

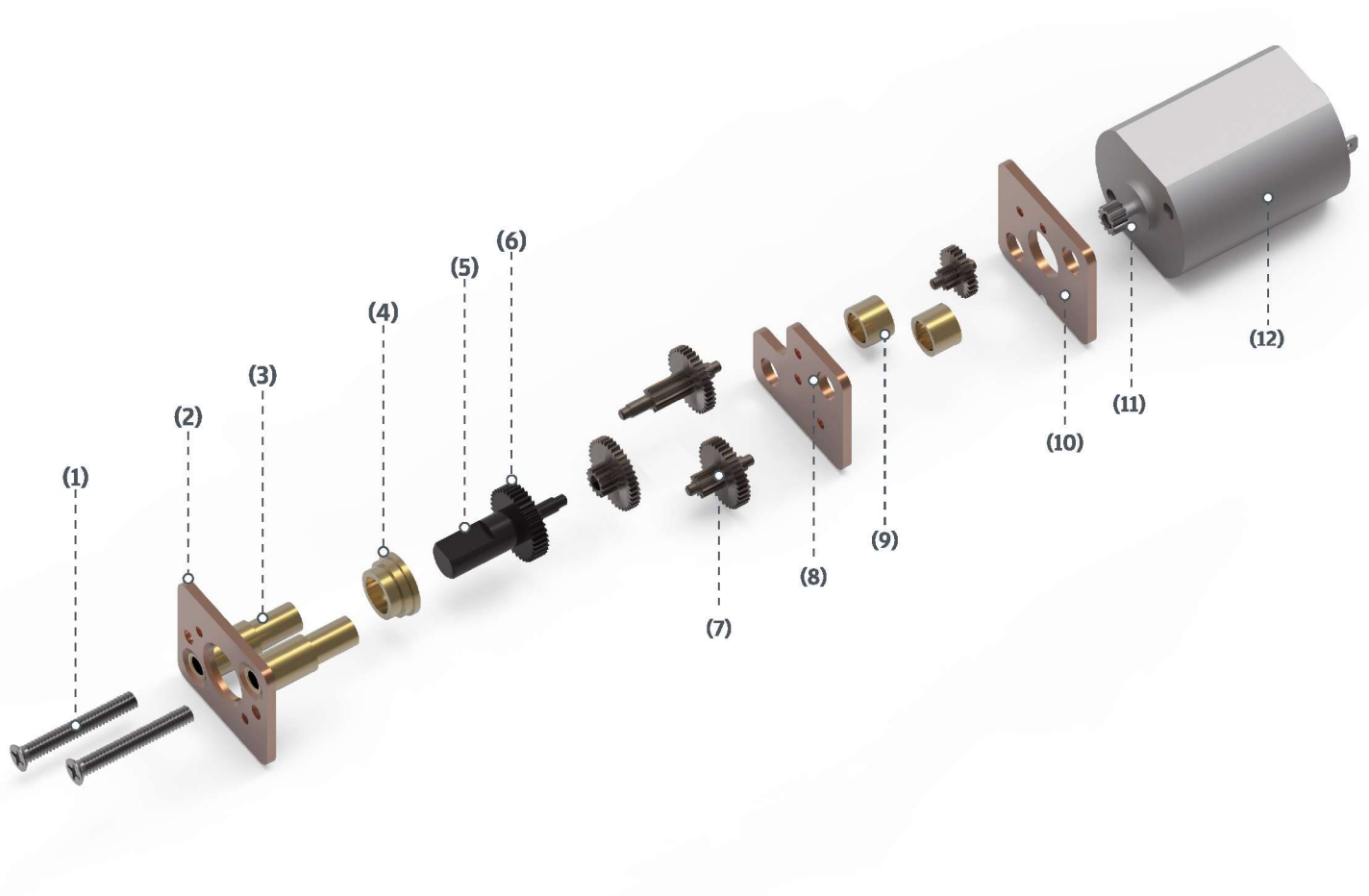


Spur Gearbox & Gear Motor

RA series - Center Output Shaft
RB series - Eccentric Output Shaft

正齒齒輪箱 (中心出軸)

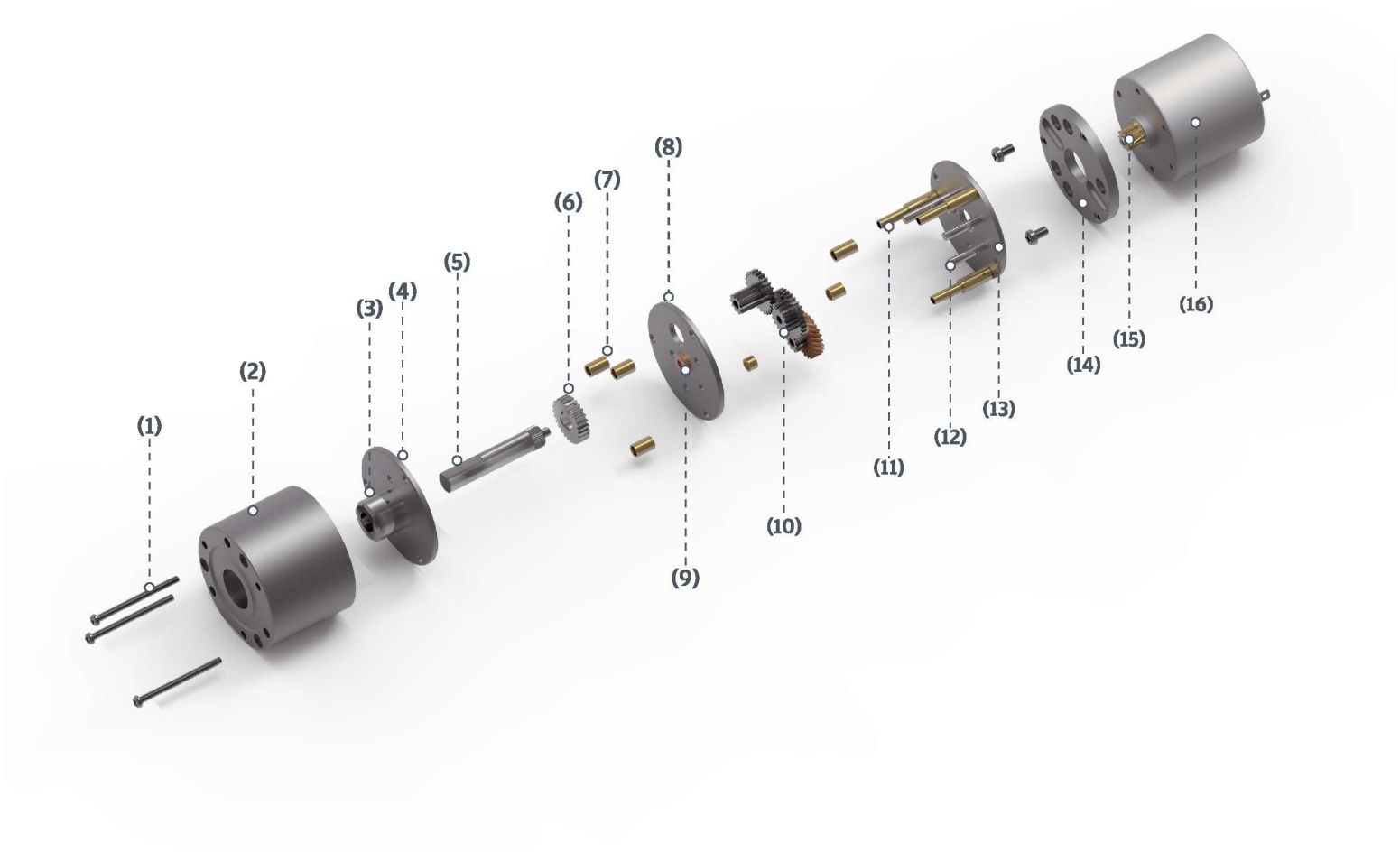
RA series (Center Output Shaft)



1	螺絲	Screw	7	塔輪	Gear wheel
2	上機板	Front plate	8	中間機板	Intermediate plate
3	支撐套	Support	9	間隔套	Spacer sleeve
4	襯套	Bushing	10	下機板	End plate
5	主軸	Output shaft	11	馬達齒	Pinion
6	傳動齒輪	Output gear	12	馬達	Motor

正齒齒輪箱 (中心出軸)

RA series (Center Output Shaft)

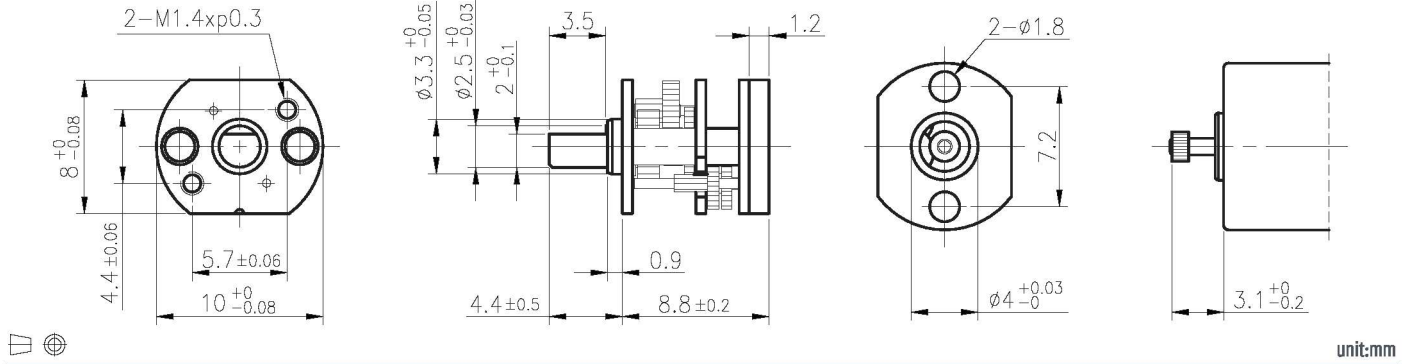


1	螺絲	Screw	9	襯套	Bushing
2	外殼	Housing	10	塔輪	Gear wheel
3	軸承	Bearing	11	支撐套	Support
4	上機板	Front plate	12	梢	Pin
5	主軸	Output shaft	13	下機板	End plate
6	傳動齒輪	Output gear	14	下蓋	Motor flange
7	間隔套	Spacer sleeve	15	馬達齒	Pinion
8	中間機板	Intermediate plate	16	馬達	Motor

RA-10W



外形尺寸 / Appearance Size



unit:mm

產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (5mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
---	---	≤0.2kg	≤0.1kg	≤1kg	≤0.06mm	≤0.2mm	≤1.5°

馬達齒輪型式 / Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.11	17	20°	∅0.99	1/30
0.11	15	20°	∅0.99	1/53,1/98,1/152, 1/207,1/242

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/30	1/53	1/98	1/152	1/207	1/242						
定格容許扭力 (kgf-cm Max.) Rated tolerance torque	0.05	0.1	0.2	0.2	0.25	0.25						
瞬間容許扭力 (kgf-cm Max.) Max momentary tolerance torque	0.15	0.3	0.6	0.6	0.75	0.75						
效率 Efficiency	66%	59%	59%	59%	59%	59%						
重量 Weight (g)	2	2	2	2	2	2						

IG

Right Angle

RA

RB

WG

Encoder

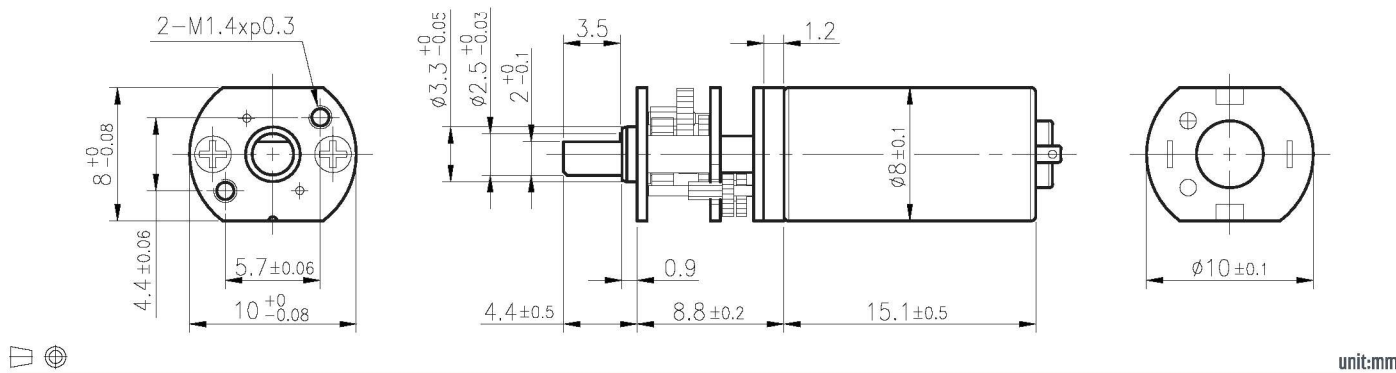
Driver

RA-10WGM

01 & 02 TYPE



外形尺寸/ Appearance Size



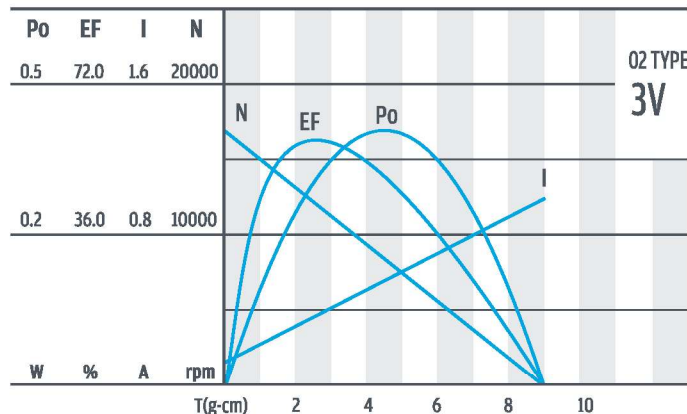
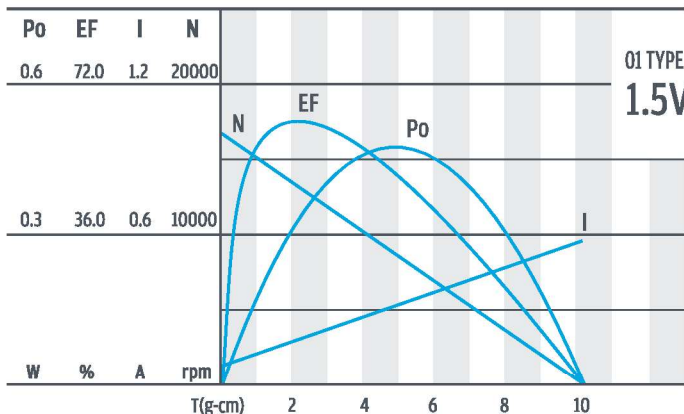
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

	減速比 Reduction ratio	1/30	1/53	1/98	1/152	1/207	1/242						
1.5V	定格扭力 Rated torque (g-cm)	39	63	116	179	244	250						
	定格轉速 Rated speed (rpm)	423	239	128	83	61	52						
3V	定格扭力 Rated torque (g-cm)	39	63	116	179	244	250						
	定格轉速 Rated speed (rpm)	453	256	137	89	65	55						
	軸心迴轉方向 Rotation direction	CW		CCW									

馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
1.5V	2	12000	≤0.35	17000	≤0.15	0.28	4
3V	2	13000	≤0.16	17000	≤0.05	0.29	4

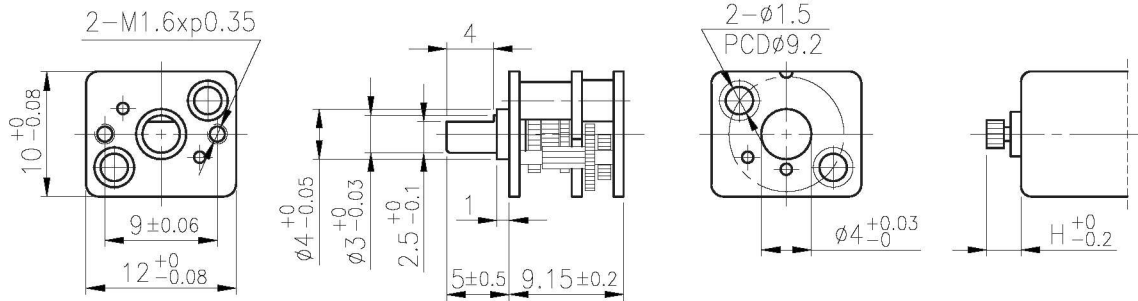
馬達單體特性/ Motor Characteristics



RA-12W



外形尺寸 & 馬達齒鉚合尺寸 / Appearance Size & Pinion Assembly Dimension



unit:mm

產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (5mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
---	---	≤ 0.4 kgf	≤ 0.2 kgf	≤ 2 kgf	≤ 0.06 mm	≤ 0.2 mm	≤ 1.5°

馬達齒輪型式 / Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.15	12	20°	Ø 0.99	1/29, 1/235, 1/298
0.15	13	20°	Ø 0.99	1/10, 1/102
0.15	16	20°	Ø 0.99	1/19, 1/60, 1/76, 1/134, 1/197

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/10	1/19	1/29	1/60	1/76	1/102	1/134	1/197	1/235	1/298
定格容許扭力 (Kgf-cm Max.) Rated tolerance torque	0.2	0.3	0.3	0.5	0.5	0.8	0.8	1	1	1
瞬間容許扭力 (Kgf-cm) Max momentary tolerance torque	0.6	0.9	0.9	1.5	1.5	2.4	2.4	3	3	3
效率 Efficiency	81%	73%	73%	66%	66%	66%	59%	59%	59%	59%
高度 Height (H)	2.5	2.1	2.1	2.5	2.5	2.5	2.1	2.1	2.1	2.1
重量 Weight (g)	4	4	4	4	4	4	4	4	4	4

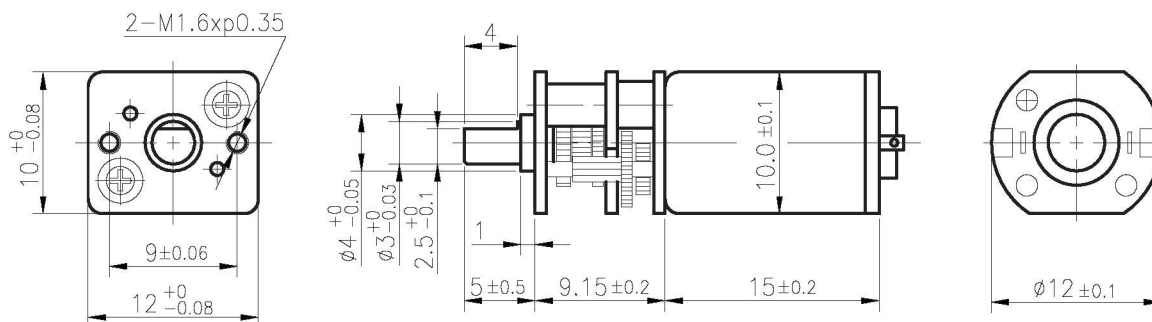
- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

RA-12WGM

01 & 02 TYPE



外形尺寸/ Appearance Size



unit:mm

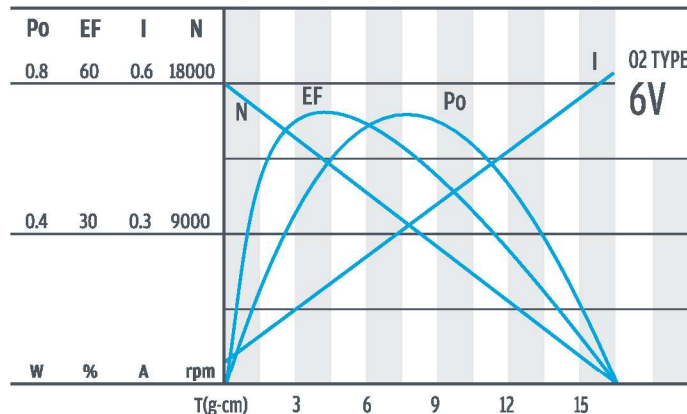
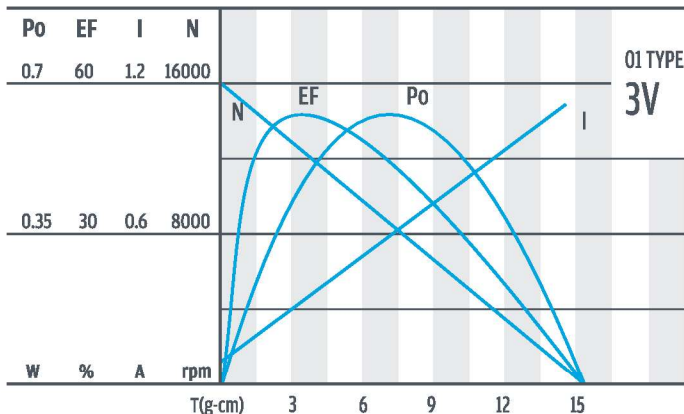
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

