION & MULTI-STAGE REDUCER

■ MODEL: LK-SVLS



尺寸表 Dimension

單位：m/m

馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	A	B	C	M	N	I	E	G	Y	X	L	V	出力軸 Output Shaft					重量 Weight (kg)
															D	S	W	T	U	
60 W	SV-A11	1/2000 以上	145	145	170	95	11	140	46.5	4	12	18	373	98	22	40	7	7	18	10
	SV-11		174	174	185	95	11	140	48.5	4	12	18	373	98	22	40	7	7	18	10
90 W	SV-A11		145	145	170	95	11	140	46.5	4	12	18	388	98	22	40	7	7	18	10
	SV-11		174	174	185	95	11	140	48.5	4	12	18	388	98	22	40	7	7	18	10
0.1 KW 1/8HPx4P	12		217	217	235	100	11	180	58	6	15	23	415	119	28	45	7	7	24	12
0.2 KW 1/4HPx4P	13	250	250	280	110	13	220	65	5	17	26	449	133	32	55	10	8	27	18	
0.4 KW 1/2HPx4P	14	260	276	310	115	18	230	77	5	20	28	515	147	40	65	10	8	35	35	

註：多速比減速機以定轉速設計，請參考齒箱最大容許扭力。 Note: This multistage gear reducer is designed to rotate at fixed speed. Please refer to the maximum allowable torque of the gear box.

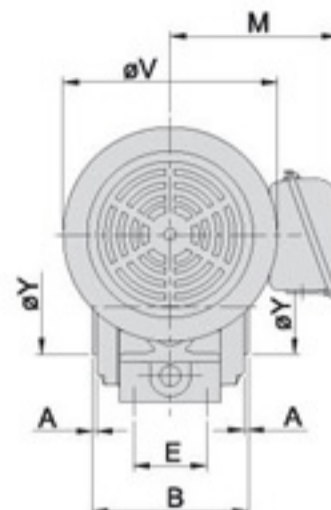
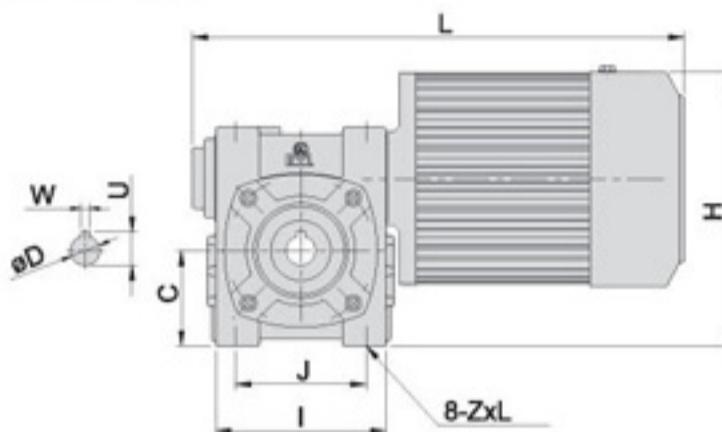


小型齒輪減速機系列 SMALL GEAR REDUCER

■ 中空軸蝸輪減速機

HOLLOW OUTPUT SHAFT WORM GEAR REDUCER

■ MODEL: LK-SEOM



尺寸表 Dimension

單位：m/m

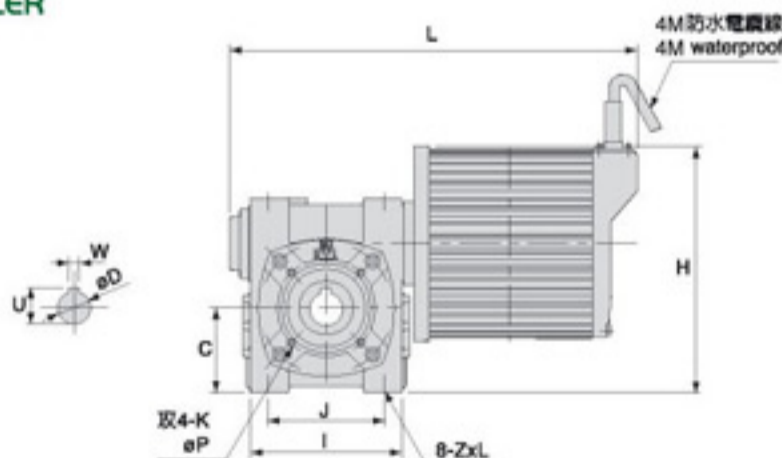
馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	A	E	B	J	I	C	H	Y	L	M	V	ZxL	出力軸Output Shaft			重量 Weight (kg)約
			W	D	U													
0.2 KW 1/4HPx4P	50	1/5~1/60	2	50	107	90	115	65	185	65	335	110	133	M8x16	6	20	22.8	13
		1/5~1/40 (1/50~1/60)	2	50	107	90	115	65	190	65	340	115	147	M8x16	6	20	22.8	15
0.4 KW 1/2HPx4P	60	1/5~1/60	2	55	110	100	125	75	210	70	355	115	147	M10x18	8	25	28.3	18
		(1/5~1/30)	2	55	110	100	125	75	220	70	370	135	161	M10x18	8	25	28.3	20
0.75 KW 1HPx4P	70	1/5~1/40 (1/50~1/60)	3.5	65	130	125	158	85	236	80	396	135	161	M10x18	8	30	33.3	24