	減速比 Reduction ratio	1/10	1/19	1/29	1/60	1/76	1/102	1/134	1/197	1/235	1/298
3V	定格扭力 Rated torque (g-cm)	15	25	40	75	100	120	155	230	275	350
	定格轉速 Rated speed (rpm)	1400	720	480	230	180	135	100	70	59	46
6V	定格扭力 Rated torque (g-cm)	24	40	60	115	150	200	235	345	410	520
	定格轉速 Rated speed (rpm)	1450	770	510	245	195	145	110	75	63	50
	軸心迴轉方向 Rotation direction	CW	CCW			CW			CCW		

馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
3	2	14000	≤0.25	16000	≤0.08	0.287	5.5
6	3	14900	≤0.17	18000	≤0.05	0.46	5.5

馬達單體特性/ Motor Characteristics



IG

Right Angle

RA

RB

WG

Encoder

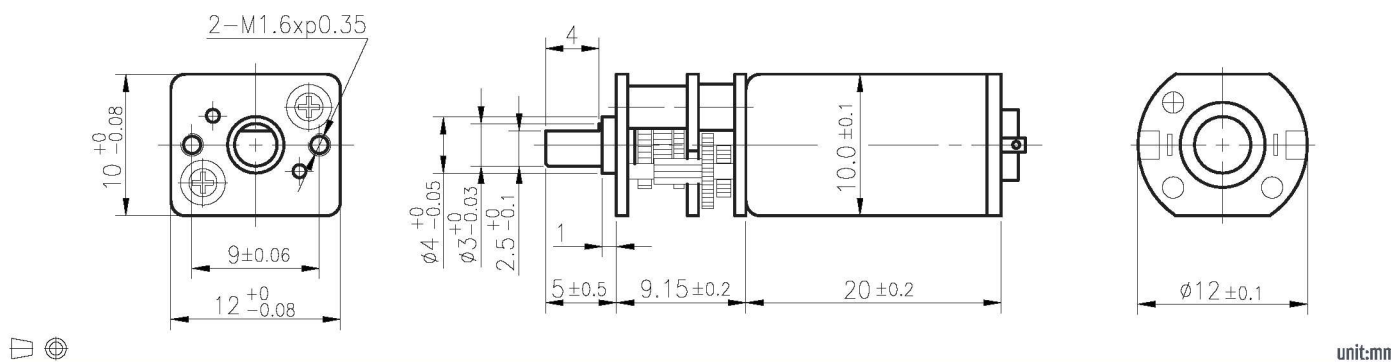
Driver

RA-12WGM

03 & 04 TYPE



外形尺寸 / Appearance Size



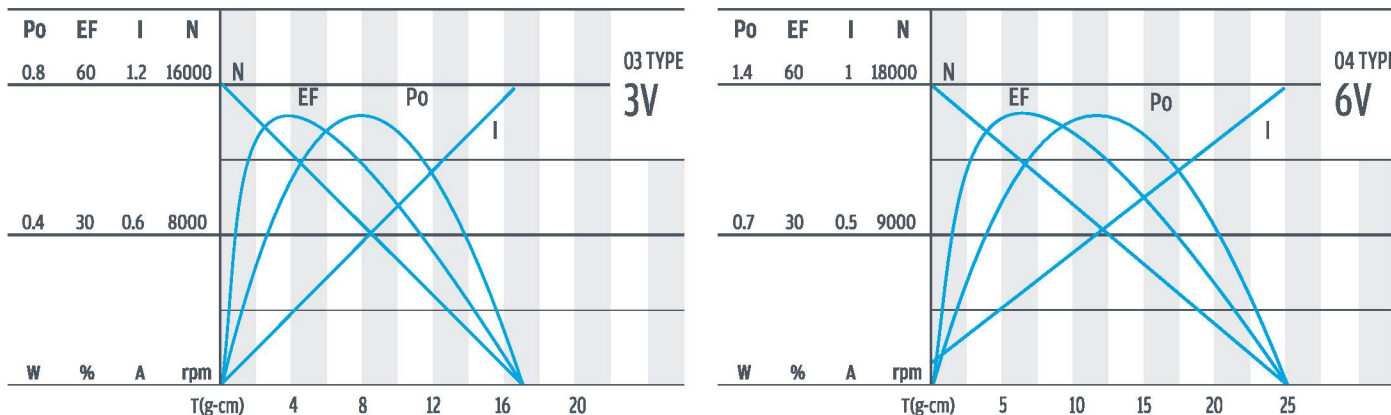
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

減速比 Reduction ratio	1/10	1/19	1/29	1/60	1/76	1/102	1/134	1/197	1/235	1/298	
3V	定格扭力 Rated torque (g-cm)	24	40	60	115	150	200	235	345	415	525
	定格轉速 Rated speed (rpm)	1300	700	460	225	175	132	100	68	57	45
6V	定格扭力 Rated torque (g-cm)	30	55	80	155	200	270	300	460	530	700
	定格轉速 Rated speed (rpm)	1500	780	510	250	195	145	112	76	64	50
軸心迴轉方向 Rotation direction	CW	CCW		CW		CCW					

馬達單體型式 / Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
3	3	13500	≤ 0.31	16000	≤ 0.09	0.41	7.5
6	4	15000	≤ 0.25	18000	≤ 0.065	0.61	7.5

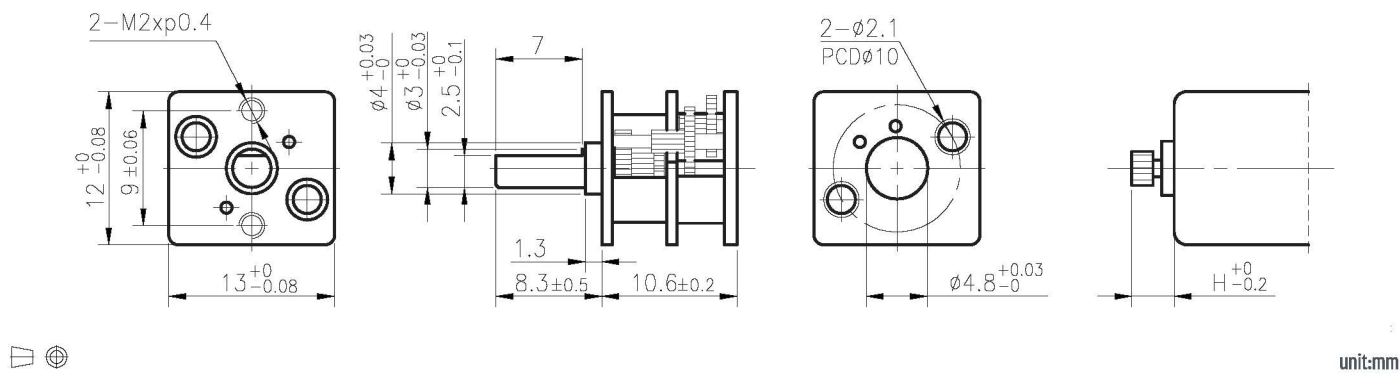
馬達單體特性 / Motor Characteristics



RA-13W



外形尺寸 & 馬達齒鉤合尺寸 / Appearance Size & Pinion Assembly Dimension



產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (5mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
---	---	≤ 0.4 kgf	≤ 0.2 kgf	≤ 2 kgf	≤ 0.06 mm	≤ 0.2 mm	≤ 1.5°

馬達齒輪型式 / Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.15	14	20°	∅ 1.49	1/10, 1/34, 1/105, 1/360
0.15	16	20°	∅ 1.49	1/21, 1/59, 1/75, 1/203, 1/257, 1/294
0.15	18	20°	∅ 1.49	1/146

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/10	1/21	1/34	1/59	1/75	1/105	1/146	1/203	1/257	1/294	1/360
定格容許扭力 (Kgf-cm Max.) Rated tolerance torque	0.2	0.3	0.3	0.5	0.5	0.8	0.8	1	1	1	1
瞬間容許扭力 (Kgf-cm) Max momentary tolerance torque	0.6	0.9	0.9	1.5	1.5	2.4	2.4	3	3	3	3
效率 Efficiency	81%	73%	73%	66%	66%	66%	59%	59%	59%	59%	59%
高度 Height (H)	3.4	2.4	2.4	3.4	3.4	3.4	2.4	2.4	2.4	2.4	2.4
重量 Weight (g)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3

- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

IG

Right Angle

RA

RB

WG

Encoder

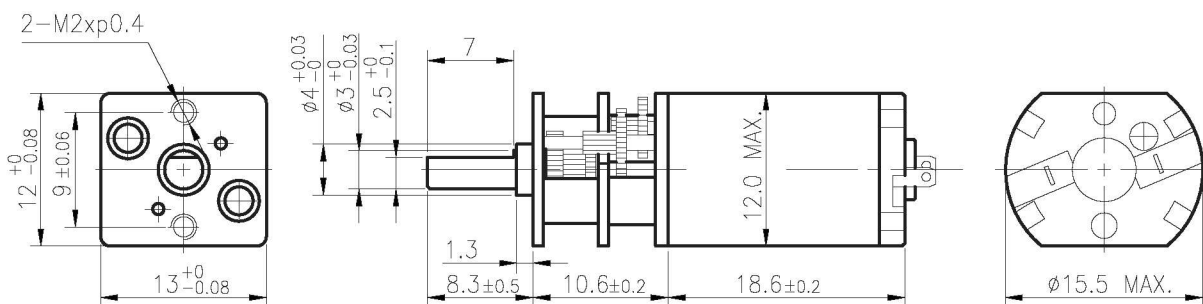
Driver

RA-13WGM

01 & 02 TYPE



外形尺寸 / Appearance Size



unit:mm

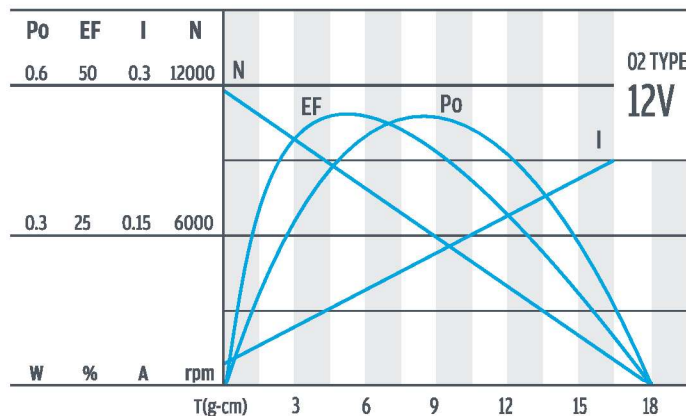
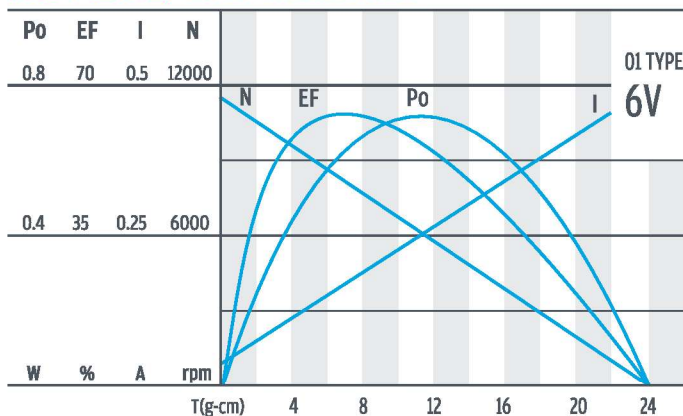
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

減速比 Reduction ratio	1/10	1/21	1/34	1/59	1/75	1/105	1/146	1/203	1/257	1/294	1/360
6V											
定額扭力 Rated torque (g-cm)	30	60	100	155	200	270	340	470	600	690	840
定額轉速 Rated speed (rpm)	950	445	270	160	125	91	65	47	37	32	26
12V											
定額扭力 Rated torque (g-cm)	35	70	110	175	220	310	380	530	680	780	950
定額轉速 Rated speed (rpm)	870	400	255	145	116	83	59	43	34	29	24
軸心迴轉方向 Rotation direction	CW	CCW			CW				CCW		

馬達單體型式 / Motor Data

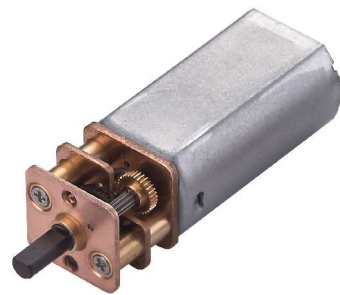
定額電壓 Rated volt (V)	定額扭力 Rated torque (g-cm)	定額轉速 Rated speed (rpm)	定額電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定額輸出 Rated output (W)	重量 Weight (g)
6	4	9600	≤ 0.14	11500	≤ 0.05	0.39	10
12	4.5	8750	≤ 0.1	11700	≤ 0.03	0.4	10

馬達單體特性 / Motor Characteristics

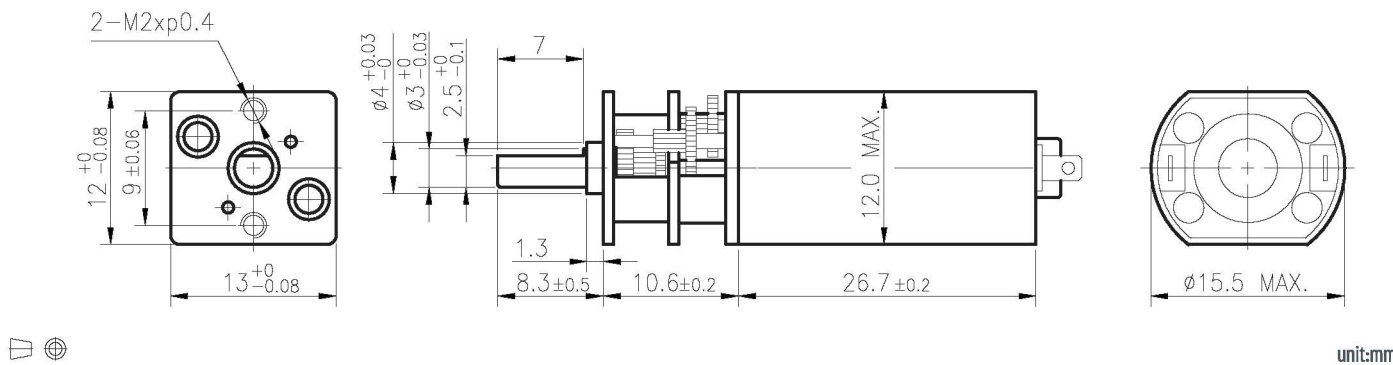


RA-13WGM

03 & 04 TYPE



外形尺寸 / Appearance Size



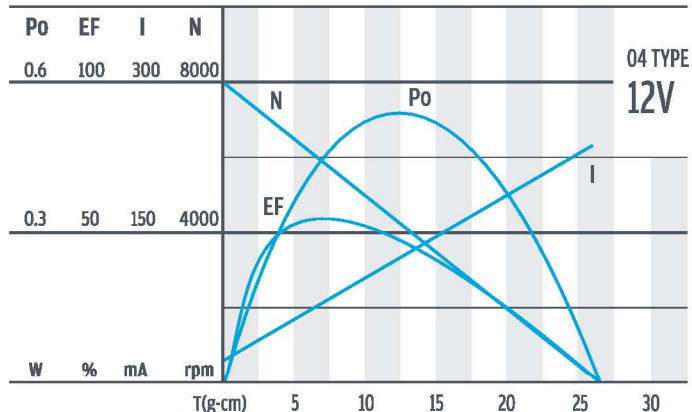
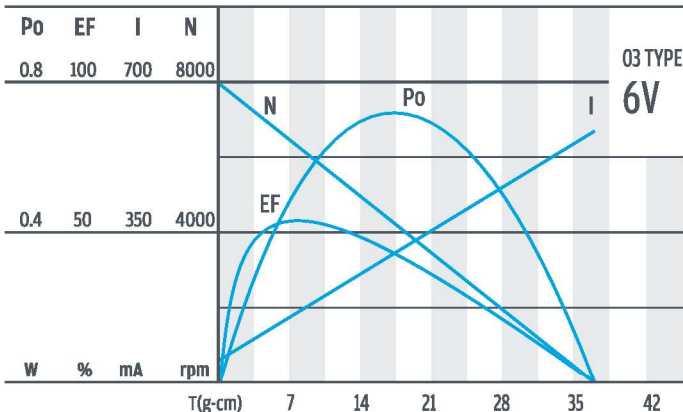
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

	減速比 Reduction ratio	1/10	1/21	1/34	1/59	1/75	1/105	1/146	1/203	1/257	1/294	1/360
6V	定格扭力 Rated torque (g-cm)	55	110	180	285	365	510	635	880	1000	1000	1000
	定格轉速 Rated speed (rpm)	650	300	190	110	86	62	44	32	25	23	19
12V	定格扭力 Rated torque (g-cm)	45	90	150	235	300	420	520	730	920	1000	1000
	定格轉速 Rated speed (rpm)	620	290	180	100	82	59	42	30	24	21	18
	軸心迴轉方向 Rotation direction	CW		CCW		CW			CCW			

馬達單體型式 / Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
6	7.4	6550	≤0.16	8000	≤0.065	0.5	18
12	6.1	6200	≤0.085	8000	≤0.05	0.394	18

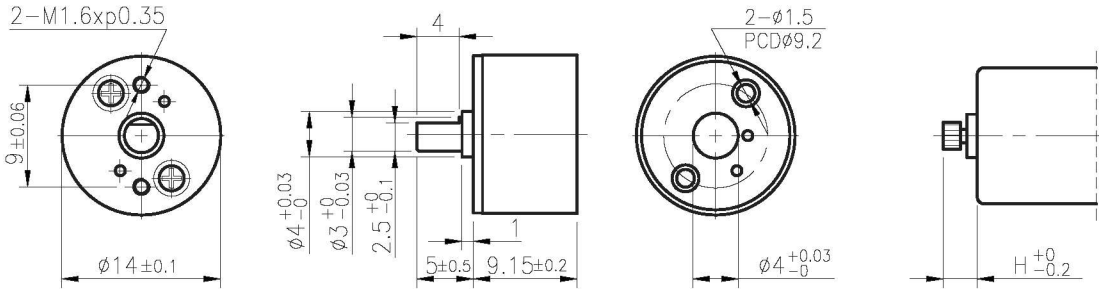
馬達單體特性 / Motor Characteristics



RA-14



外形尺寸 & 馬達齒鉤合尺寸 / Appearance Size & Pinion Assembly Dimension



unit:mm

產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (5mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
塑膠 Plastic	---	≤ 0.4 kgf	≤ 0.2 kgf	≤ 2 kgf	≤ 0.06 mm	≤ 0.2 mm	$\leq 1.5'$

馬達齒輪型式 / Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.15	12	20°	$\phi 0.99$	1/29, 1/235, 1/298
0.15	13	20°	$\phi 0.99$	1/10, 1/102
0.15	16	20°	$\phi 0.99$	1/19, 1/60, 1/76, 1/134, 1/197

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/10	1/19	1/29	1/60	1/76	1/102	1/134	1/197	1/235	1/298
定格容許扭力 (Kgf-cm Max.) Rated tolerance torque	0.2	0.3	0.3	0.5	0.5	0.8	0.8	1	1	1
瞬間容許扭力 (Kgf-cm) Max momentary tolerance torque	0.6	0.9	0.9	1.5	1.5	2.4	2.4	3	3	3
效率 Efficiency	81%	73%	73%	66%	66%	66%	59%	59%	59%	59%
高度 Height (H)	2.5	2.1	2.1	2.5	2.5	2.5	2.1	2.1	2.1	2.1
重量 Weight (g)	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7