註：表中()內數字係表示輕荷重使用。 NOTE: Values shown in parenthesis () are used for light loading.

■ 防水型蝸輪減速機

WATERPROOF WORM GEAR REDUCER

■ MODEL: LK-SEOM



尺寸表 Dimension

單位：m/m

馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	A	E	B	J	I	C	H	Y	L	V	K	P	ZxL	出力軸Output Shaft			重量 Weight (kg)約
			W	D	U														
0.4 KW 1/2HPx4P	50	1/5~1/40 (1/50~1/60)	2	50	107	90	115	65	190	65	315	150	M6	76	M8x16	8	25	28.5	15
0.75 KW 1HPx4P	60	(1/5~1/30)	2	55	110	100	125	75	210	70	350	150	M8	92	M10x18	8	30	33.5	20

註：1. 表中()內數字係表示輕荷重使用。

2. 適用於潮濕水氣之環境。(例：洗車機蓋空移動設備等)

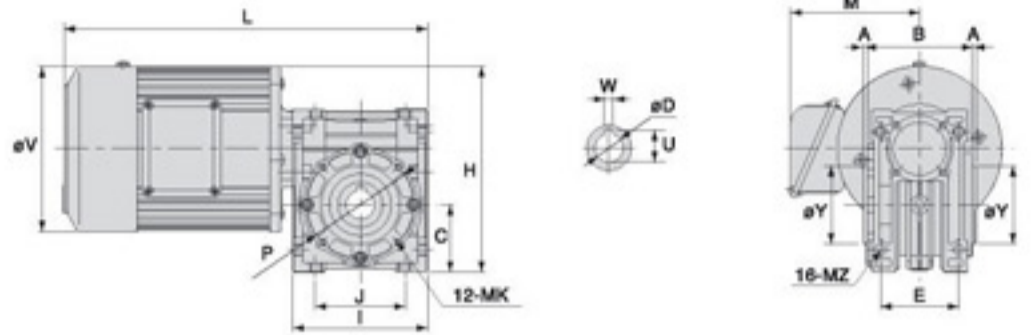
NOTE: 1. Values shown in parenthesis () are used for light loading.

2. Appropriate to the humid environment (such as the moving equipment in the glasshouse of car washing machine)

■ 中空軸蝸輪減速機

HOLLOW OUTPUT SHAFT WORM GEAR REDUCER

■ MODEL: LK-SNEOM



尺寸表 Dimension(m/m)

馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	A	E	B	J	I	C	H	Y	L	M	V	K	P	Z	出力軸 Output Shaft			重量 Weight (kg)
			W	D	U															
0.1KW 1/8HPx4P	40	1/5~1/60	2	60	80	70	102	50	148	60	295	100	119	M6	77	M8	8	20	22.8	6.5
0.2KW 1/4HPx4P		1/5~1/50 (1/60)	2	60	80	70	102	50	155	60	300	110	133	M6	77	M8	6	20	22.8	8
0.4KW 1/2HPx4P		1/5~1/10 (1/20~1/30)	2	60	80	70	102	50	164	60	310	115	147	M6	77	M8	6	20	22.8	9
0.2KW 1/4HPx4P	50	1/5~1/40 (1/50~1/60)	3	70	94	80	120	60	175	70	320	110	133	M6	95	M10	8	25	28.3	9.5
0.4KW 1/2HPx4P		1/5~1/30 (1/40~1/60)	3	70	94	80	120	60	184	70	325	115	147	M6	95	M10	8	25	28.3	10.5
0.75KW 1 HPx4P		1/5 (1/10~1/20)	3	70	94	80	120	60	190	70	345	135	161	M6	95	M10	8	25	28.3	13.5
0.4KW 1/2HPx4P	60	1/5~1/60	3	85	102	100	146	75	209	80	355	115	147	M8	120	M10	8	25	28.3	12.5
0.75KW 1 HPx4P		(1/5~1/40)	3	85	102	100	146	75	216	80	375	135	161	M8	120	M10	8	25	28.3	15.5
0.4KW 1/2HPx4P	70	1/5~1/60	3	90	118	120	170	85	229	90	380	115	147	M10	140	M10	8	30	33.3	17
0.75KW 1 HPx4P		1/5~1/40 (1/50~1/60)	3	90	118	120	170	85	236	90	400	135	161	M10	140	M10	8	30	33.3	20
1.5KW 2 HPx4P		1/5~1/10 (1/15~1/30)	3	90	118	120	170	85	246	90	435	150	181	M10	140	M10	8	30	33.3	25