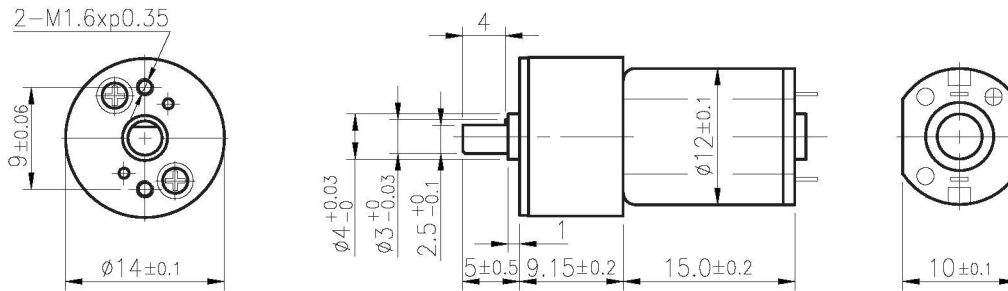
- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

RA-14GM

01 & 02 TYPE



外形尺寸/ Appearance Size



unit:mm

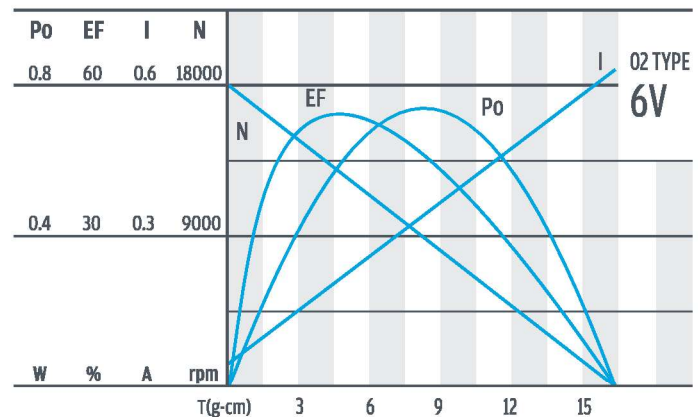
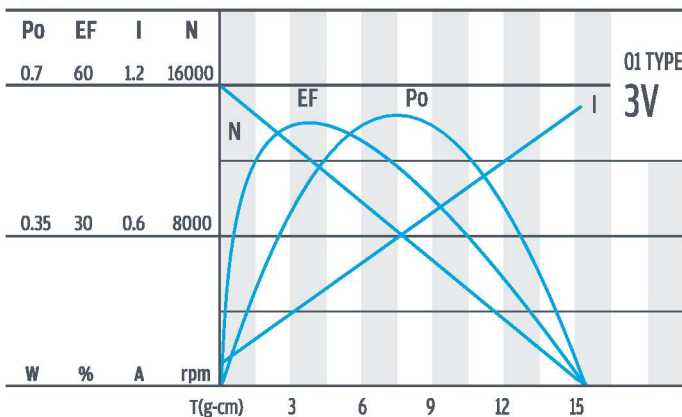
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

	減速比 Reduction ratio	1/10	1/19	1/29	1/60	1/76	1/102	1/134	1/197	1/235	1/298		
3V	定格扭力 Rated torque (g-cm)	15	25	40	75	100	120	155	230	275	350		
	定格轉速 Rated speed (rpm)	1400	720	480	230	180	135	100	70	59	46		
6V	定格扭力 Rated torque (g-cm)	24	40	60	115	150	200	235	345	410	520		
	定格轉速 Rated speed (rpm)	1450	770	510	245	195	145	110	75	63	50		
	軸心迴轉方向 Rotation direction	CW	CCW			CW				CCW			

馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
3	2	14000	≤ 0.25	16000	≤ 0.08	0.287	5.5
6	3	14900	≤ 0.17	18000	≤ 0.05	0.46	5.5

馬達單體特性/ Motor Characteristics



IG

Right Angle

RA

RB

WG

Encoder

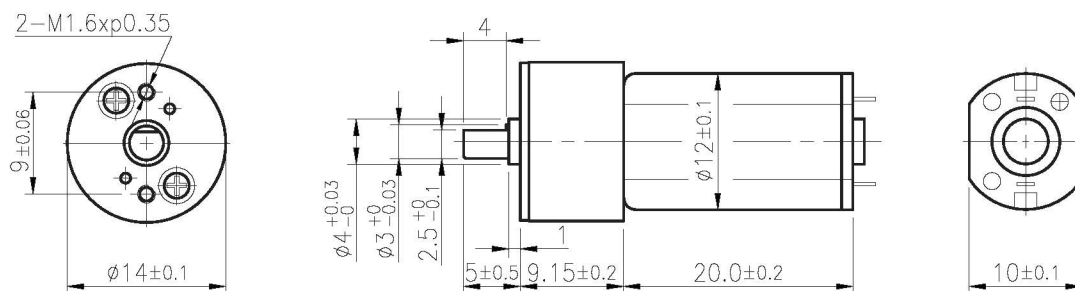
Driver

RA-14GM

03 & 04 TYPE



外形尺寸 / Appearance Size



unit:mm

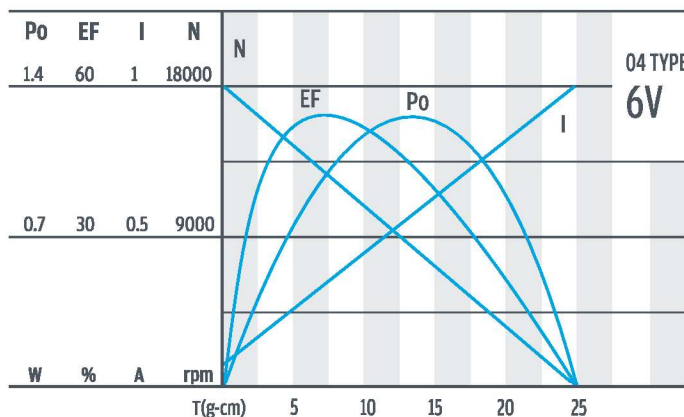
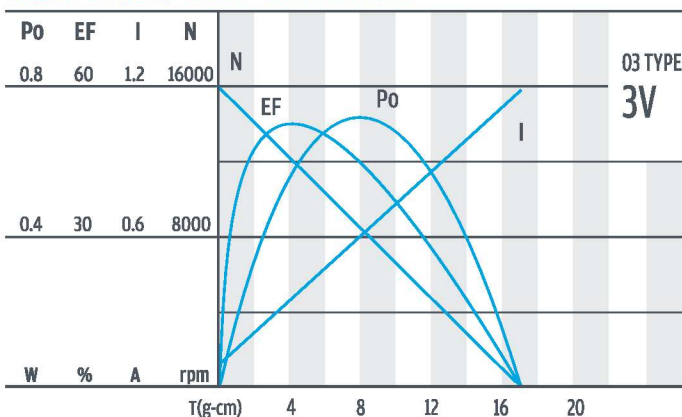
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

		減速比 Reduction ratio	1/10	1/19	1/29	1/60	1/76	1/102	1/134	1/197	1/235	1/298
3V	定格扭力 Rated torque (g-cm)	24	40	60	115	150	200	235	345	415	525	
	定格轉速 Rated speed (rpm)	1300	700	460	225	175	132	100	68	57	45	
6V	定格扭力 Rated torque (g-cm)	30	55	80	155	200	270	300	460	530	700	
	定格轉速 Rated speed (rpm)	1500	780	510	250	195	145	112	76	64	50	
		軸心迴轉方向 Rotation direction	CW	CCW		CW		CCW				

馬達單體型式 / Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格輸出 Rated output (W)	重量 Weight (g)
3	3	13500	≤ 0.31	16000	≤ 0.09	0.41	7.5
6	4	15000	≤ 0.25	18000	≤ 0.065	0.61	7.5

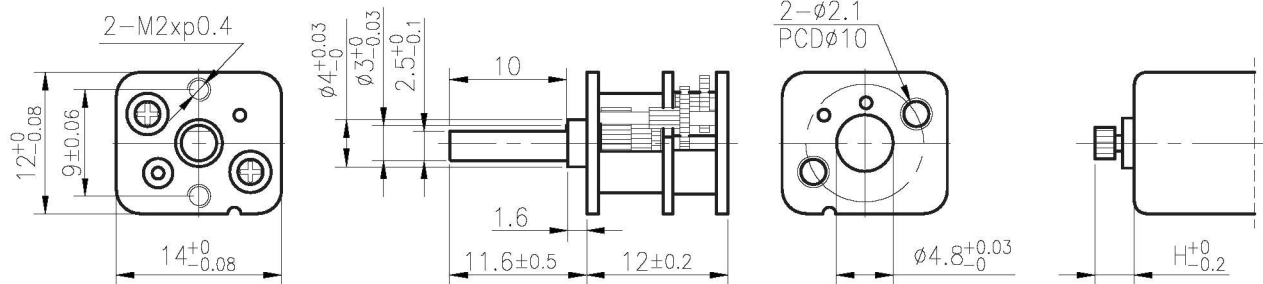
馬達單體特性 / Motor Characteristics



RA-14W



外形尺寸 & 馬達齒鉤合尺寸 / Appearance Size & Pinion Assembly Dimension



unit:mm

產品規格/ Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (5mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
---	---	≤ 0.4 kgf	≤ 0.2 kgf	≤ 2 kgf	≤ 0.06 mm	≤ 0.2 mm	≤ 1.5°

馬達齒輪型式/ Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.15	15	20°	∅ 1.49	1/123, 1/209
0.15	17	20°	∅ 1.49	1/6, 1/36, 1/62

標準減速比型式/ Gearboxes Specifications

減速比 Reduction ratio	1/6	1/36	1/62	1/123	1/209						
定格容許扭力 (Kgf-cm Max.) Rated tolerance torque	0.2	0.3	0.5	0.8	1						
瞬間容許扭力 (Kgf-cm) Max momentary tolerance torque	0.6	0.9	1.5	2.4	3						
效率 Efficiency	81%	66%	66%	59%	59%						
高度 Height (H)	4.1	4.1	4.1	2.9	2.9						
重量 Weight (g)	6.2	6.2	6.2	6.2	6.2						

- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

IG

Right Angle

RA

RB

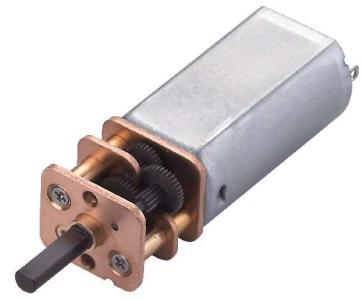
WG

Encoder

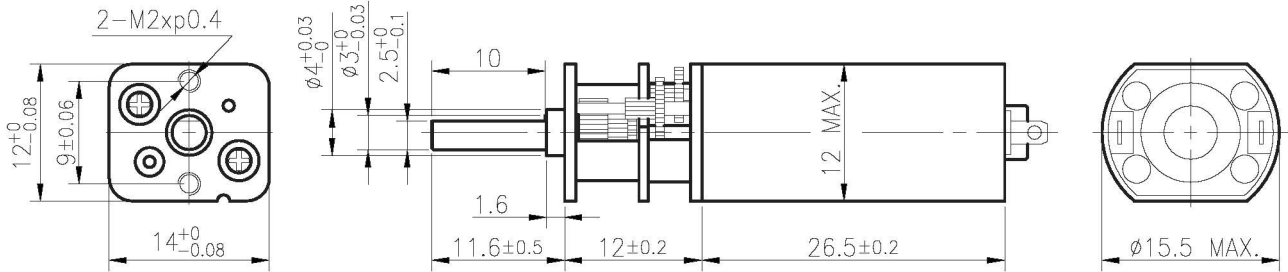
Driver

RA-14WGM

03 & 04 TYPE



外形尺寸 / Appearance Size



unit:mm

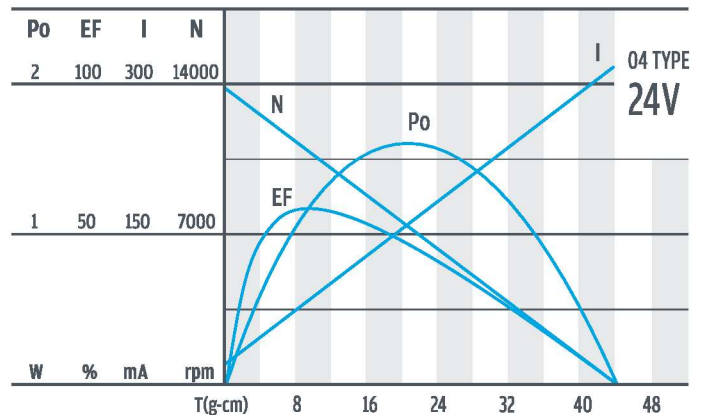
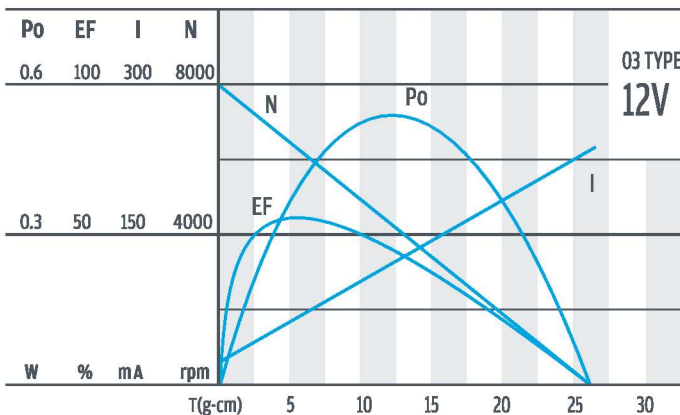
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

		減速比 Reduction ratio	1/6	1/36	1/62	1/123	1/209
12V	定格扭力 Rated torque (g-cm)	30	140	240	440	750	
	定格轉速 Rated speed (rpm)	1000	170	100	50	29	
24V	定格扭力 Rated torque (g-cm)	40	210	360	650	1000	
	定格轉速 Rated speed (rpm)	1800	300	175	89	53	
軸心迴轉方向 Rotation direction			CW		CCW		

馬達單體型式 / Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格輸出 Rated output (W)	重量 Weight (g)
12	6.1	6200	≤ 0.085	8000	≤ 0.05	0.394	18
24	9	11000	≤ 0.09	13500	≤ 0.05	1.026	18

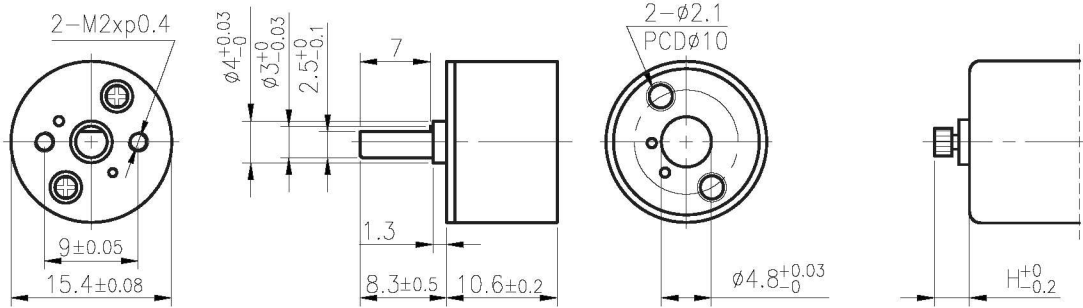
馬達單體特性 / Motor Characteristics



RA-15



外形尺寸 & 馬達齒鉤合尺寸 / Appearance Size & Pinion Assembly Dimension



unit:mm

產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (5mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
塑膠 Plastic	---	≤ 0.4 kgf	≤ 0.2 kgf	≤ 2 kgf	≤ 0.06 mm	≤ 0.2 mm	≤ 15°

馬達齒輪型式 / Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.15	14	20°	∅ 1.49	1/10, 1/34, 1/105, 1/360
0.15	16	20°	∅ 1.49	1/21, 1/59, 1/75, 1/203, 1/257, 1/294
0.15	18	20°	∅ 1.49	1/146

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/10	1/21	1/34	1/59	1/75	1/105	1/146	1/203	1/257	1/294	1/360
定格容許扭力 (Kgf-cm Max.) Rated tolerance torque	0.2	0.3	0.3	0.5	0.5	0.8	0.8	1	1	1	1
瞬間容許扭力 (Kgf-cm) Max momentary tolerance torque	0.6	0.9	0.9	1.5	1.5	2.4	2.4	3	3	3	3
效率 Efficiency	81%	73%	73%	66%	66%	66%	59%	59%	59%	59%	59%
高度 Height (H)	3.4	2.4	2.4	3.4	3.4	3.4	2.4	2.4	2.4	2.4	2.4
重量 Weight (g)	6	6	6	6	6	6	6	6	6	6	6

- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

IG

Right Angle

RA

RB

WG

Encoder

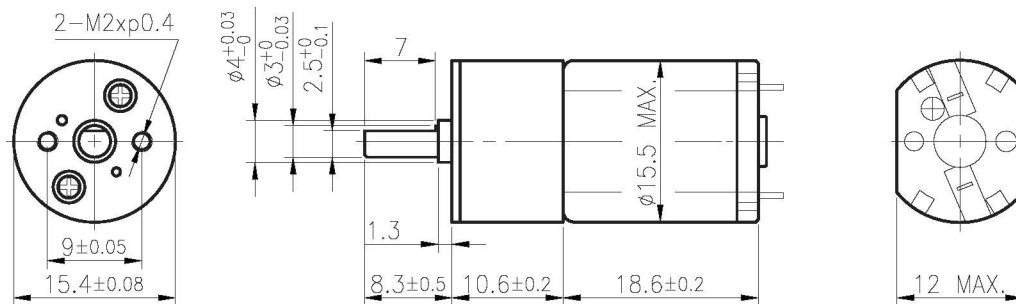
Driver

RA-15GM

01 & 02 TYPE



外形尺寸/Appearance Size



unit:mm

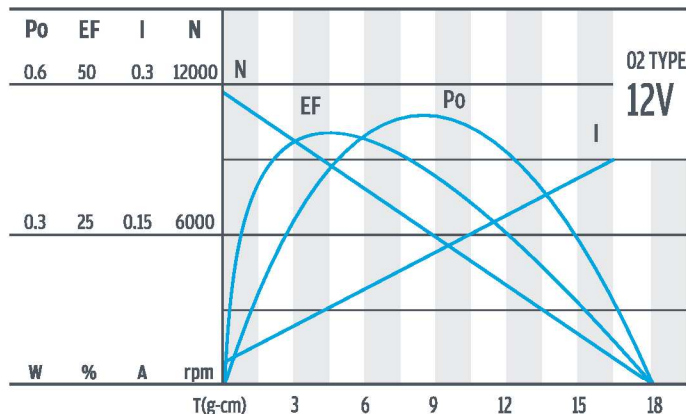
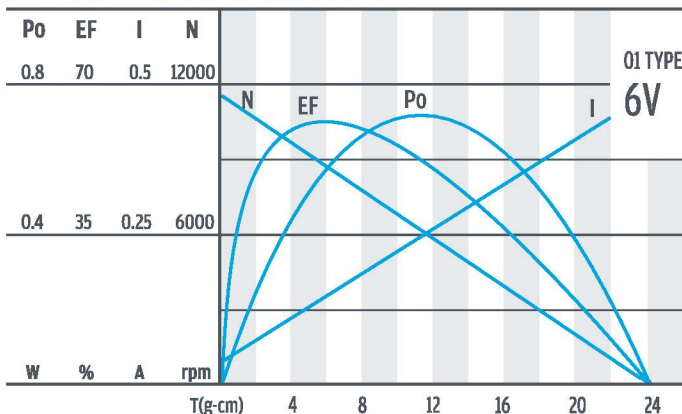
齒輪箱馬達轉矩 & 速度/Gear Motor Torque & Speed

減速比 Reduction ratio	1/10	1/21	1/34	1/59	1/75	1/105	1/146	1/203	1/257	1/294	1/360
6V	定格扭力 Rated torque (g-cm)	30	60	100	155	200	270	340	470	600	840
	定格轉速 Rated speed (rpm)	950	445	270	160	125	91	65	47	37	26
12V	定格扭力 Rated torque (g-cm)	35	70	110	175	220	310	380	530	680	950
	定格轉速 Rated speed (rpm)	870	400	255	145	116	83	59	43	34	24
軸心迴轉方向 Rotation direction	CW	CCW		CW		CCW					

馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
6	4	9600	≤ 0.14	11500	≤ 0.05	0.39	10
12	4.5	8750	≤ 0.1	11700	≤ 0.03	0.4	10