- 註：1.表中()內數字係表示輕荷重使用。
2.表中重量以配合三相馬達為主，其它單相、剎車、直流、特殊等馬達重量另訂。
3.表中L內數字以三相為主，剎車及其它特殊馬達另訂。
4.馬達單頭、單雙電壓依設計所需另訂。
5.以上數值若有變更，恕不另行通知。

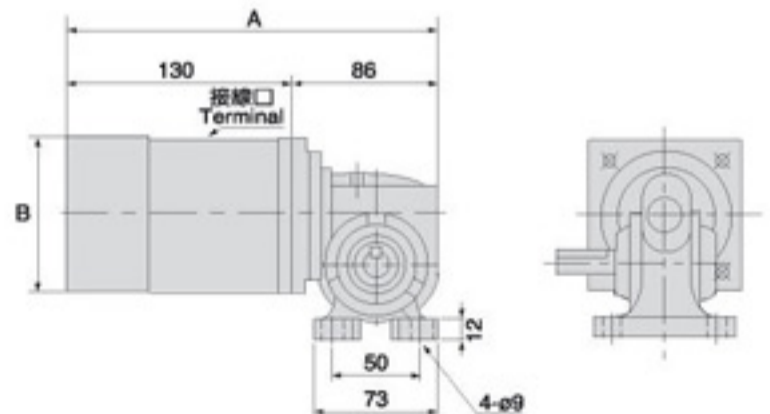
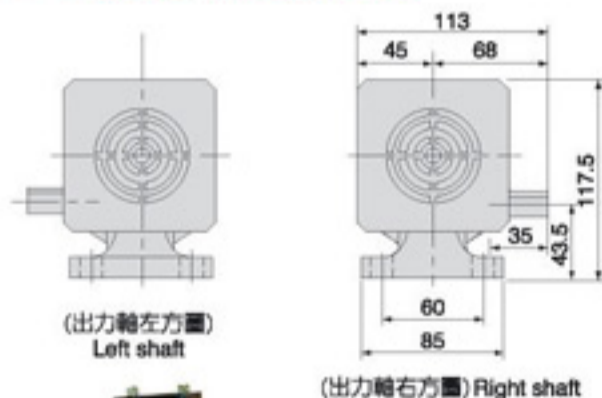
NOTES:

- 1.Values shown in paranthesis () are used for light loading.
2.Weights shown in the above chart are based on 3-phase, motors, weights for single phase, brake, DC, or special motor shall be referred to specific values.
3.Values shown in "L" column are based on 3-phase, brake for other special motor refer to specific values.
4.When the need arises to determine the special voltage frequency for single phase, please contact the Li-Ming application engineering team.
5.Above specifications are subject to change without prior notice.

■ 小型蝸輪減速機

SMALL WORM REDUCER

■ MODEL: LK-SMW28



尺寸表 Dimension(m/m)

馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	A	B
25 W	28	1/5~1/60	186	80
40 W	28	1/5~1/60	191	88
60 W	28	1/5~1/60	216	90

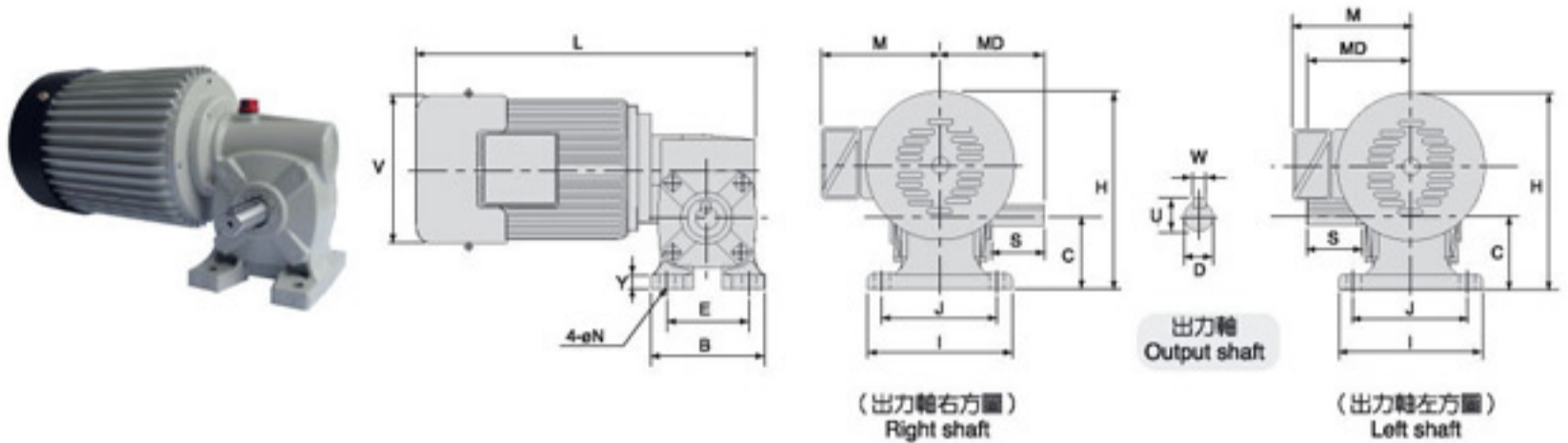




小型齒輪減速機系列 SMALL GEAR REDUCER

■ 小型蝸輪減速機 VERTICAL TYPE REDUCER

■ MODEL: LK-SMW



尺寸表 Dimension

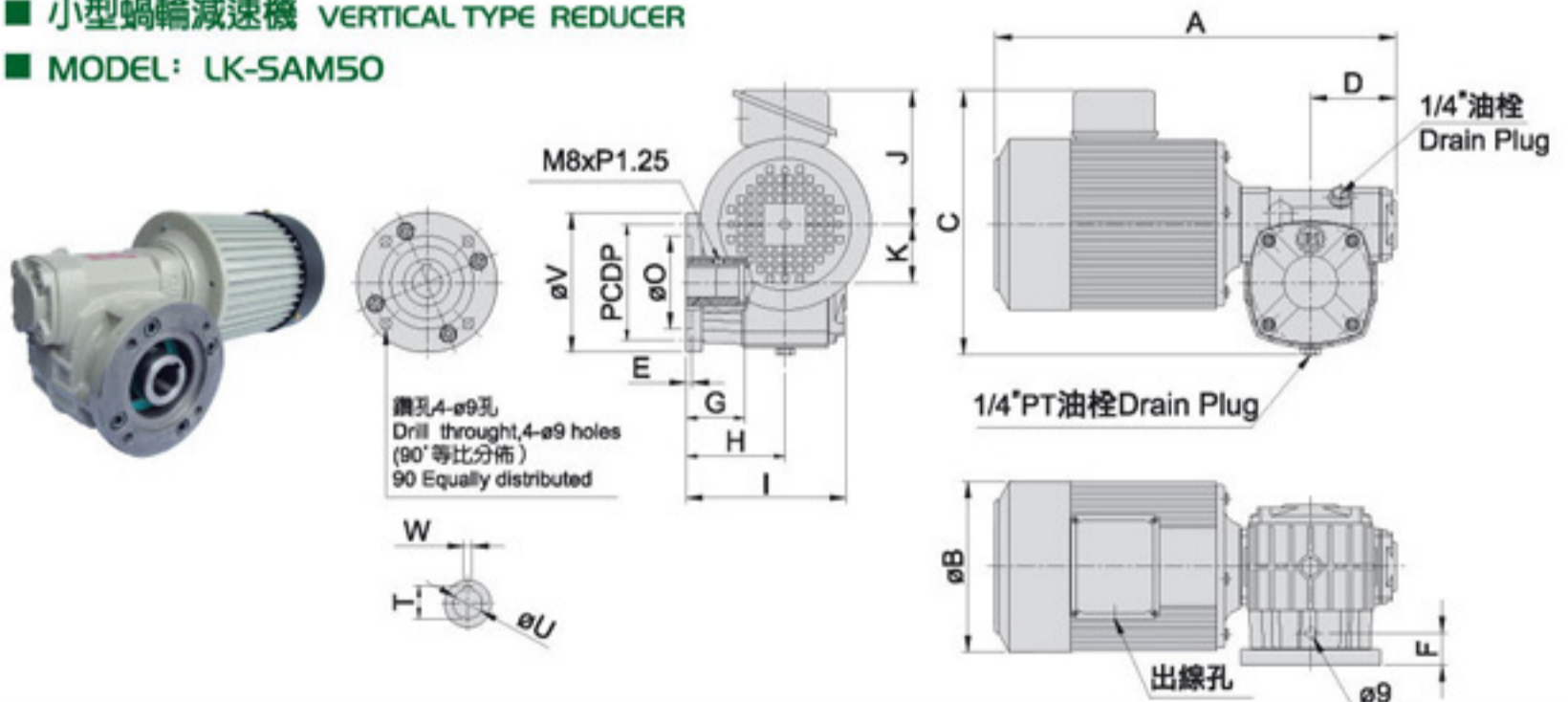
單位：m/m

馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	L	V	M	H	E	B	J	I	Y	C	N	MD	出力軸 Output Shaft				重量 Weight (kg)
															D	S	W	U	
0.1 KW 1/8HPx4P	40	1/5~1/60	270	119	100	158	65	90	90	112	11	56.5	10	82	16	40	5	18.5	6
0.2 KW 1/4HPx4P	40	15~150(1/60)	280	133	110	162	65	90	90	112	11	56.5	10	82	16	40	5	18.5	7
0.4 KW 1/2HPx4P	40	(1/5~1/30)	280	147	115	170	65	90	90	112	11	56.5	10	82	16	40	5	18.5	9
0.4 KW 1/2HPx4P	50	1/5~1/60	345	147	115	205	120	150	105	130	15	80	11	106	22	50	7	25.5	16