馬達單體特性/ Motor Characteristics

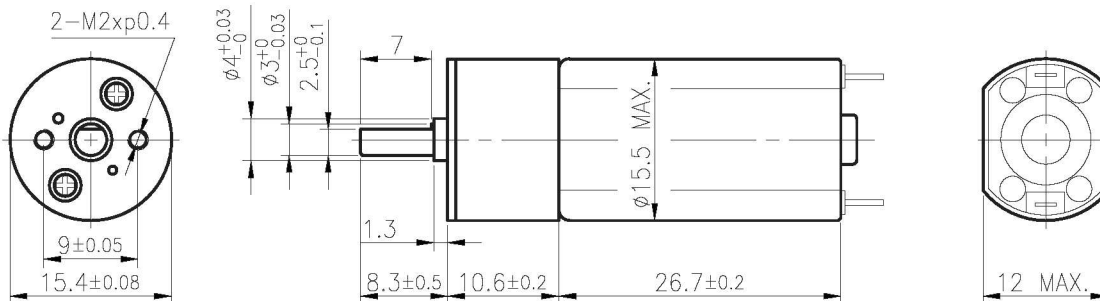


RA-15GM

03 & 04 TYPE



外形尺寸/ Appearance Size



unit:mm

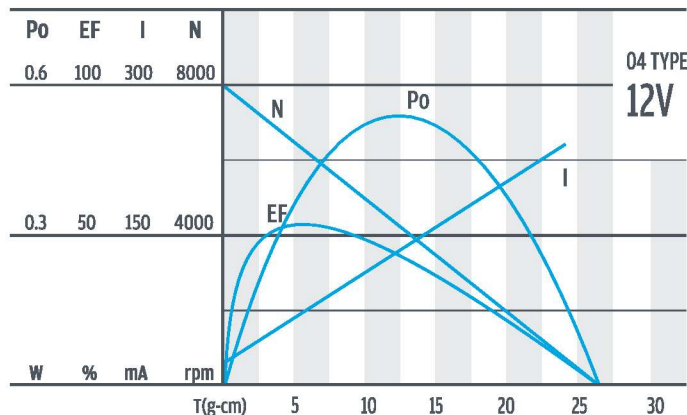
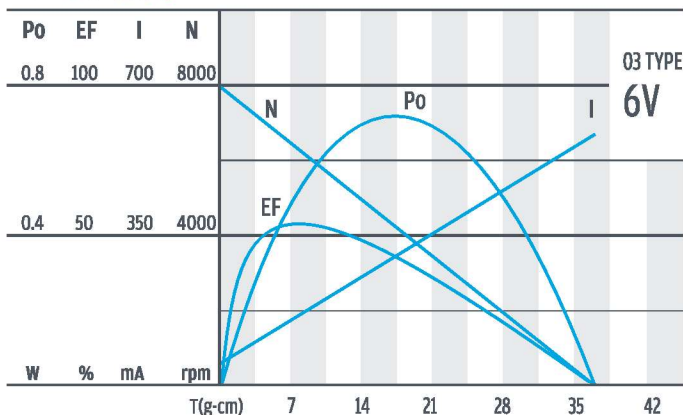
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

	減速比 Reduction ratio	1/10	1/21	1/34	1/59	1/75	1/105	1/146	1/203	1/257	1/294	1/360
6V	定格扭力 Rated torque (g-cm)	55	110	180	285	365	510	635	880	1000	1000	1000
	定格轉速 Rated speed (rpm)	650	300	190	110	86	62	44	32	25	23	19
12V	定格扭力 Rated torque (g-cm)	45	90	150	235	300	420	520	730	920	1000	1000
	定格轉速 Rated speed (rpm)	620	290	180	100	82	59	42	30	24	21	18
	軸心迴轉方向 Rotation direction	CW	CCW			CW				CCW		

馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
6	7.4	6550	≤ 0.16	8000	≤ 0.065	0.5	18
12	6.1	6200	≤ 0.085	8000	≤ 0.05	0.394	18

馬達單體特性/ Motor Characteristics



IG

Right Angle

RA

RB

WG

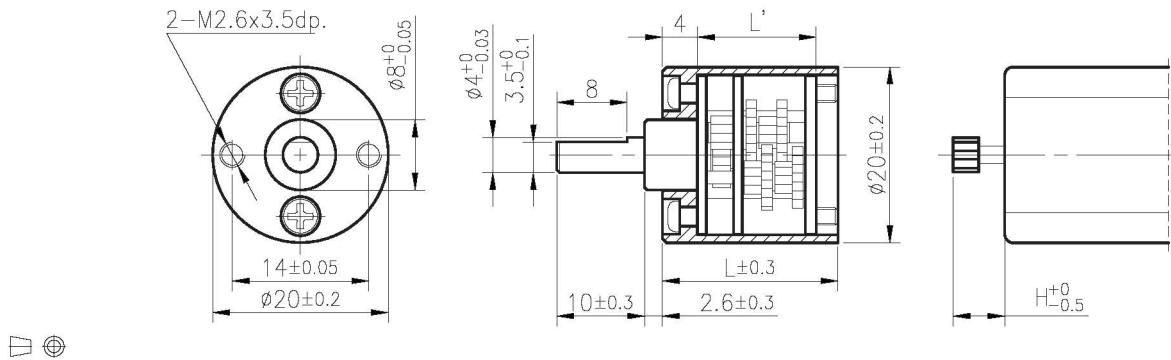
Encoder

Driver

RA-18



外形尺寸 & 馬達齒鉤合尺寸 / Appearance Size & Pinion Assembly Dimension



unit:mm

產品規格/ Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (10mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
金屬 Metal	含油軸承 Sleeve bearings	≤ 0.4 kgf	≤ 0.2 kgf	≤ 2 kgf	≤ 0.05 mm	≤ 0.3 mm	$\leq 1.5^\circ$

馬達齒輪型式/ Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.25	12	20°	$\phi 1.98$	1/10, 1/13, 1/29, 1/67, 1/80, 1/99, 1/150, 1/225 1/350, 1/430, 1/549, 1/689, 1/794, 1/866
0.25	14	20°	$\phi 1.98$	1/18, 1/42, 1/52, 1/120, 1/179, 1/275

標準減速比型式/ Gearboxes Specifications

減速比 Reduction ratio	1/10	1/13	1/18	1/29	1/42	1/52	1/67	1/80	1/99	1/120	1/150	1/179	1/225	1/275	1/350	1/430	1/549	1/689	1/794	1/866
定格容許扭力 (Kgf-cm Max.) Rated tolerance torque	0.4	0.4	0.6	0.6	1	1	1	1.2	1.2	1.5	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
瞬間容許扭力 (Kgf-cm) Max momentary tolerance torque	1.2	1.2	1.8	1.8	3	3	3	3.6	3.6	4.5	4.5	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
效率 Efficiency	73%	73%	65%	65%	55%	55%	55%	50%	50%	50%	50%	45%	45%	45%	45%	40%	40%	40%	40%	40%
L'	10	10	13.5	13.5	13.5	13.5	13.5	15.3	15.3	15.3	15.3	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
L	16.5	16.5	20	20	20	20	20	21.8	21.8	21.8	21.8	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3
H	5.2	5.2	7.4	7.4	5.2	5.2	5.2	5.2	5.2	5.2	5.2	7.4	7.4	7.4	7.4	5.2	5.2	5.2	5.2	5.2
重量 Weight (g)	24	24	27.5	27.5	27.5	27.5	27.5	29	29	29	29	32	32	32	32	32	32	32	32	32

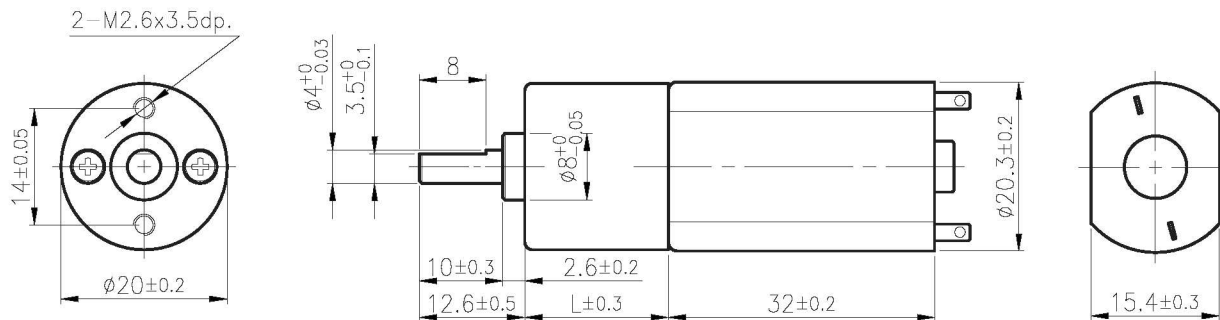
- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

RA-20GM

03 & 04 TYPE



外形尺寸/ Appearance Size



unit:mm

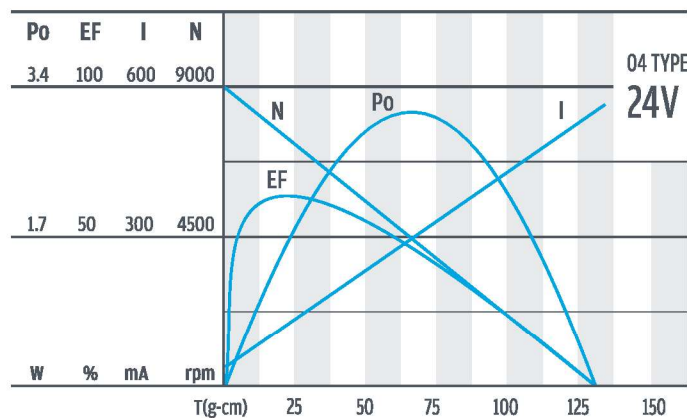
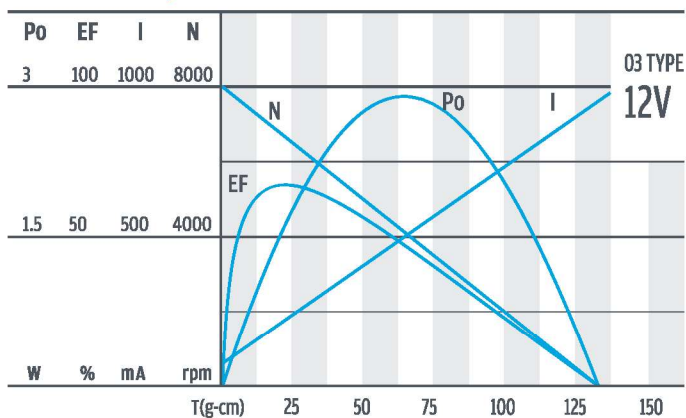
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

	減速比 Reduction ratio	1/10	1/13	1/18	1/29	1/42	1/52	1/67	1/80	1/99	1/120	1/150	1/179	1/225	1/275	1/350	1/430	1/549	1/689	1/794	1/866
12V	定格扭力 Rated torque (kg-cm)	0.16	0.20	0.25	0.41	0.51	0.62	0.81	0.86	1.10	1.30	1.50	1.77	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
	定格轉速 Rated speed (rpm)	655	525	364	226	159	129	100	84	67	56	45	37	31	25.5	20.5	16.6	13.1	10.5	9.3	8.6
24V	定格扭力 Rated torque (kg-cm)	0.16	0.20	0.25	0.41	0.51	0.62	0.81	0.86	1.10	1.30	1.50	1.77	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
	定格轉速 Rated speed (rpm)	720	580	403	250	176	142	110	93	74	62	49.5	41	34	28.5	23	18.5	15	12	10.5	9.2
	軸心迴轉方向 Rotation direction	CW		CCW		CW		CCW		CW		CCW		CW		CCW		CW		CCW	
	長度 Length (L)	16.5		20		21.8		25.3													

馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	22	6700	≤0.2	8000	≤0.05	1.5	32
24	22	7400	≤0.11	9000	≤0.03	1.7	32

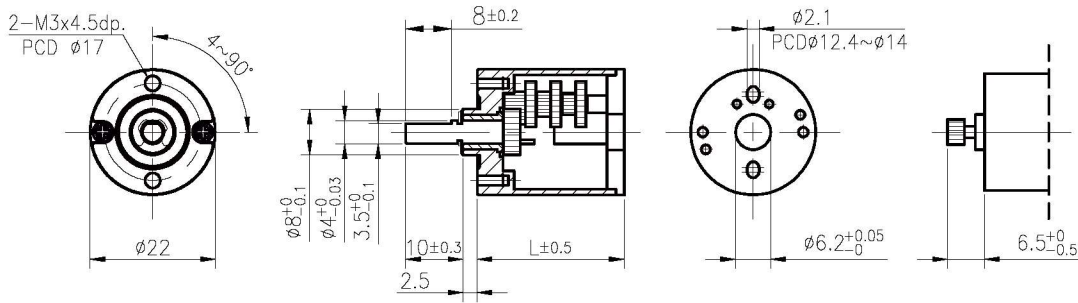
馬達單體特性/ Motor Characteristics



RA-22



外形尺寸 & 馬達齒鉚合尺寸 / Appearance Size & Pinion Assembly Dimension



unit:mm

產品規格/ Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (5mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
金屬 Metal	含油軸承 Sleeve bearings	≤ 0.4 kgf	≤ 0.2 kgf	≤ 2 kgf	≤ 0.05 mm	≤ 0.3 mm	$\leq 1.5^\circ$

馬達齒輪型式/ Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.3	12	20°	$\phi 1.98$	全種通用 Practicable

標準減速比型式/ Gearboxes Specifications

減速比 Reduction ratio	1/9	1/19	1/24	1/39	1/51	1/70	1/82	1/106	1/112	1/137	1/145	1/180	1/233	1/286	1/392	1/507
定格容許扭力 (Kgf-cm Max.) Rated tolerance torque	0.4	0.6	0.6	1	1	1	1.2	1.2	1.2	1.5	1.5	1.8	1.8	1.8	1.8	1.8
瞬間容許扭力 (Kgf-cm) Max momentary tolerance torque	1.2	1.8	1.8	3	3	3	3.6	3.6	3.6	4.5	4.5	5.4	5.4	5.4	5.4	5.4
效率 Efficiency	73%	65%	65%	55%	55%	55%	50%	50%	50%	50%	50%	45%	45%	45%	45%	45%
高度 Height (H)	17	19.2	19.2	21.4	21.4	21.4	23.6	23.6	23.6	23.6	23.6	25.8	25.8	25.8	25.8	25.8
重量 Weight (g)	24.6	25.4	25.4	26.2	26.2	26.2	27	27	27	27	27	27.7	27.7	27.7	27.7	27.7

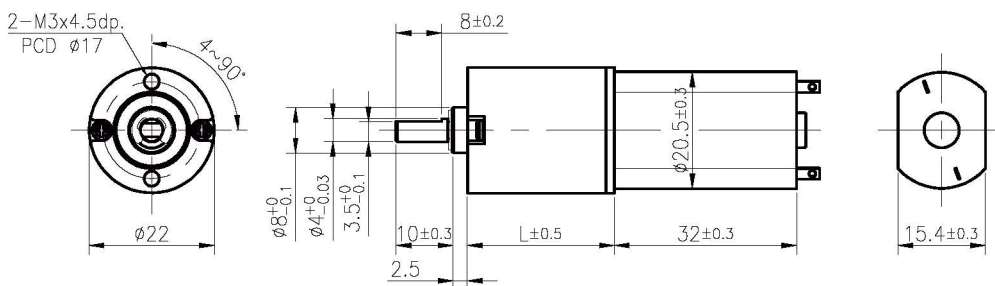
- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

RA-22GM

01 & 02 TYPE



外形尺寸/ Appearance Size



unit:mm

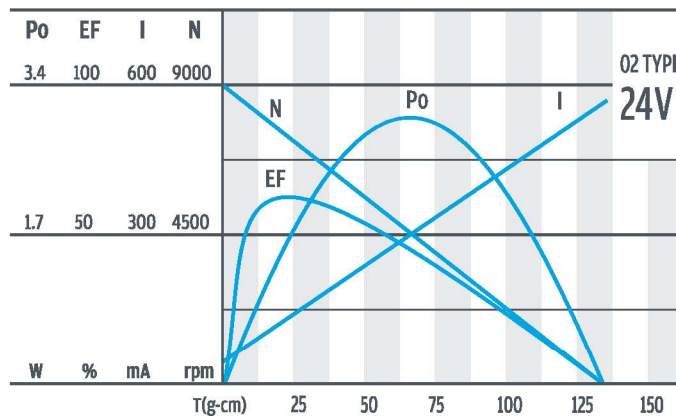
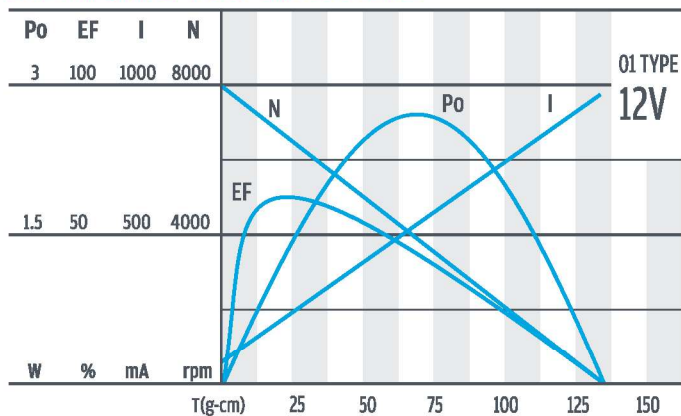
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

	減速比 Reduction ratio	1/9	1/19	1/24	1/39	1/51	1/70	1/82	1/106	1/112	1/137	1/145	1/180	1/233	1/286	1/392	1/507
12V	定格扭力 Rated torque (g-cm)	145	265	345	470	615	840	895	1165	1200	1500	1500	1780	1800	1800	1800	1800
	定格轉速 Rated speed (rpm)	740	350	270	170	130	95	80	65	60	50	45	37	27	22	16	12
24V	定格扭力 Rated torque (g-cm)	145	265	345	470	615	840	895	1165	1200	1500	1500	1780	1800	1800	1800	1800
	定格轉速 Rated speed (rpm)	815	390	300	185	145	105	90	70	65	55	50	40	30	24	17	13
	軸心迴轉方向 Rotation direction	ccw	cw		ccw			cw					ccw				
	長度 Length (L)	17	19.2		21.4			23.6					25.8				

馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (mA)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (mA)	定格出力 Rated output (W)	重量 Weight (g)
12	22	6700	≤ 200	8000	≤ 70	1.5	32
24	22	7400	≤ 110	9000	≤ 40	1.7	32

馬達單體特性/ Motor Characteristics

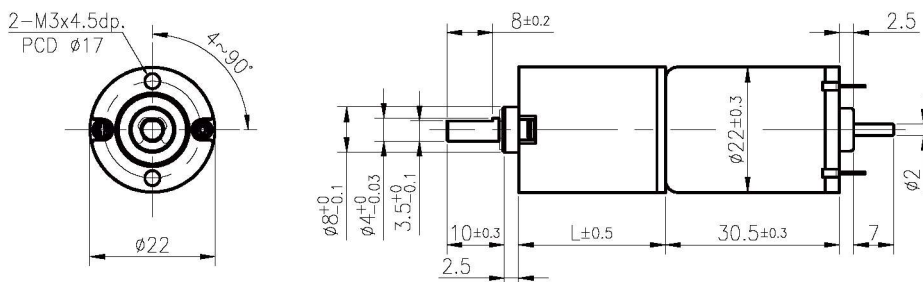


RA-22GM

03 & 04 TYPE



外形尺寸/ Appearance Size



unit:mm

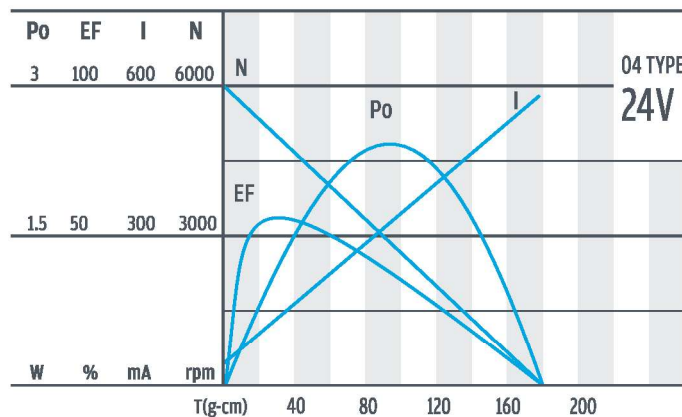
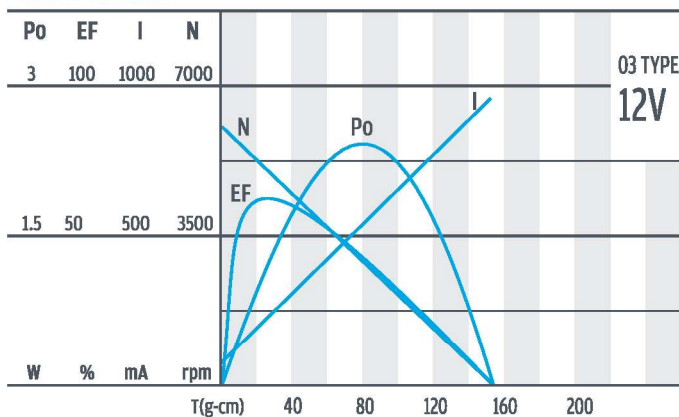
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