註：表中()內數字係表示輕荷重使用。 NOTE: Values shown in parenthesis () are used for light loading.

■ 小型蝸輪減速機 VERTICAL TYPE REDUCER

■ MODEL: LK-SAM50



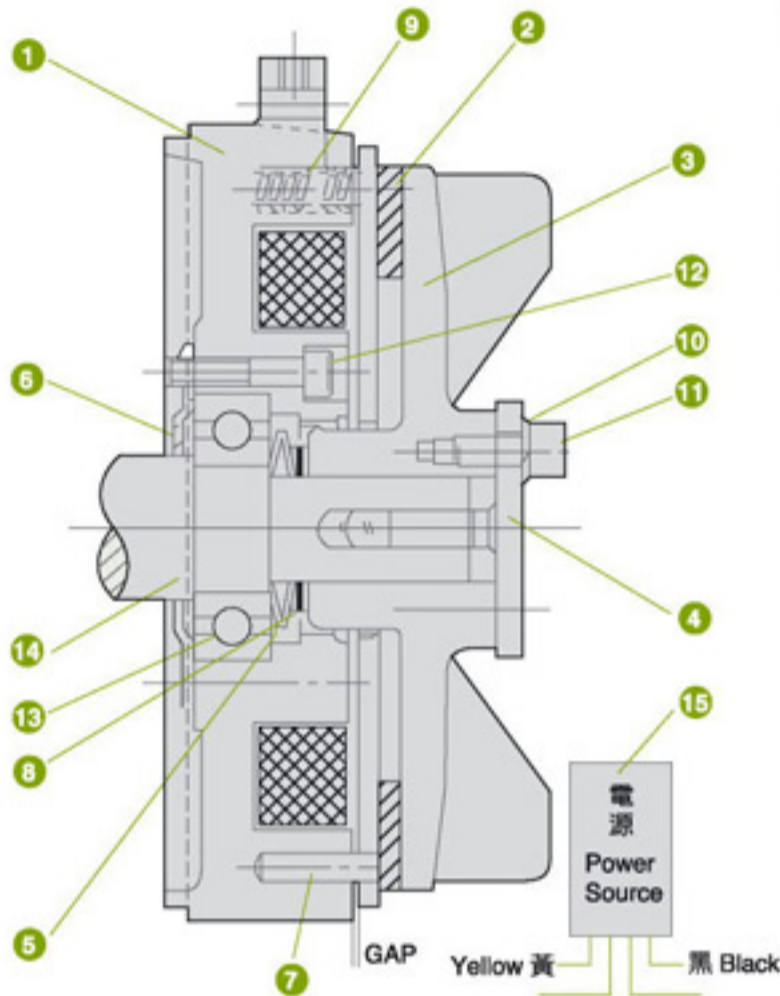
尺寸表 Dimension

單位：m/m

馬達容量 Motor Capacity	型號 Model No.	減速比 Gear Ratio	A	B	C	D	E	F	G	H	I	J	K	V	P	O	出力孔 Output Hole			重量 Weight (kg)
																	W	T	U	
0.1 KW 1/8HPx4P	50	1/5~1/60	324	ø119	212	73.3	5	28	50.3	85	138	100	50	120	100	80	7	28.3	25	10
0.2 KW 1/4HPx4P	50	1/5~1/40 (1/50~1/60)	334	ø133	222	73.3	5	28	50.3	85	138	110	50	120	100	80	7	28.3	25	12
0.4 KW 1/2HPx4P	50	1/5~1/30 (1/40~1/60)	344	ø147	227	73.3	5	28	50.3	85	138	115	50	120	100	80	7	28.3	25	14

註：表中()內數字係表示輕荷重使用。 NOTE: Values shown in parenthesis () are used for light loading.