減速比 Reduction ratio	1/9	1/19	1/24	1/39	1/51	1/70	1/82	1/106	1/112	1/137	1/145	1/180	1/233	1/286	1/392	1/507
12V	定格扭力 Rated torque (g-cm)	200	375	490	665	865	1000	1200	1200	1500	1800	1800	1800	1800	1800	1800
	定格轉速 Rated speed (rpm)	530	255	195	120	95	69	58	44	42	34	32	25	19	15	11
24V	定格扭力 Rated torque (g-cm)	240	450	585	795	1000	1000	1200	1200	1500	1500	1800	1800	1800	1800	1800
	定格轉速 Rated speed (rpm)	520	250	190	120	92	68	56	43	41	33	31	25	19	15	11
軸心迴轉方向 Rotation direction	CCW	CW			CCW				CW					CCW		
長度 Length (L)	17	19.2			21.4				23.6					25.8		

馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (mA)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (mA)	定格出力 Rated output (W)	重量 Weight (g)
12	31	4790	≤ 240	6000	≤ 80	1.52	43
24	37	4710	< 145	6000	< 55	1.79	43

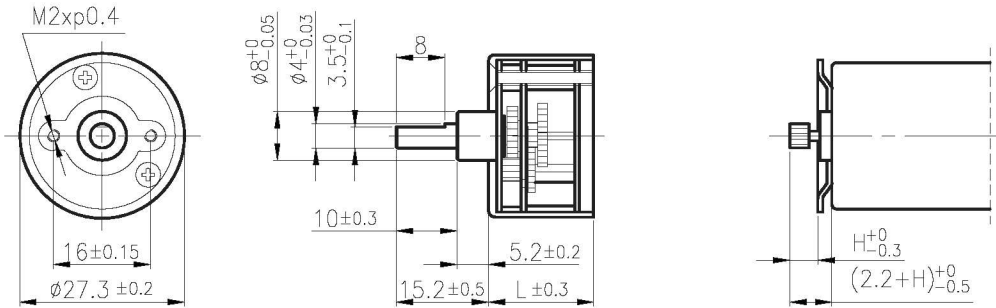
馬達單體特性/ Motor Characteristics



RA-25



外形尺寸 & 馬達齒鉤合尺寸 / Appearance Size & Pinion Assembly Dimension



unit:mm

產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (10mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
金屬 Metal	含油軸承 Sleeve bearings	≤ 0.3 kgf	≤ 0.2 kgf	≤ 2 kgf	≤ 0.05 mm	≤ 0.3 mm	≤ 2°

馬達齒輪型式 / Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.3	12	20°	Ø 1.98	1/6, 1/21, 1/100, 1/170, 1/200, 1/250 1/320, 1/400, 1/500, 1/700, 1/800
0.3	11	20°	Ø 1.98	1/10, 1/15, 1/30, 1/44, 1/60, 1/77, 1/112 1/150, 1/360, 1/900, 1/1153

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/6	1/10	1/15	1/21	1/30	1/44	1/60	1/77	1/100	1/112	1/150	1/170	1/200	1/250	1/320	1/360	1/400	1/500	1/700	1/800	1/900	1/1153
定格容許扭力 (Kgf-cm Max.) Rated tolerance torque	0.3	0.3	0.4	0.4	0.6	0.6	0.8	0.8	1	1	1.2	1.2	1.2	1.2	1.2	1.2	1.5	1.5	1.5	1.5	1.5	1.5
瞬間容許扭力 (Kgf-cm) Max momentary tolerance torque	0.9	0.9	1.2	1.2	1.8	1.8	2.4	2.4	3	3	3.6	3.6	3.6	3.6	3.6	3.6	4.5	4.5	4.5	4.5	4.5	4.5
效率 Efficiency	81%	81%	73%	73%	65%	65%	65%	65%	65%	65%	50%	50%	50%	50%	50%	50%	40%	40%	40%	40%	40%	40%
L	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	19.3	19.3	19.3	19.3	19.3	19.3
H	5.7	5.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
重量 Weight (g)	33	33	34	34	35	35	35	35	36	36	36	36	36	36	36	36	37	37	37	37	37	37

- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

IG

Right Angle

RA

RB

WG

Encoder

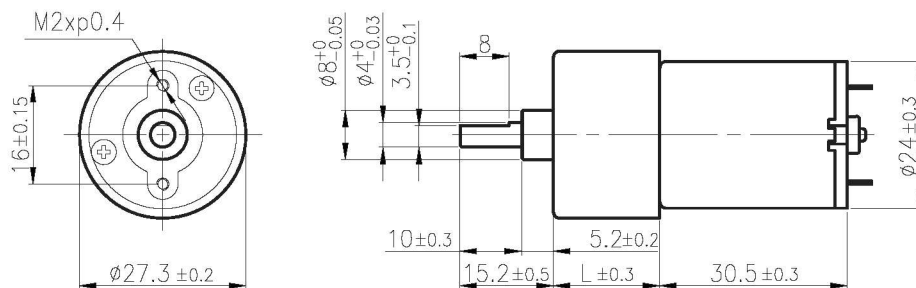
Driver

RA-27GM

02 & 03 TYPE



外形尺寸/ Appearance Size



unit:mm

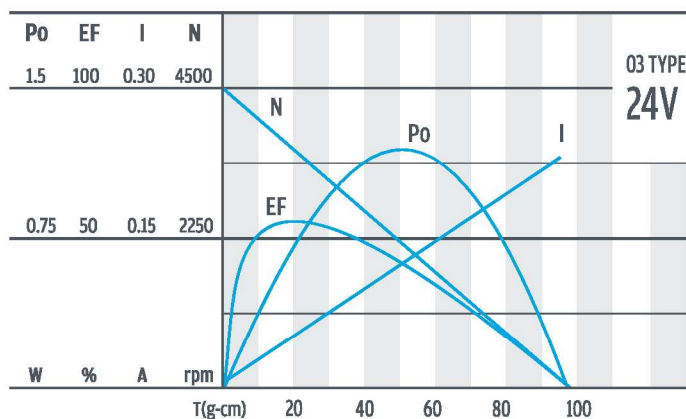
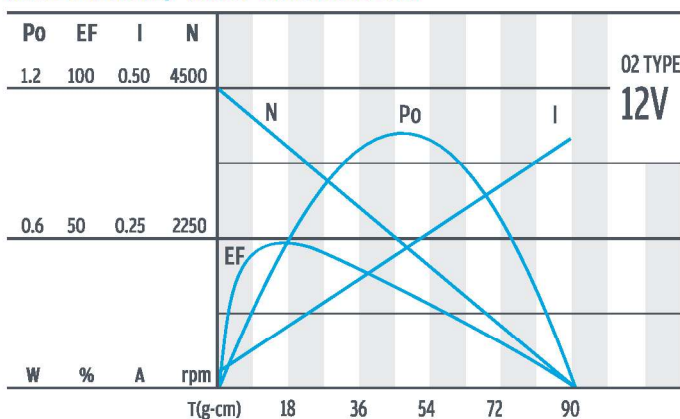
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

減速比 Reduction ratio	1/10	1/15	1/21	1/30	1/44	1/60	1/77	1/100	1/112	1/150	1/170	1/200	1/250	1/320	1/360	1/500	1/700	1/800	1/900	1/1153
12V 定格扭力 Rated torque (kg-cm)	0.16	0.22	0.32	0.40	0.55	0.78	0.8	1.0	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.5	1.5	1.5	1.5	1.5
12V 定格轉速 Rated speed (rpm)	340	230	160	110	80	59	46	36	33	21.5	20	18	14.5	12	10.5	7.5	5.7	5.1	4.5	3.7
24V 定格扭力 Rated torque (kg-cm)	0.16	0.21	0.30	0.38	0.52	0.73	0.8	1.0	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.5	1.5	1.5	1.5	1.5
24V 定格轉速 Rated speed (rpm)	325	220	153	105	77	56	44	34	33	22	20	18	14.5	11.5	10.5	7.5	5.6	5.0	4.5	3.6
軸心迴轉方向 Rotation direction	CW		CCW		CW				CCW				CW							
長度 Length (L)	17.3																19.3			

馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	20.5	3560	≤0.15	4500	≤0.05	0.75	42
24	19.5	3400	≤0.065	4500	≤0.03	0.68	42

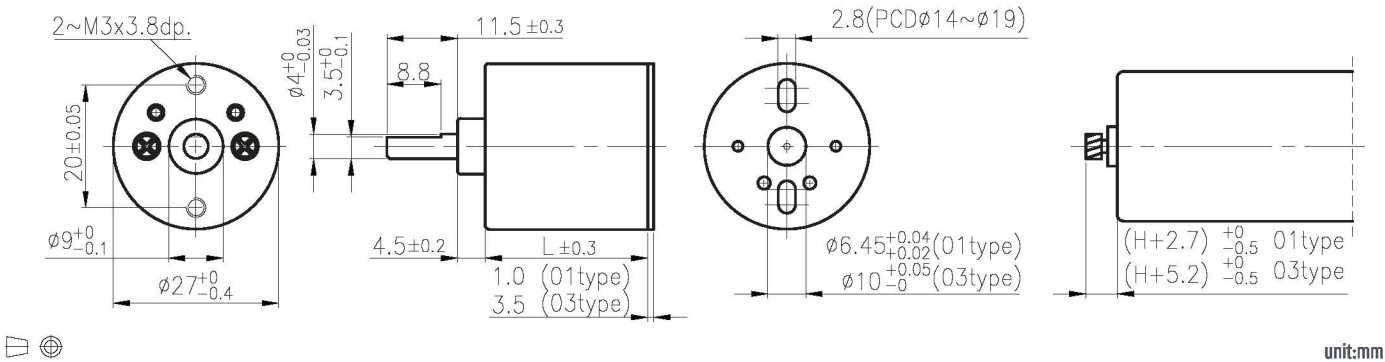
馬達單體特性/ Motor Characteristics



RA-27C



外形尺寸 & 馬達齒鉤合尺寸 / Appearance Size & Pinion Assembly Dimension



產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (10mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
金屬 Metal	含油軸承 Sleeve bearings	≤ 0.5 kgf	≤ 0.4 kgf	≤ 4 kgf	≤ 0.05 mm	≤ 0.3 mm	≤ 2°

馬達齒輪型式 / Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	螺旋角 Helix angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.4	10	20°	18° (左, left)	$\phi 1.98 \ \phi 2.28$	全種通用 Practicable

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/10	1/20	1/42	1/54	1/87	1/112	1/181	1/232	1/376	1/484	1/784	1/1009
定格容許扭力 (Kgf-cm Max.) Rated tolerance torque	0.5	0.6	1	1	1.2	1.2	1.6	1.6	2	2	2.5	2.5
瞬間容許扭力 (Kgf-cm) Max momentary tolerance torque	1.5	1.8	3	3	3.6	3.6	4.8	4.8	6	6	7.5	7.5
效率 Efficiency	73%	66%	59%	59%	53%	53%	48%	48%	43%	43%	39%	39%
L	14.65	14.65	19.4	19.4	19.4	19.4	24.15	24.15	24.15	24.15	26.6	26.6
H	4.65	2.27	4.65	4.65	2.27	2.27	4.65	4.65	2.27	2.27	4.65	4.65
重量 Weight (g)	33	34	35	35	35	35	36	36	36	36	36	36

- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

IG

Right Angle

RA

RB

WG

Encoder

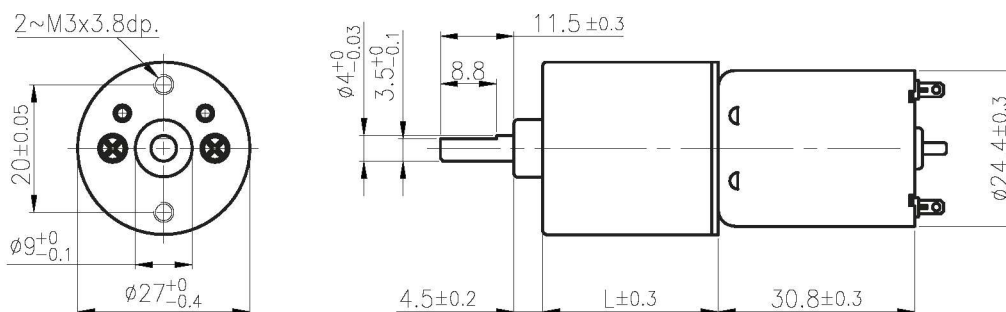
Driver

RA-27CGM

01 & 02 TYPE



外形尺寸 / Appearance Size



unit:mm

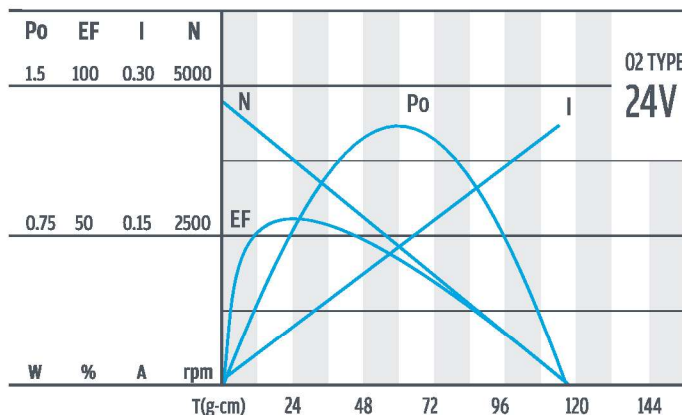
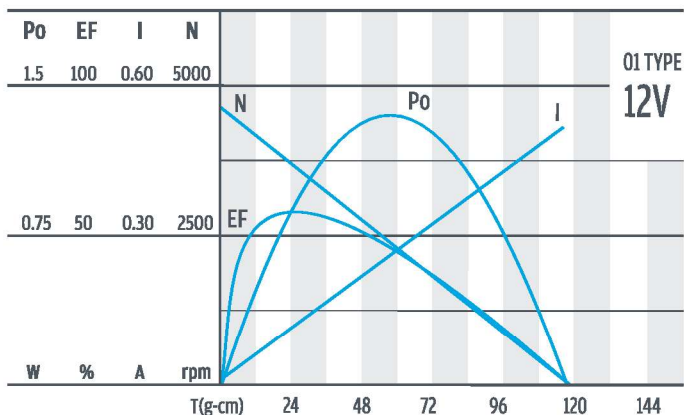
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

減速比 Reduction ratio	1/10	1/20	1/42	1/54	1/87	1/112	1/181	1/232	1/376	1/484	1/784	1/1009
12V 定格扭力 Rated torque (kg-cm)	0.15	0.28	0.54	0.69	1	1.2	1.6	1.6	2	2	2.5	2.5
12V 定格轉速 Rated speed (rpm)	375	180	86	67	41	32	20.2	16.5	10.5	8	5.2	4.1
24V 定格扭力 Rated torque (kg-cm)	0.16	0.31	0.59	0.75	1.1	1.2	1.6	1.6	2	2	2.5	2.5
24V 定格轉速 Rated speed (rpm)	365	175	84	65	40	32	21	16.8	10.6	8.5	5.3	4.1
軸心迴轉方向 Rotation direction	CW	CCW	CW		CCW		CW		CCW		CW	
長度 Length (L)	15.65		20.40			25.15			27.6			

馬達單體型式 / Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	22	3600	≤ 0.13	4500	≤ 0.05	0.81	50
24	24	3500	≤ 0.07	4500	≤ 0.035	0.86	50

馬達單體特性 / Motor Characteristics

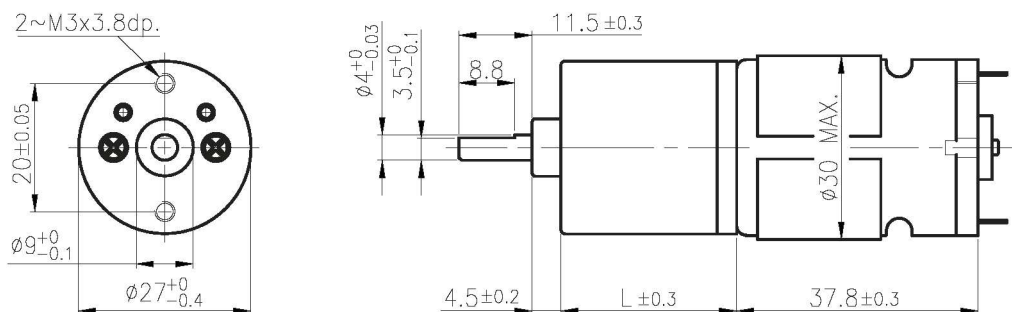


RA-27CGM

03 & 04 TYPE



外形尺寸/ Appearance Size



unit:mm

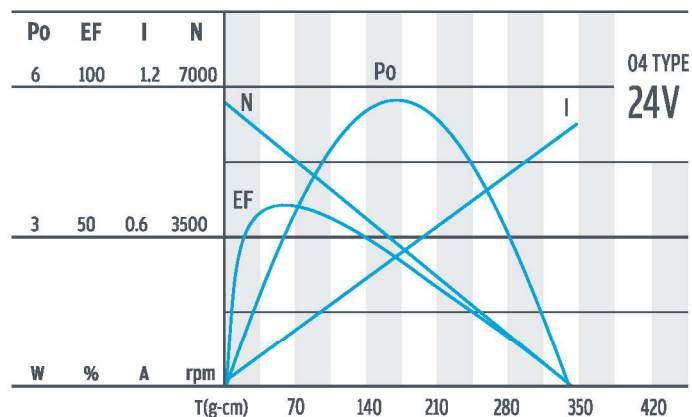
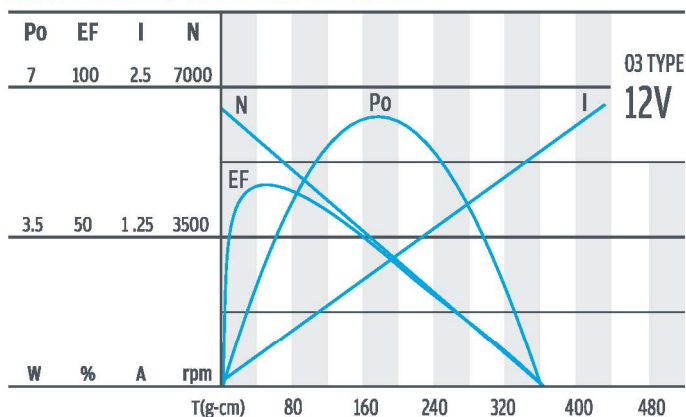
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

	減速比 Reduction ratio	1/10	1/20	1/42	1/54	1/87	1/112	1/181	1/232	1/376	1/484	1/784	1/1009
12V	定格扭力 Rated torque (kg-cm)	0.38	0.6	1	1	1.2	1.2	1.6	1.6	2	2	2.5	2.5
	定格轉速 Rated speed (rpm)	546	284	139	110.5	69.7	55.4	34.1	27	16.8	13	8.2	6.2
24V	定格扭力 Rated torque (kg-cm)	0.41	0.6	1	1	1.2	1.2	1.6	1.6	2	2	2.5	2.5
	定格轉速 Rated speed (rpm)	558	280	137	109	68.7	54.7	33.7	26.7	16.6	12.9	8.1	6.2
	軸心迴轉方向 Rotation direction	CW	CCW	CW		CCW		CW		CCW		CW	
	長度 Length (L)	18.15		22.90			27.65			30.10			

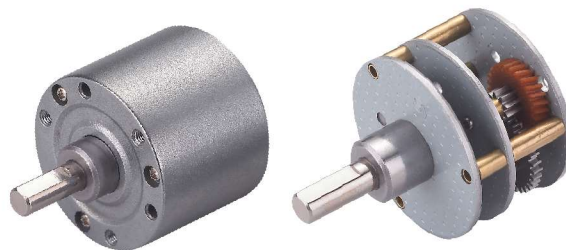
馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	78	5290	≤0.53	6500	≤0.15	4.22	73
24	74	5250	≤0.25	6500	≤0.085	3.97	73

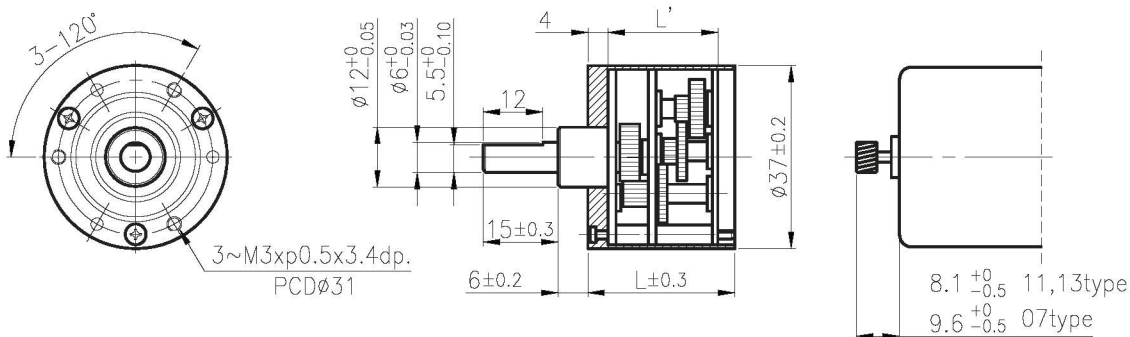
馬達單體特性/ Motor Characteristics



RA-35C



外形尺寸 & 馬達齒鉤合尺寸 / Appearance Size & Pinion Assembly Dimension



unit:mm

產品規格/ Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (10mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
金屬 Metal	含油軸承 Sleeve bearings	≤ 1 kgf	≤ 0.7 kgf	≤ 5 kgf	≤ 0.05 mm	≤ 0.35 mm	≤ 2'

馬達齒輪型式/ Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	螺旋角 Helix angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.5	10	20°	— 18° (左, left)	∅ 1.98 ∅ 2.28 ∅ 2.48 ∅ 2.98 ∅ 3.16	全種通用 Practicable

標準減速比型式/ Gearboxes Specifications

減速比 Reduction ratio	1/6	1/16 1/19 1/21	1/31 1/38 1/47	1/56 1/63 1/69	1/75 1/94 1/104 1/113	1/125 1/156 1/169 1/187	1/219 1/234 1/250	1/281 1/312 1/375	1/422 1/469 1/563 1/625	1/750 1/938 1/1250 1/1875	1/2813 1/3750 1/5625
定格容許扭力 (Kgf-cm Max.) Rated tolerance torque	1	2	3	4	5	6	6	6	6	6	6
瞬間容許扭力 (Kgf-cm) Max momentary tolerance torque	3	6	9	12	15	18	18	18	18	18	18
效率 Efficiency	81%	73%	66%	66%	59%	59%	53%	53%	53%	48%	43%
L'	14.8	17.6	20.1	20.1	22.5	22.5	25	25	25	27.5	30
L	21.8	24.6	27.1	27.1	29.5	29.5	32	32	32	34.5	37
重量 Weight (g)	97	103	109	109	117	117	121	121	121	128	131

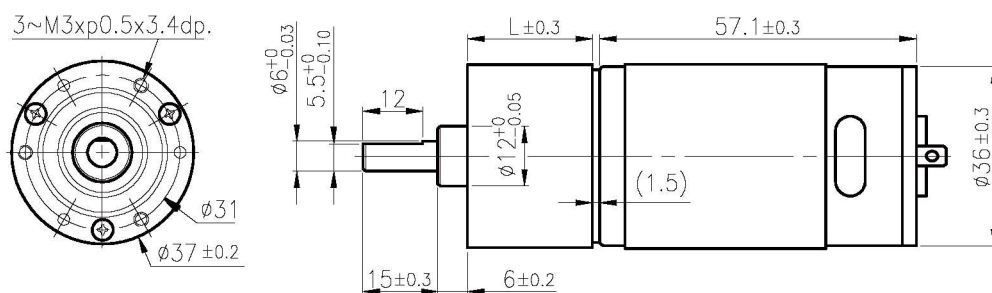
- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

RA-37GM

07 & 09 TYPE



外形尺寸 / Appearance Size



unit:mm

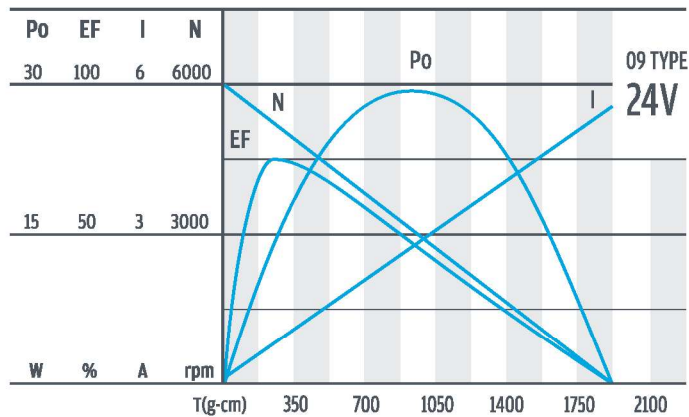
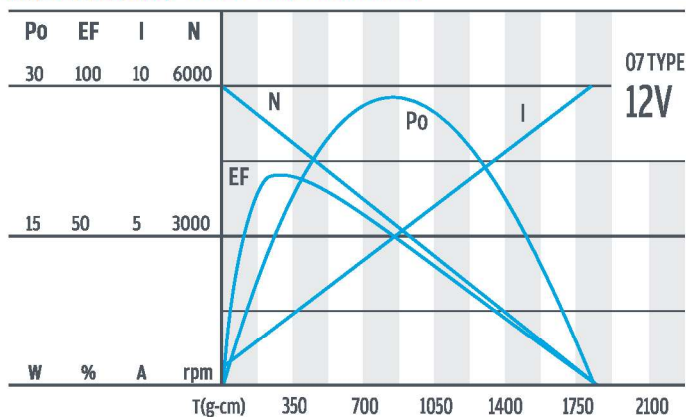
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

	減速比 Reduction ratio	1/6	1/16	1/21	1/31	1/56	1/75	1/104	1/125	1/156	1/187	1/219	1/250	1/312	1/469	1/625	1/750	1/938	1/1875	1/3750	1/5625
12V	定格扭力 Rated torque (kg-cm)	1	2	2	3	4	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6
	定格轉速 Rated speed (rpm)	795	330	250	172	95	72	54	45	37	31	26	23	18.7	12.5	9.3	7.8	6.2	3.2	1.5	1
24V	定格扭力 Rated torque (kg-cm)	1	2	2	3	4	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6
	定格轉速 Rated speed (rpm)	805	338	260	175	97	73	55	46	38	32	26.8	23.4	18.8	12.5	9.5	7.8	6.3	3.2	1.6	1
	軸心迴轉方向 Rotation direction	CCW	CW	CCW					CW					CCW				CW			CCW
	長度 Length (L)	21.8	24.6		27.1				29.5					32				34.5			37

馬達單體型式 / Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	250	4930	≤1.6	6000	≤0.25	12.80	220
24	240	5150	≤0.75	6000	≤0.13	12.70	220

馬達單體特性 / Motor Characteristics

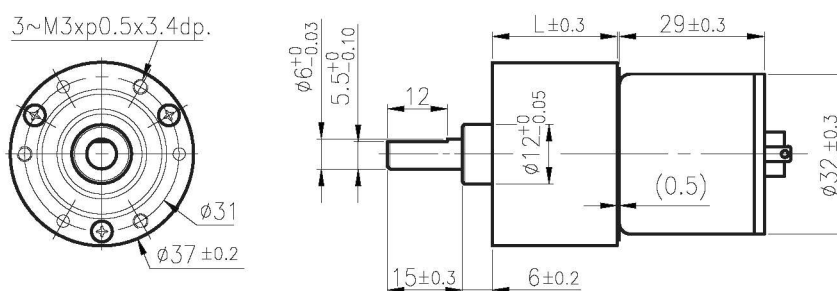


RA-37GM

11 & 12 TYPE



外形尺寸/ Appearance Size



unit:mm

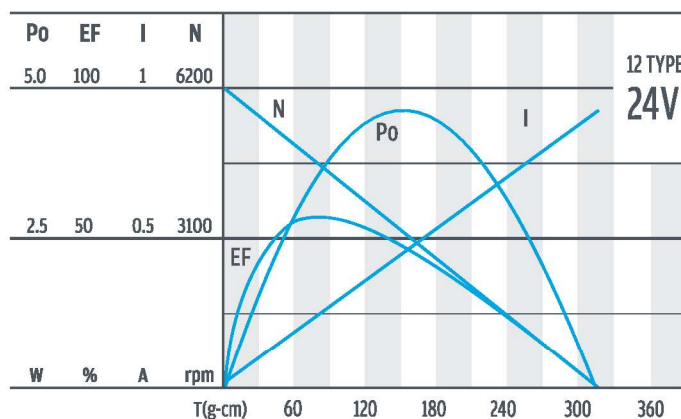
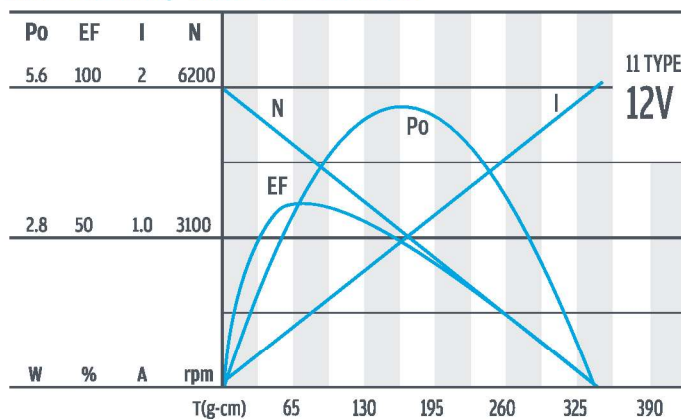
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

	減速比 Reduction ratio	1/6	1/16	1/21	1/31	1/56	1/75	1/104	1/125	1/156	1/187	1/219	1/250	1/312	1/469	1/625	1/750	1/938	1/1875	1/3750	1/5625	
		12V	定格扭力 Rated torque (kg-cm)	0.3	0.68	0.9	1.25	2.2	2.6	3.6	4.4	5.5	6	6	6	6	6	6	6	6	6	6
12V	定格轉速 Rated speed (rpm)	800	310	245	155	90	67	49	41	33	28	24	21.5	17.6	12.3	9.1	7.8	6.3	3.2	1.6	1	
24V	定格扭力 Rated torque (kg-cm)	0.3	0.7	0.9	1.25	2.3	2.7	3.8	4.5	5.7	6	6	6	6	6	6	6	6	6	6	6	6
	定格轉速 Rated speed (rpm)	780	308	240	150	87	65	48	40	32	27	23.5	21.5	17.5	12	9	7.8	6.2	3.2	1.6	1	
	軸心迴轉方向 Rotation direction	CW		CCW		CW		CCW				CW				CCW		CW				
	長度 Length (L)	21.8		24.6		27.1		29.5				32				34.5		37				

馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	60	5100	≤ 0.47	6200	≤ 0.12	3.14	75
24	62	5000	≤ 0.21	6200	≤ 0.06	3.17	75

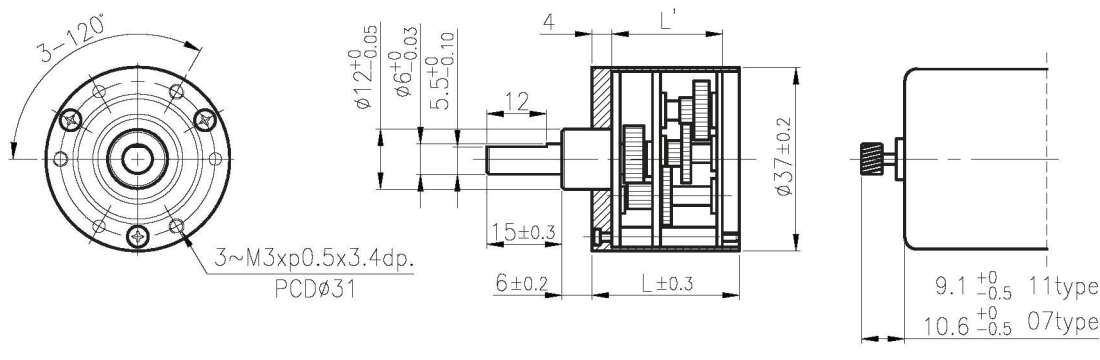
馬達單體特性/ Motor Characteristics



RA-35A



外形尺寸 & 馬達齒鉤合尺寸 / Appearance Size & Pinion Assembly Dimension



unit:mm

產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (10mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
金屬 Metal	含油軸承 Sleeve bearings	≤ 1 kgf	≤ 0.7 kgf	≤ 5 kgf	≤ 0.05 mm	≤ 0.35 mm	≤ 2°

馬達齒輪型式 / Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	螺旋角 Helix angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.5	10	20°	— 18° (左, left)	∅ 1.98 ∅ 2.28 ∅ 2.48 ∅ 2.98 ∅ 3.16	全種通用 Practicable

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/16	1/31	1/56	1/75	1/125	1/219	1/281	1/422
	1/19	1/38	1/63	1/94	1/156	1/234	1/312	1/469
	1/21	1/47	1/69	1/104	1/169	1/250	1/375	1/563
				1/113	1/187			1/625
定格容許扭力 (Kgf-cm Max.) Rated tolerance torque	2	3	4	5	6	6	6	6
瞬間容許扭力 (Kgf-cm) Max momentary tolerance torque	6	9	12	15	18	18	18	18
效率 Efficiency	73%	66%	66%	59%	59%	53%	53%	53%
L'	20.6	23.1	23.1	25.5	25.5	28	28	28
L	27.1	29.5	29.5	32	32	34.5	34.5	34.5
重量 Weight (g)	108	114	114	122	122	126	126	126

- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

IG

Right Angle

RA

RB

WG

Encoder

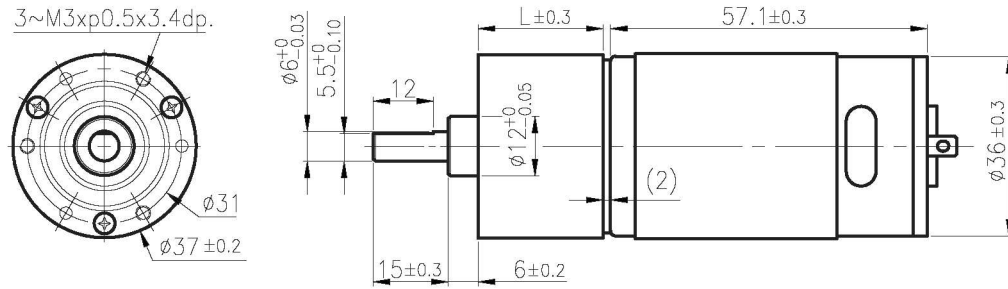
Driver

RA-37AGM

07 & 09 TYPE



外形尺寸 / Appearance Size



unit:mm

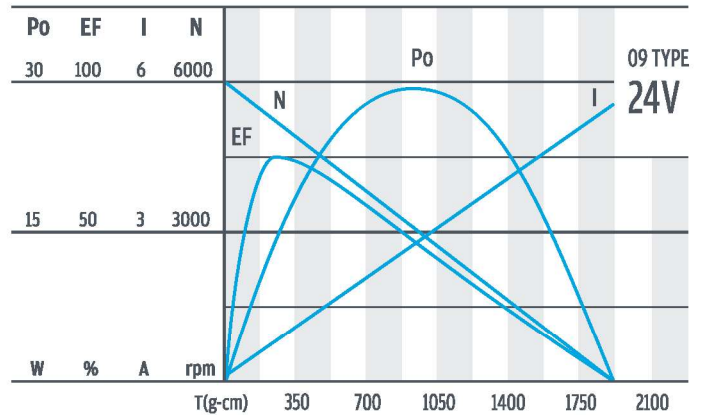
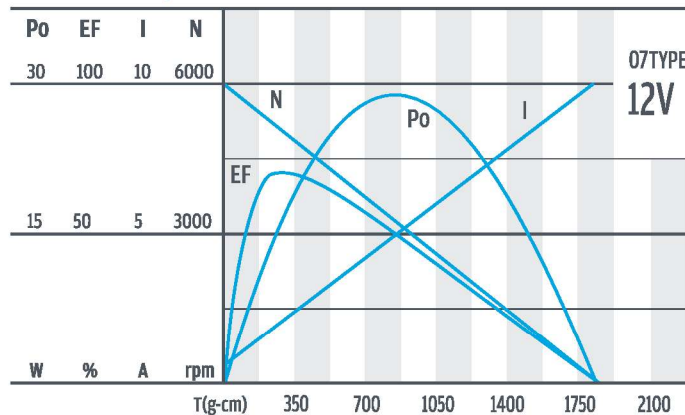
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

	減速比 Reduction ratio	1/16	1/21	1/31	1/56	1/75	1/104	1/125	1/156	1/187	1/219	1/250	1/281	1/312	1/375	1/422	1/469	1/563	1/625
		12V	定格扭力 Rated torque (kg-cm)	2	2	3	4	5	5	6	6	6	6	6	6	6	6	6	6
	定格轉速 Rated speed (rpm)	330	250	172	95	72	54	45	37	31	26	23	20.3	18.7	15.2	13.7	12.5	10.2	9.3
24V	定格扭力 Rated torque (kg-cm)	2	2	3	4	5	5	6	6	6	6	6	6	6	6	6	6	6	6
	定格轉速 Rated speed (rpm)	338	260	175	97	73	55	46	38	32	26.8	23.4	23.4	18.8	15.2	13.7	12.5	10.5	9.5
	軸心迴轉方向 Rotation direction	CW		CCW			CW					CCW							
	長度 Length (L)	27.1		29.5			32					34.5							

馬達單體型式 / Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	250	4930	≤ 1.6	6000	≤ 0.25	12.80	220
24	240	5150	≤ 0.75	6000	≤ 0.13	12.70	220

馬達單體特性 / Motor Characteristics

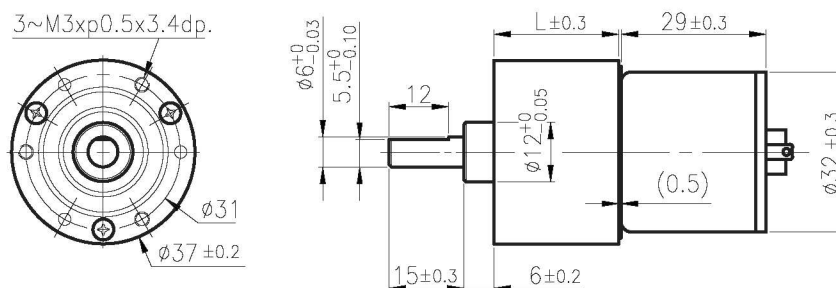


RA-37AGM

11 & 12 TYPE



外形尺寸/ Appearance Size



unit:mm

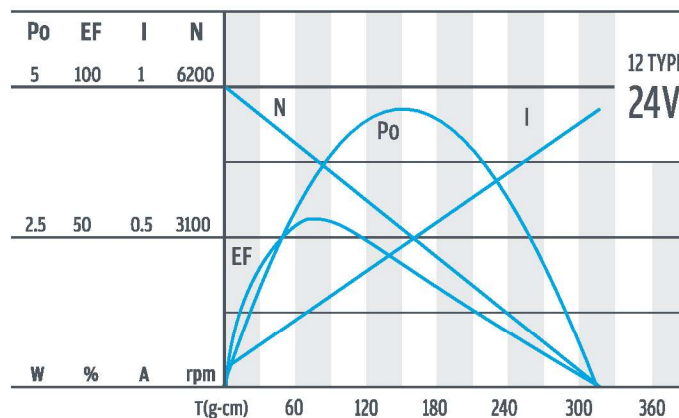
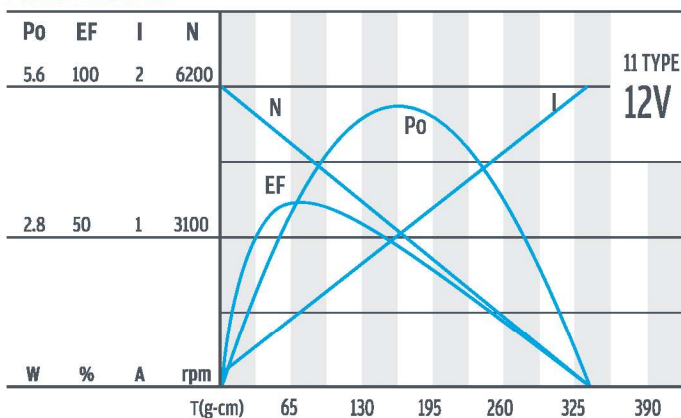
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