■ 直流電磁停電制車剖面構造圖 CROSS SECTION OF DC MAGNETIC BRAKE SYSTEM



安裝條件 (一般標準品)		INSTALLATION CONDITION (FOR STANDARD PRODUCT)	
周圍溫度	Ambient Temperature	-5°C ~ 40°C	
周圍濕度	Ambient Humidity	85%以下	below 85%
周圍環境	Ambient Condition	避免腐蝕性、爆發性氣體，水蒸汽之環境，應置於乾燥且通風良好之環境	Please place in dry and well-ventilated location. Environment with corrosive gas, inflammable gas and moisture should be avoided.
場所	Location	屋內，須裝置於平坦及堅固的底部	Indoor; the product should be installed on flat and solid foundation.
機高	Elevation	1000m以下	below 1000m

編號 NO.	零件名稱 Name Of Parts	
1	托架 (附制車線圈)	Bracket (Brake coil included)
2	制車來令	Brake Shoe
3	外扇	Outer Fan
4	調整螺絲	Adjusting Screw
5	皿型彈簧	Tray-Type Spring
6	軸承蓋	Bearing Cover
7	彈簧銷	Spring Pin
8	墊圈	Washer
9	壓縮彈簧	Spring, Compression
10	彈簧墊圈	Washer For Spring
11	內六角螺絲	Hex. Screw
12	內六角螺絲	Hex. Screw
13	軸承	Bearing
14	馬達軸心	Motor Spindle
15	制車電源裝置 (整流器)	Power Device For Brake (Rectifier)

■ 制車特性 BRAKING CHARACTERISTICS

出力	Force Output	(KW)	4極	4-Pole	0.1	0.2	0.4	0.75	1.5	2.2
定額制動	Actuation By Gradual Control	(kg-m)			0.1	0.2	0.4	0.75	1.5	2.2
釋放時間	Time Of Releasing	(S)	交流一體切	Alternative Current Switch	0.1	0.07	0.10	0.12	0.14	0.15
			直流別切	Direct Current Switch	0.06	0.03	0.03	0.05	0.05	0.03
調整間隙	Clearance For Adjustment	(mm)	規定值	Specified Value	0.3	0.3	0.3	0.4	0.4	0.4
			限界值	Boundary Value	0.7	0.7	0.7	1.0	1.0	1.0

■ 電源接線 POWER CABLE

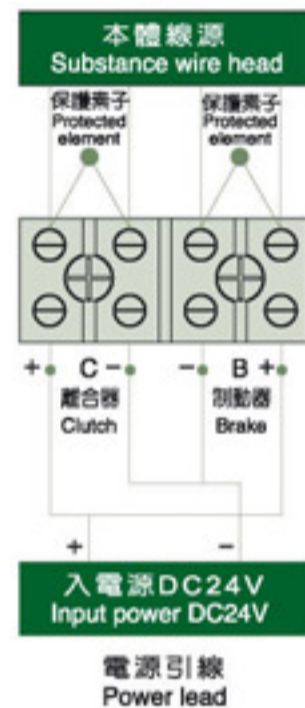
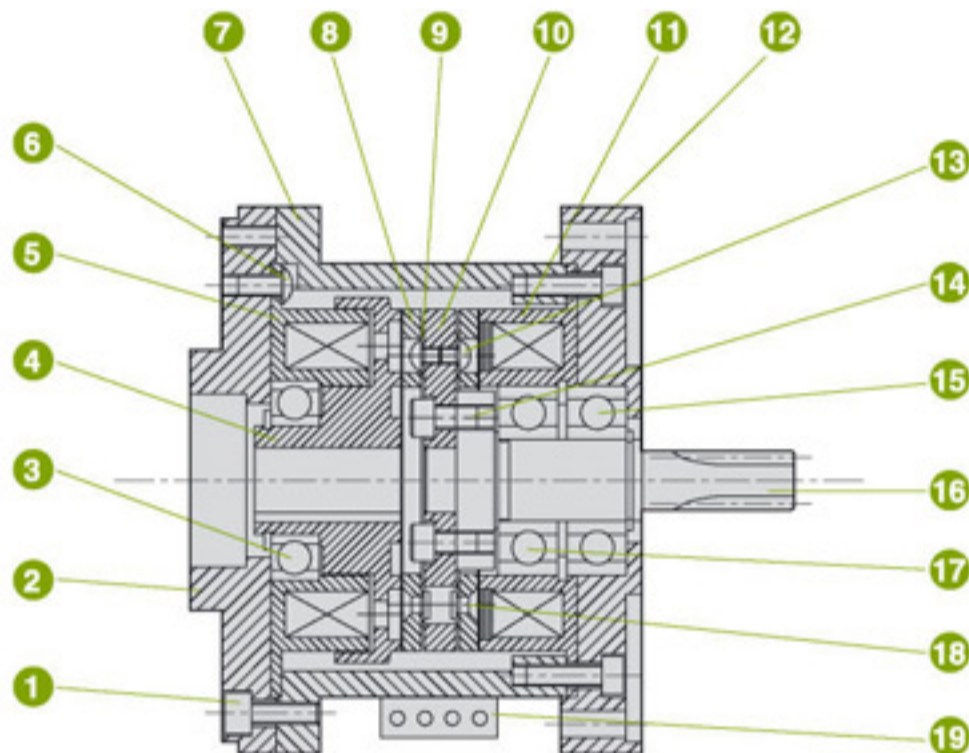
	電源接線 Power Cable	電源整流器裝置 Rectifier Device
交流一體切 Alternative Current Switch		<p>1. 輸入 Input AC200V-50HZ. 200/220V-60HZ</p> <p>輸出 Output DC90V</p> <p>2. 單向AC110V使用全波整流器 One-Way AC110 Full-Wave Rectifier</p> <p>3. 異電壓380V/440V使用交流一體切時， 改變馬達接線方法 (接線盒圖所示) Voltage 380V, 440V. Change Motor Connecting Method When AC Switch Is Used. (As Indicated In Figure Of Cable Box.)</p>
直流別切 Direct Current Switch		