	減速比 Reduction ratio	1/16	1/21	1/31	1/56	1/75	1/104	1/125	1/156	1/187	1/219	1/250	1/281	1/312	1/375	1/422	1/469	1/563	1/625
12V	定格扭力 Rated torque (kg-cm)	0.68	0.9	1.25	2.2	2.6	3.6	4.4	5.5	6	6	6	6	6	6	6	6	6	6
	定格轉速 Rated speed (rpm)	310	245	155	90	67	49	41	33	28	24	21.5	19	17.6	14.5	13.2	12.3	10.1	9.1
24V	定格扭力 Rated torque (kg-cm)	0.7	0.9	1.25	2.3	2.7	3.8	4.5	5.7	6	6	6	6	6	6	6	6	6	6
	定格轉速 Rated speed (rpm)	308	240	150	87	65	48	40	32	27	23.5	21.5	18.5	17.5	14.7	13.2	12	10.2	9
	軸心迴轉方向 Rotation direction	CCW		CW		CCW				CW									
	長度 Length (L)	27.1		29.5		32				34.5									

馬達單體型式/ Motor Data

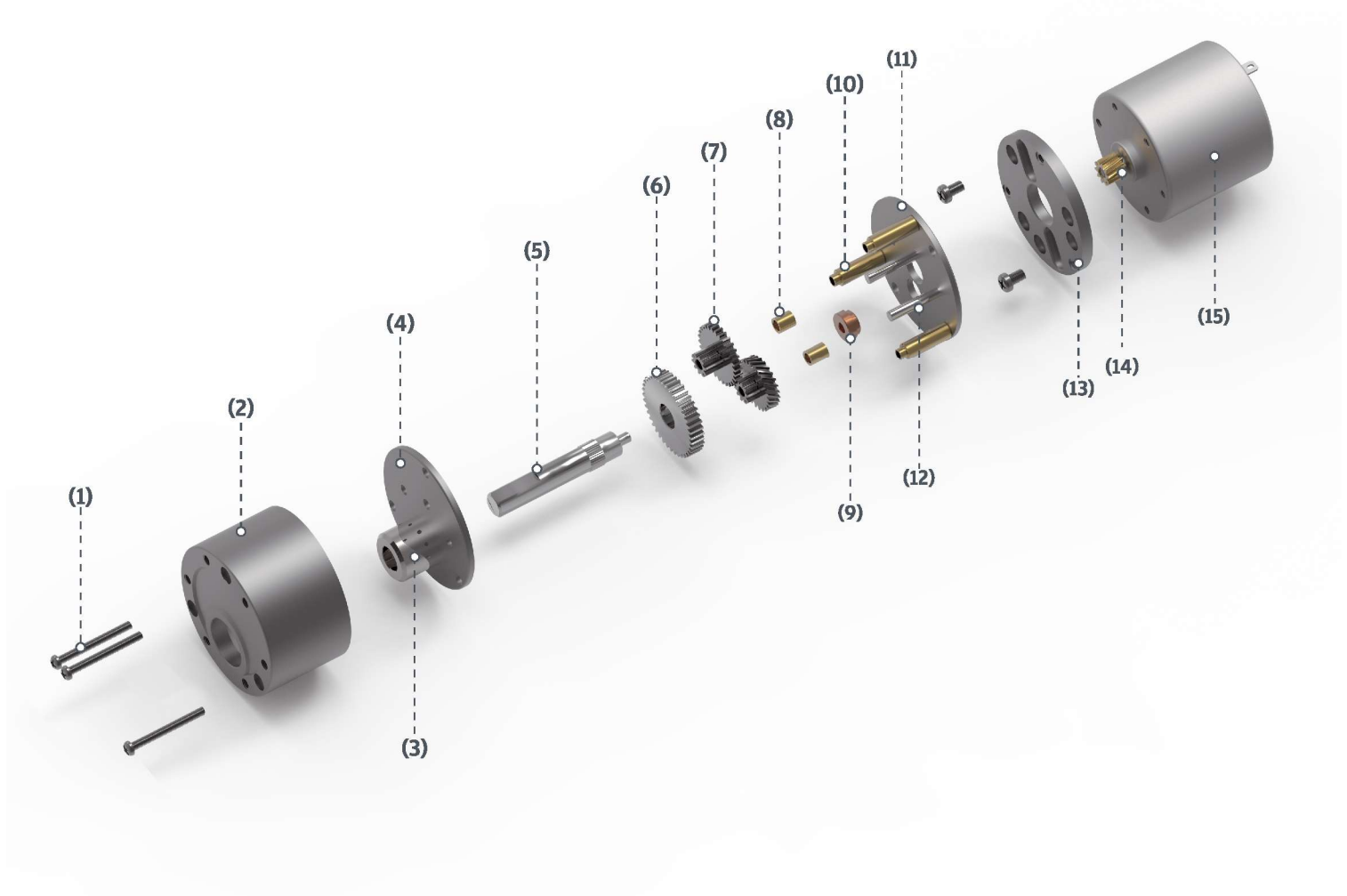
定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	60	5100	≤0.47	6200	≤0.12	3.14	75
24	62	5000	≤0.21	6200	≤0.06	3.17	75

馬達單體特性/ Motor Characteristics



正齒齒輪箱 (偏心出軸)

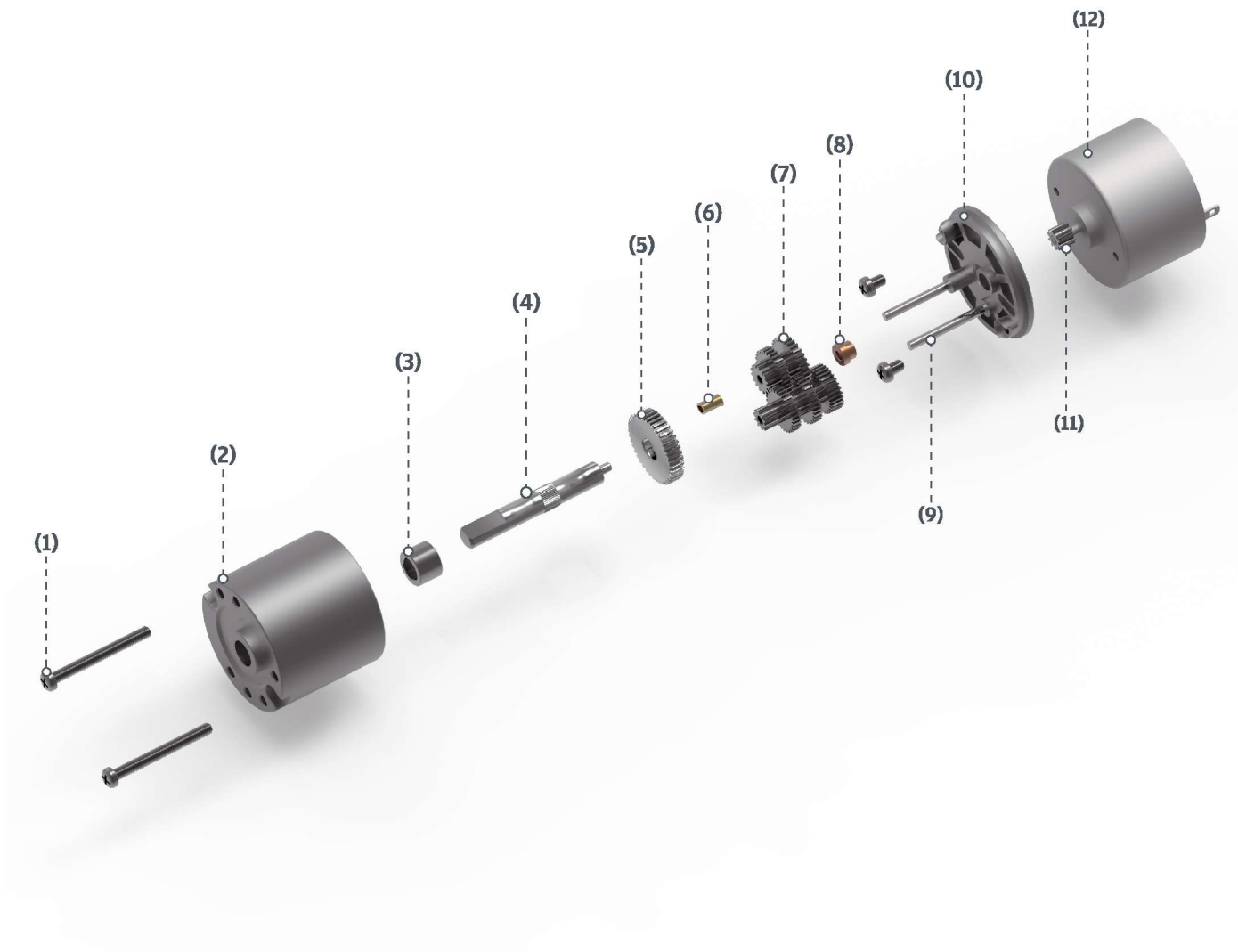
RB series (Eccentric Output Shaft)



1	螺絲	Screw	9	襯套	Bushing
2	外殼	Housing	10	支撐套	Support
3	軸承	Bearing	11	下機板	End plate
4	上機板	Front plate	12	梢	Pin
5	主軸	Output shaft	13	下蓋	Motor flange
6	傳動齒輪	Output gear	14	馬達齒	Pinion
7	塔輪	Gear wheel	15	馬達	Motor
8	間隔套	Spacer sleeve			

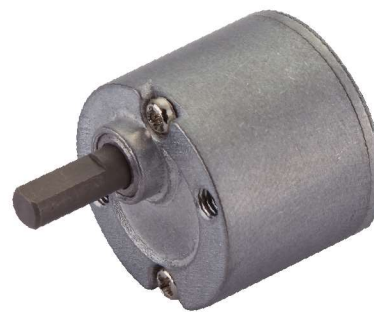
正齒齒輪箱 (偏心出軸)

RB series (Eccentric Output Shaft)

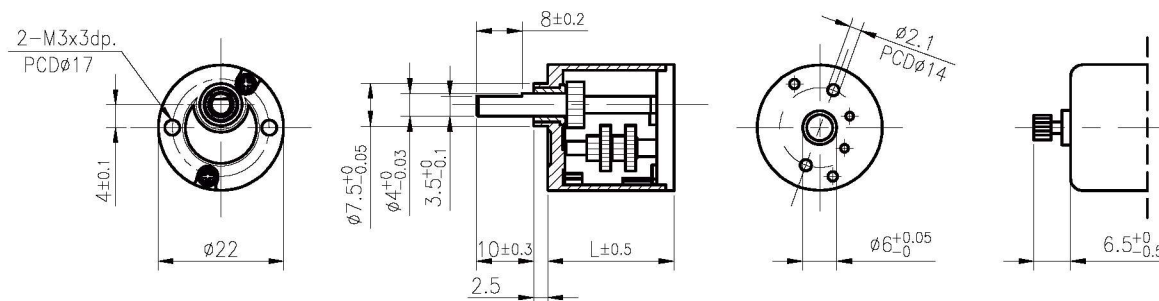


1	螺絲	Screw	7	塔輪	Gear wheel
2	外殼	Housing	8	襯套	Bushing
3	軸承	Bearing	9	梢	Pin
4	主軸	Output shaft	10	下蓋	Motor flange
5	傳動齒輪	Output gear	11	馬達齒	Pinion
6	間隔套	Spacer sleeve	12	馬達	Motor

RB-22



外形尺寸 & 馬達齒鉚合尺寸 / Appearance Size & Pinion Assembly Dimension



unit:mm

產品規格/ Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (5mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
金屬 Metal	含油軸承 Sleeve bearings	≤ 0.4 kgf	≤ 0.2 kgf	≤ 2 kgf	≤ 0.05 mm	≤ 0.3mm	≤ 1.5°

馬達齒輪型式/ Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.3	12	20°	∅1.98	全種通用 Practicable

標準減速比型式/ Gearboxes Specifications

減速比 Reduction ratio	1/9	1/19	1/24	1/39	1/51	1/82	1/106	1/112	1/137	1/145
定格容許扭力 (Kg·cm Max.) Rated tolerance torque	0.4	0.6	0.6	1	1	1.2	1.2	1.2	1.5	1.5
瞬間容許扭力 (Kg·cm) Max momentary tolerance torque	1.2	1.8	1.8	3	3	3.6	3.6	3.6	4.5	4.5
效率 Efficiency	73%	66%	66%	59%	59%	53%	53%	53%	53%	53%
高度 Height (H)	17.7	17.7	17.7	22.1	22.1	22.1	22.1	22.1	22.1	22.1
重量 Weight (g)	23.9	24.5	24.5	26.3	26.3	27	27	27	27	27

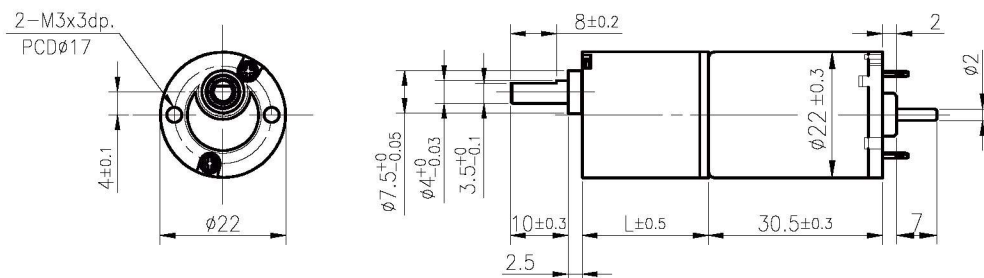
- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

RB-22GM

01 & 02 TYPE



外形尺寸/ Appearance Size



unit:mm

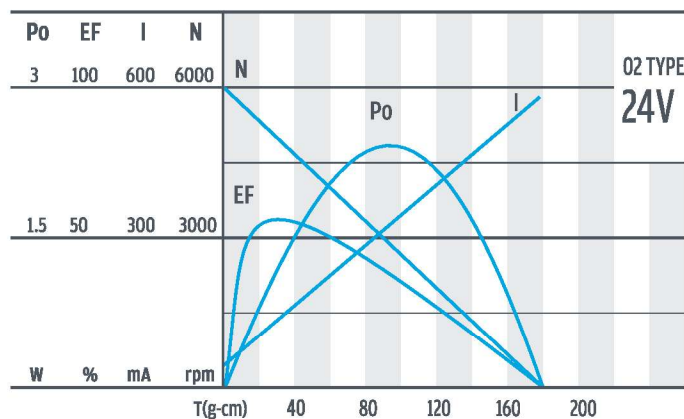
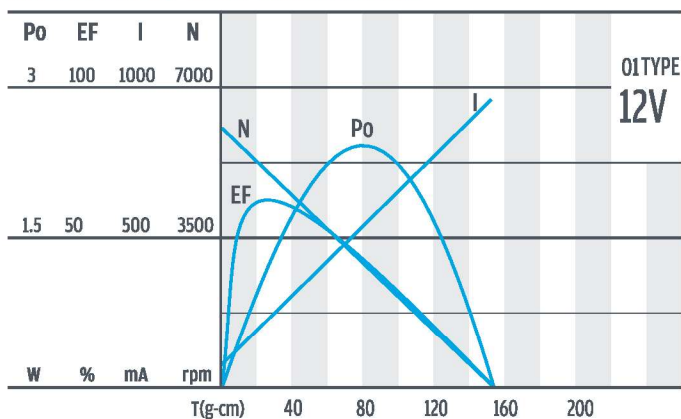
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

	減速比 Reduction ratio	1/9	1/19	1/24	1/39	1/51	1/82	1/106	1/112	1/137	1/145		
12V	定格扭力 Rated torque (g-cm)	200	385	495	715	930	1200	1200	1200	1500	1500		
	定格轉速 Rated speed (rpm)	530	255	195	122	94	58	44	42	34	32		
24V	定格扭力 Rated torque (g-cm)	240	460	595	855	1100	1200	1200	1200	1500	1500		
	定格轉速 Rated speed (rpm)	520	250	190	120	92	57	43	41	33	31		
	軸心迴轉方向 Rotation direction	CCW	CW		CCW				CW				
	長度 Length (L)		17.7					22.1					

馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (mA)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (mA)	定格出力 Rated output (W)	重量 Weight (g)
12	31	4790	≤ 240	6000	≤ 80	1.52	43
24	37	4710	≤ 145	6000	≤ 55	1.79	43

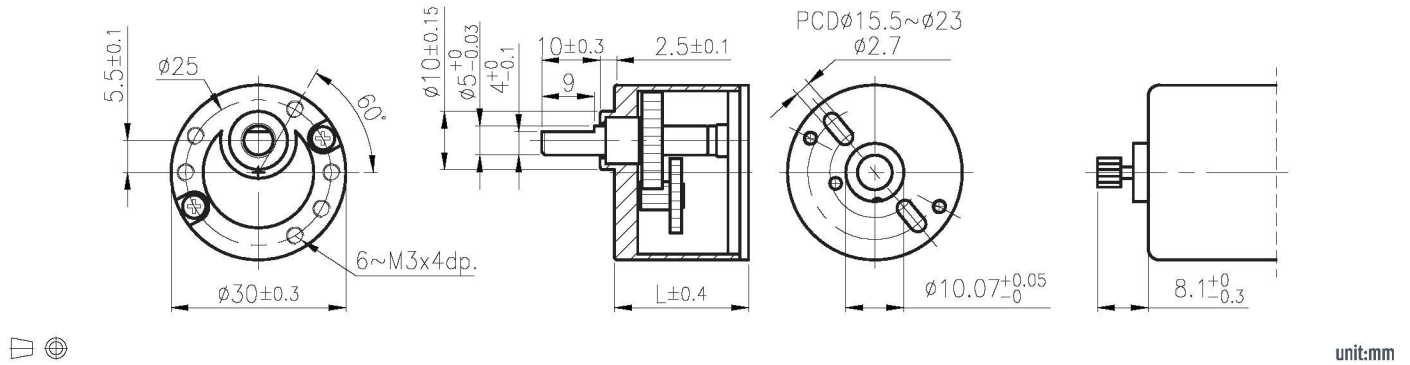
馬達單體特性/ Motor Characteristics



RB-30



外形尺寸 & 馬達齒鉚合尺寸 / Appearance Size & Pinion Assembly Dimension



產品規格/ Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (10mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
金屬 Metal	含油軸承 Sleeve bearings	≤ 0.8 kgf	≤ 0.6 kgf	≤ 10 kgf	≤ 0.05 mm	≤ 0.35 mm	≤ 2°

馬達齒輪型式/ Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.4	10	20°	∅ 1.98, ∅ 2.28	全種通用 Practicable

標準減速比型式/ Gearboxes Specifications

減速比 Reduction ratio	1/20	1/30, 1/36	1/50, 1/60	1/75, 1/90, 1/100	1/120, 1/150	1/180, 1/200	1/250, 1/300	1/400, 1/500, 1/600	1/810, 1/900, 1/1000
定格容許扭力 (kgf-cm Max.) Rated tolerance torque	1	1.5	2	3	4	4.5	4.5	4.5	4.5
瞬間容許扭力 (kgf-cm) Max momentary tolerance torque	3	4.5	6	9	12	13.5	13.5	13.5	13.5
效率 Efficiency	66%				53%				
長度 Length (L)	23				28				
重量 Weight (g)	89				98				