小型齒輪減速機系列 SMALL GEAR REDUCER

電磁離合制動器剖面構造圖

CROSS SECTION STRUCTURE OF ELECTROMAGNETIC CLUTCH BRAKE



編號 NO.	零件名稱 Name Of Parts	編號 NO.	零件名稱 Name Of Parts
1	內六角螺絲 Hex. Screw	11	BF磁極組 BF magnetic pole section
2	法蘭面(馬達端) Flange (motor point)	12	法蘭面(減速機端) Flange (decelerating machine point)
3	軸承 Bearing	13	圓頭內六角螺絲 Hex. screw in the circle
4	CR轉子 CR rotor	14	內六角螺絲 Hex. Screw
5	CF磁極組 CF magnetic pole section	15	軸承 Bearing
6	圓頭內六角螺絲 Hex. Screw in the circle	16	軸心 Spindle
7	機體 Airframe	17	軸承 Bearing
8	電樞片 Leaf electric armature	18	釘釘 Rivet
9	彈簧片 Leaf spring	19	電源引線DC24 Power lead DC24
10	平板型導座 Conduct base in slab type		

電磁離合器、制動器仕様

ELECTROMAGNETIC CLTCH, TYPES OF BRACK

離合器方式 Method of clutch	乾式直流勵磁作動形 Dried direct current exciter action form
電壓 Voltage	DC24V ± 10% DC24V ± 10%
時間定格 Time Scale	連續 Continuity
絕緣體 Insulation	B種 B kind
周圍溫度 Ambient Temperature	0°C ~ +40°C
內襯材質 Internal served material	非石棉・低金屬 Non asbestos, low metal
容許頻數 Allowed frequency	80回/分(隨使用條件而變) 80 times/minute (depends on used condition)

電磁離合器、制動器特性

ELECTROMAGNETIC CLTCH, FEATURES OF BRACK

規格出力 Force output specifications (kg)	動摩擦 Moving friction (kg/m)	電壓 Voltage (DCV)	容量 Capacity (W)	電流 Electric current (A)	電樞吸引時間 Engaged time of electric armature (ms)	電樞釋放時間 Released time of electric armature (ms)	保護素子 Protected element	調整間隙 Clearance For Adjustment (mm)
0.1	0.50	24	11	0.46	13	12	TNR9G820K	0.2 ± 0.05
0.2	0.50	24	11	0.46	13	12	TNR9G820K	0.2 ± 0.05
0.4	1	24	15	0.63	21	15	TNR9G820K	0.2 ± 0.05

齒輪減速機一般故障原因及改善方法

SOLUTIONS AND REASONS FOR THE GENERAL FAULTS OF REDUCTION GEARS

故障情形 FAULT DESCRIPTION	故障原因 REASONS	解決方法 SOLUTIONS
減速機過熱 Overheating	<ul style="list-style-type: none"> * 超負荷運轉 * 油封過度磨擦 * 出力軸與傳動裝置連接不當 * 衝擊荷重大 * Overload. * Over friction of oil seal. * Improper connection between driving shaft and the transmission device. * Large impact loading. 	<ul style="list-style-type: none"> * 調整至適當負荷 * 在油封處滴潤滑油 * 調整至適當位置 * 更換較大型號減速機 * Adjust to proper loading. * Drop lubricant at oil seal. * Adjust to proper position. * Use larger reduction gears.
減速機雜音 Noise	<ul style="list-style-type: none"> * 超負荷運轉 * 軸承損傷或間隙過大 * 潤滑油不足或劣化 * 出力軸與傳動裝置連接不當 * 螺栓鬆脫 * 傳動裝置固定不良 * Overload. * Bearing damaged or too large clearance. * Lubricant oil shortage or deterioration. * Improper connection between driving shaft and the transmission device. * Bolt loose. * Improper installation of transmission device. 	<ul style="list-style-type: none"> * 調整至適當負荷 * 更換軸承 * 依指示加入適量潤滑油 * 調整至適當位置 * 旋緊螺栓 * 傳動裝置固定 * Adjust to proper loading. * Replace bearing. * Fill in adequate lubricant oil as indication. * Adjust to proper position. * Tighten bolt. * Fix transmission device properly.
漏油 Oil leakage	<ul style="list-style-type: none"> * 油封損傷 * 油量過多 * 螺絲鬆脫 * 外殼破裂 * Oil seal damaged. * Too much oil. * Screw loose. * Outside shell fractured. 	<ul style="list-style-type: none"> * 更換油封 * 依指示加入適量潤滑油 * 旋緊螺絲 * 更換外殼 * Replace oil seal. * Fill in adequate lubricant oil as indication. * Tighten screw. * Replace outer shell.
出力軸不轉 Driving shaft cannot rotate	<ul style="list-style-type: none"> * 超負荷運轉 * 軸承損傷 * 異物嵌入 * 齒輪磨損 * 馬達損壞 * 配線錯誤 * 衝擊荷重過大 * Overload. * Bearing damaged. * Invasion by foreign objects. * Gear worn-out. * Motor out of order. * Incorrect wiring. * Large impact loading. 	<ul style="list-style-type: none"> * 調整至適當負荷 * 更換軸承 * 取出異物 * 更換齒輪 * 修復馬達 * 依指示配線 * 更換較大型號減速機 * Adjust to proper loading. * Replace bearing. * Take out foreign objects. * Replace gear. * Repair motor. * Wiring as indication. * Use larger reduction gears.

註:1.以上所列為一般故障原因,如有其它故障情形時,請與本公司連絡,我們將提供最正確之服務。

2.產品如經自行拆裝或更改,產生異常本公司恕不負責。

NOTES:1.The above items are general fault descriptions. In case of other kinds of faults, please contact with us to obtain most correct services.

2. If the product has been broken off or changed, the unusual matter the company won't be in charge of the case.



小型齒輪減速機系列 SMALL GEAR REDUCER

■ 安裝條件 (一般標準品)

INSTALLATION CONDITION (FOR STANDARD PRODUCT)

周圍溫度	Ambient Temperature	-5°C ~ 40°C	
周圍濕度	Ambient Humidity	85%以下	below 85%
周圍環境	Ambient Condition	避免腐蝕性，爆發性氣體，水蒸汽之環境，應置於乾燥且通風良好之環境	Please place in dry and well-ventilated location. Environment with corrosive gas, inflammable gas and moisture should be avoided.
場所	Location	屋內，須裝置於平坦及堅固的底部	Indoor; the product should be installed on flat and solid foundation.
標高	Elevation	1000m 以下	below 1000m

■ 減速機規格

SPECIFICATIONS OF REDUCTION GEAR

齒輪材料 出力軸材料	Gear Material Material of outlet axle	<ul style="list-style-type: none"> S45C (高週波) SCM21 (滲碳) SCM4 (氮化) S45C (High-frequency Wave), SCM21 (Carbonization), SCM4 (Nitrogen Hardening). 	
潤滑方式	Lubrication	Gresse NO.0	
外殼	Shell	<ul style="list-style-type: none"> 鋁合金 (Adc12) 鑄鐵 (Fc 20) 鋁合金 (380) Aluminum Alloy (Adc12), Cast Iron (Fc 20) 	

■ 馬達規格

MOTOR OF REDUCTION GEAR

相數	Phase No	三相	3-phase	單相	single-phase
外被構造	Enclosure Structure	全閉外扇 (0.1kw ~ 2.2kw)	Closed with external-fan (0.1kw ~ 2.2kw)	全閉外扇 (0.1kw ~ 2.2kw)	Closed with external-fan (0.1kw ~ 2.2kw)
啟動方式	Start-up method	直接啟動	Direct	電容運轉 電容啟動運轉	Capacitor Capacitor Motor (variable capacitor)
頻率	Frequency	50HZ / 60HZ		50HZ / 60HZ	
電壓	Voltage	415V 460V 480V 220 / 380V 220 / 440V		110 / 220V	
時間定格	Time Scale	連續	Continuous	連續	Continuous
極數	Pole No	4 極	four	4 極	four
絕緣	Insulation	E 級	E Grade	E 級	E Grade