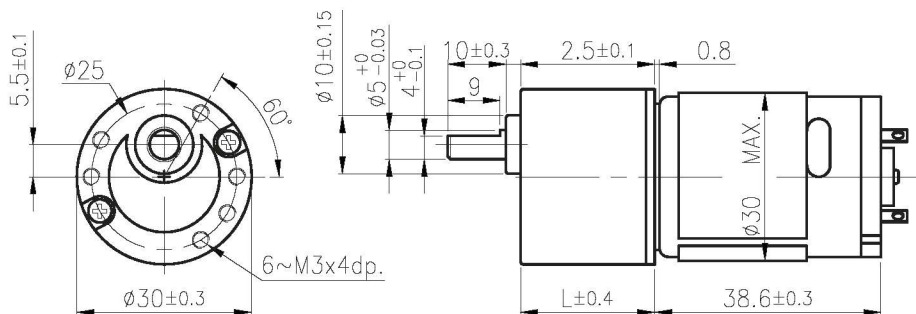
- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

RB-30GM

02 & 03 TYPE



外形尺寸/ Appearance Size



unit:mm

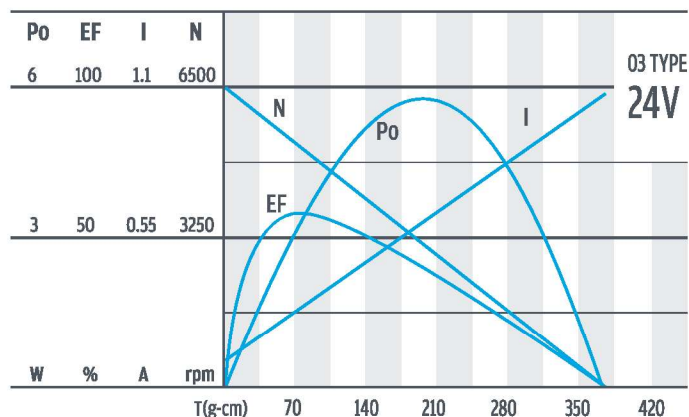
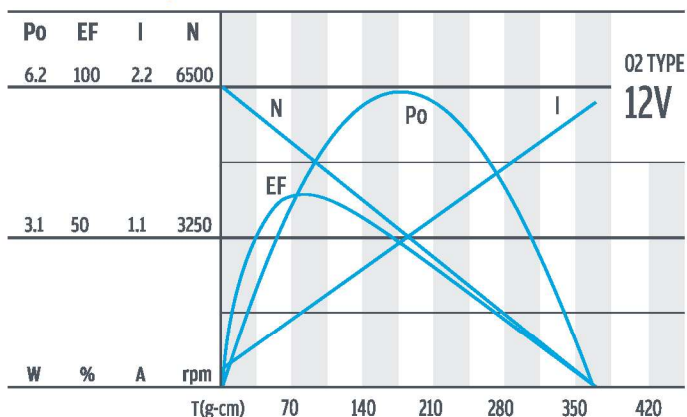
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

	減速比 Reduction ratio	1/20	1/30	1/36	1/50	1/60	1/75	1/90	1/100	1/120	1/150	1/180	1/200	1/250	1/300	1/400	1/500	1/600	1/810	1/900	1/1000
12V	定格扭力 Rated torque (kg-cm)	1	1.5	1.5	2	2	3	3	3	4	4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
	定格轉速 Rated speed (rpm)	255	168	150	107	91	73	62	56	46.3	37.5	32	28.8	24	19.5	15.2	12.1	10.4	7.7	6.9	6.3
24V	定格扭力 Rated torque (Kg-cm)	1	1.5	1.5	2	2	3	3	3	4	4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
	定格轉速 Rated speed (rpm)	258	168	150	107	91	73	62	56	46.3	37.4	31.8	28.7	24	19.5	15.1	12.1	10.3	7.7	6.9	6.3
軸心迴轉方向 Rotation direction		CCW																			
長度 Length (L)		23										28									

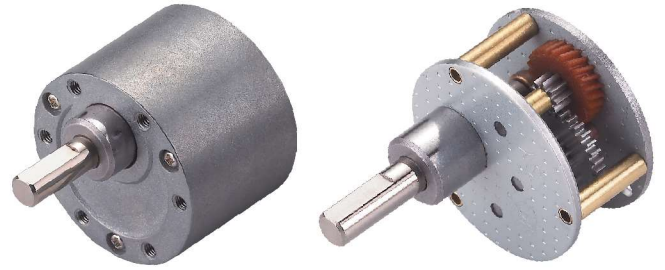
馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	78	5290	≤ 0.53	6500	≤ 0.15	4.22	73
24	74	5250	≤ 0.25	6500	≤ 0.1	3.97	73

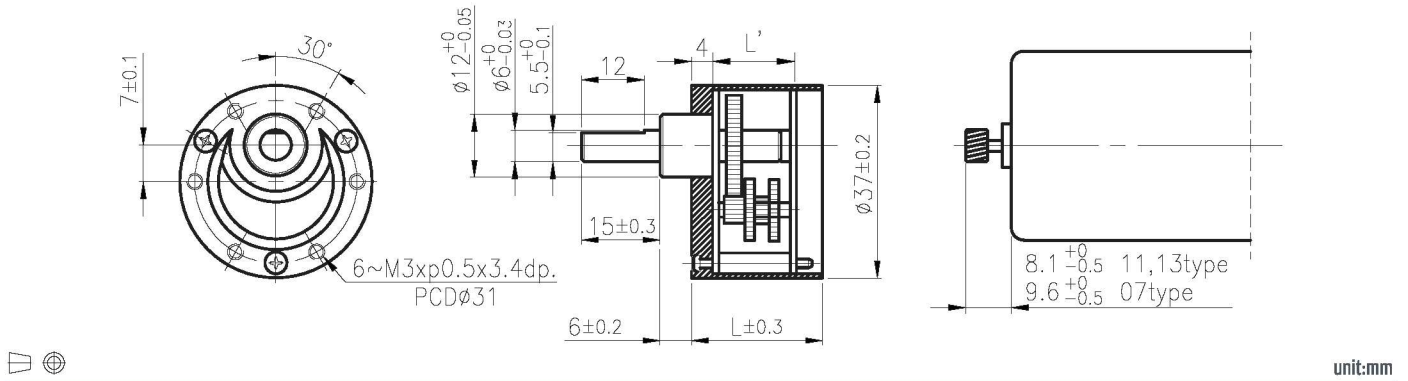
馬達單體特性/ Motor Characteristics



RB-35C



外形尺寸 & 馬達齒鉚合尺寸 / Appearance Size & Pinion Assembly Dimension



產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (10mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
金屬 Metal	含油軸承 Sleeve bearings	≤ 1 kgf	≤ 0.7 kgf	≤ 20 kgf	≤ 0.05 mm	≤ 0.35 mm	≤ 2°

馬達齒輪型式 / Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	螺旋角 Helix angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.5	10	20°	— 18° (左, left)	∅ 1.98, ∅ 2.28, ∅ 2.48, ∅ 2.98, ∅ 3.16	全種通用 Practicable

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/6, 1/10	1/18	1/30	1/50, 1/60, 1/70	1/75, 1/90	1/100	1/120, 1/150, 1/180 1/200, 1/250, 1/300	1/350, 1/400, 1/450 1/500, 1/600, 1/700	1/750, 1/900, 1/1000	1/1500, 1/3000
定格容許扭力(kgf-cm Max.) Rated tolerance torque	1	1	2	3	4	6	6	6	6	6
瞬間容許扭力(kgf-cm) Max momentary tolerance torque	3	3	6	9	12	18	18	18	18	18
效率 Efficiency	81%	73%			66%		59%		53%	48%
長度 Length (L)	12.5	15			17.5		20		22.5	25
長度 Length (L)	19.5	22			24.5		27		29.5	32
重量 Weight (g)	86	93			100		106		112	120

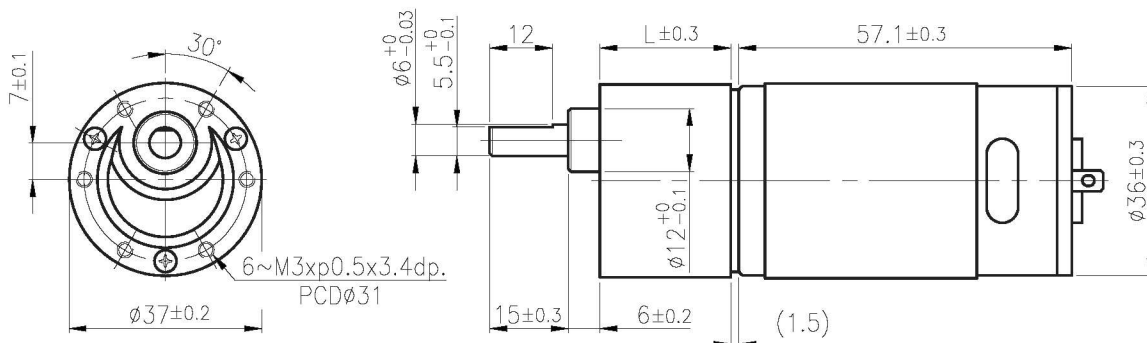
- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

RB-37GM

07 & 09 TYPE



外形尺寸/ Appearance Size



unit:mm

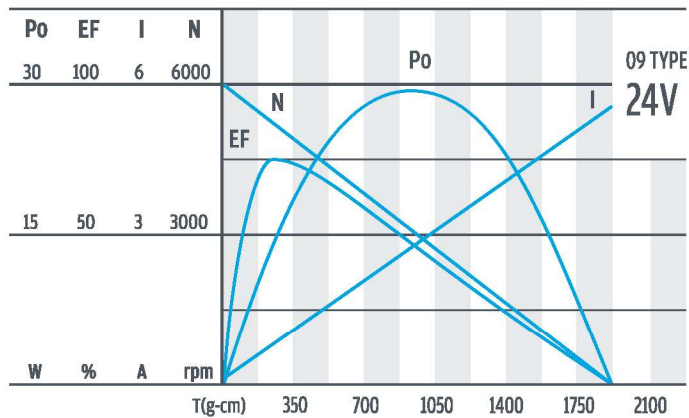
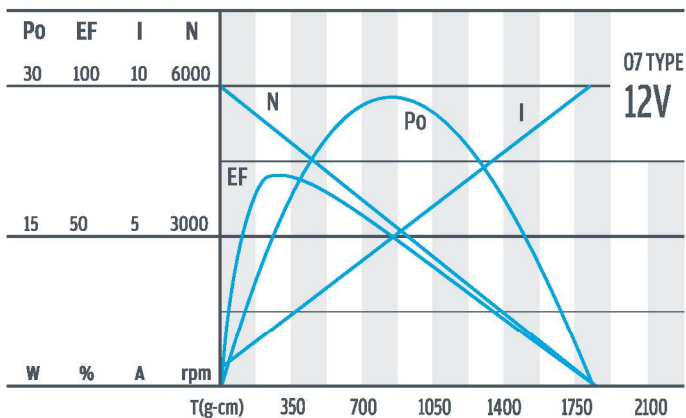
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

	減速比 Reduction ratio	1/10	1/18	1/30	1/50	1/60	1/75	1/90	1/100	1/120	1/150	1/180	1/200	1/250	1/300	1/500	1/600	1/750	1/1000	1/1500	1/3000
12V	定格扭力 Rated torque (kg-cm)	1	1	2	3	3	4	4	6	6	6	6	6	6	6	6	6	6	6	6	6
	定格轉速 Rated speed (rpm)	528	313	185	109	95	76	63	55	47	36	31.5	29	22.5	19.5	11.5	9.8	8	5.9	3.9	2
24V	定格扭力 Rated torque (kg-cm)	1	1	2	3	3	4	4	6	6	6	6	6	6	6	6	6	6	6	6	6
	定格轉速 Rated speed (rpm)	532	315	186	111	96	77	64	55.5	48	36	32	29.5	23	20	11.8	9.9	8	6	4	2
	軸心迴轉方向 Rotation direction	CCW	CW				CCW						CW					CCW			CW
	長度 Length (L)	19.5	22				24.5						27					29.5			32

馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	250	4930	≤ 1.6	6000	≤ 0.25	12.80	220
24	240	5150	≤ 0.75	6000	≤ 0.13	12.70	220

馬達單體特性/ Motor Characteristics

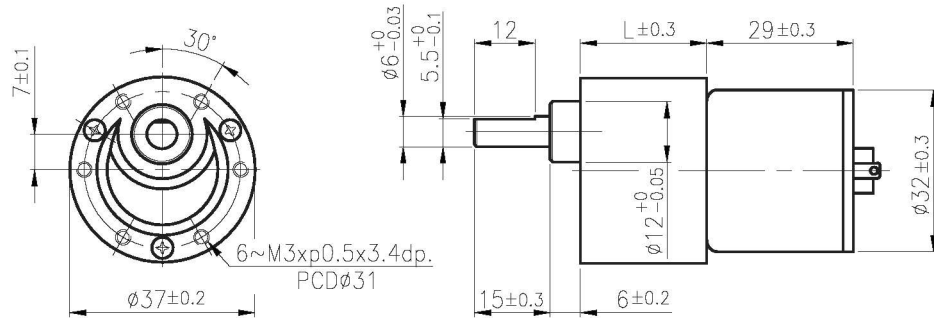


RB-37GM

11 & 12 TYPE



外形尺寸 / Appearance Size



unit:mm

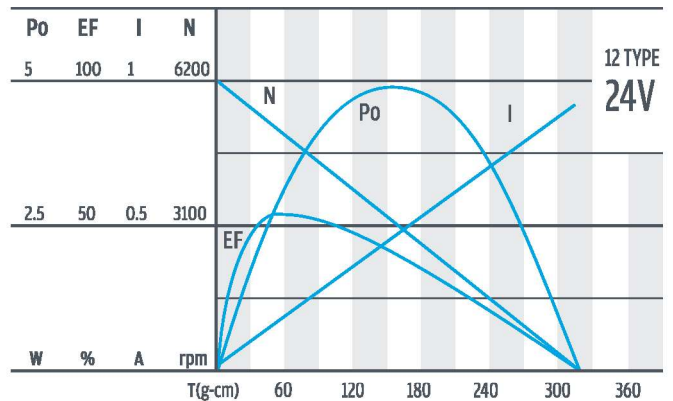
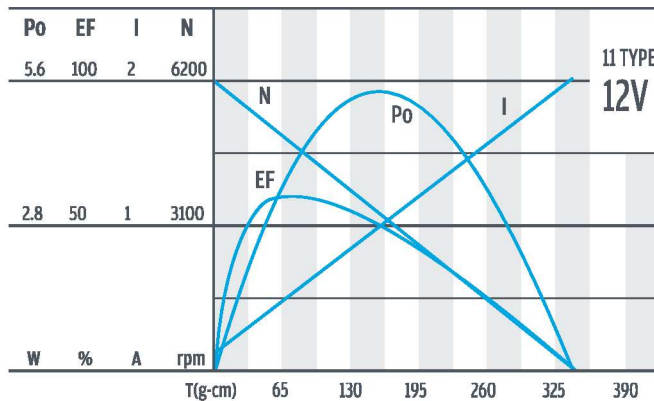
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

減速比 Reduction ratio	1/10	1/18	1/30	1/50	1/60	1/75	1/90	1/100	1/120	1/150	1/180	1/200	1/250	1/300	1/500	1/600	1/750	1/1000	1/1500	1/3000
12V																				
定額扭力 Rated torque (kg-cm)	0.5	0.8	1.3	2	2.4	2.9	3.5	3.9	4.2	5.3	6	6	6	6	6	6	6	6	6	6
定額轉速 Rated speed (rpm)	490	270	168	100	84	67	57	51	42.5	34	29	26	22	19	11.2	9.5	8	6	4.1	2
24V																				
定額扭力 Rated torque (Kg-cm)	0.5	0.8	1.4	2	2.4	3	3.6	4	4.4	5.4	6	6	6	6	6	6	6	6	6	6
定額轉速 Rated speed (rpm)	480	250	160	98	83	65	56	50	41.5	33	28.5	26	22	19	11	9.3	7.9	5.9	4	2
軸心迴轉方向 Rotation direction	CW	CCW				CW					CCW						CW			CCW
長度 Length (L)	19.5	22				24.5					27						29.5			32

馬達單體型式 / Motor Data

定額電壓 Rated volt (V)	定額扭力 Rated torque (g-cm)	定額轉速 Rated speed (rpm)	定額電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定額出力 Rated output (W)	重量 Weight (g)
12	60	5100	≤ 0.47	6200	≤ 0.12	3.14	75
24	62	5000	≤ 0.21	6200	≤ 0.06	3.17	75

馬達單體特性 / Motor Characteristics

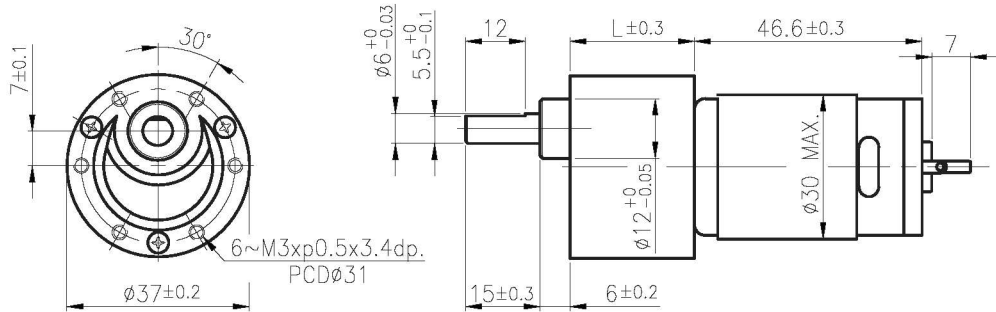


RB-37GM

13 & 14 TYPE



外形尺寸/ Appearance Size



unit:mm

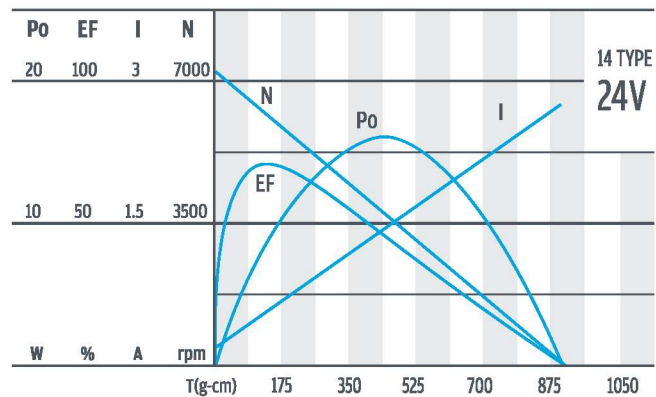
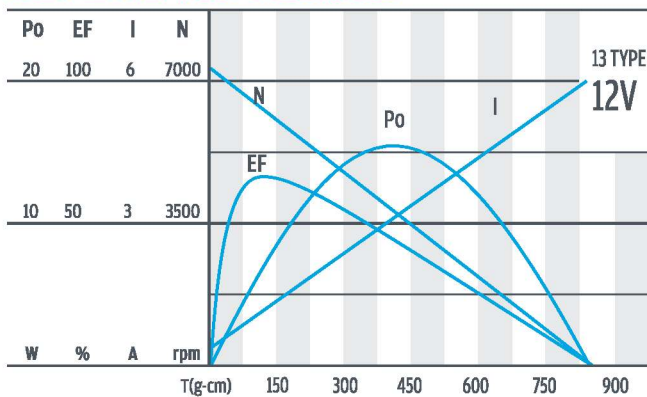
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

	減速比 Reduction ratio	1/10	1/18	1/30	1/50	1/60	1/75	1/90	1/100	1/120	1/150	1/180	1/200	1/250	1/300	1/500	1/600	1/750	1/1000	1/1500	1/3000
12V	定格扭力 Rated torque (kg-cm)	0.89	1	2	3	3	4	4	6	6	6	6	6	6	6	6	6	6	6	6	6
	定格轉速 Rated speed (rpm)	595	336	200	122	101	82	69	60	50	41	35	31	25	21	12.6	10.5	8.4	6.4	4.3	2.2
24V	定格扭力 Rated torque (Kg-cm)	1	1	2	3	3	4	4	6	6	6	6	6	6	6	6	6	6	6	6	6
	定格轉速 Rated speed (rpm)	616	350	208	126	106	85	71	62	51	42	36	32	26	22	12.7	10.6	8.5	6.4	4.3	2.2
	軸心迴轉方向 Rotation direction	CCW	CW				CCW						CW					CCW			CW
	長度 Length (L)	19.5	22				24.5						27					29.5			32

馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	110	5950	< 0.9	7200	< 0.15	7.0	110
24	130	6160	< 0.5	7200	< 0.12	8.5	110

馬達單體特性/ Motor Characteristics

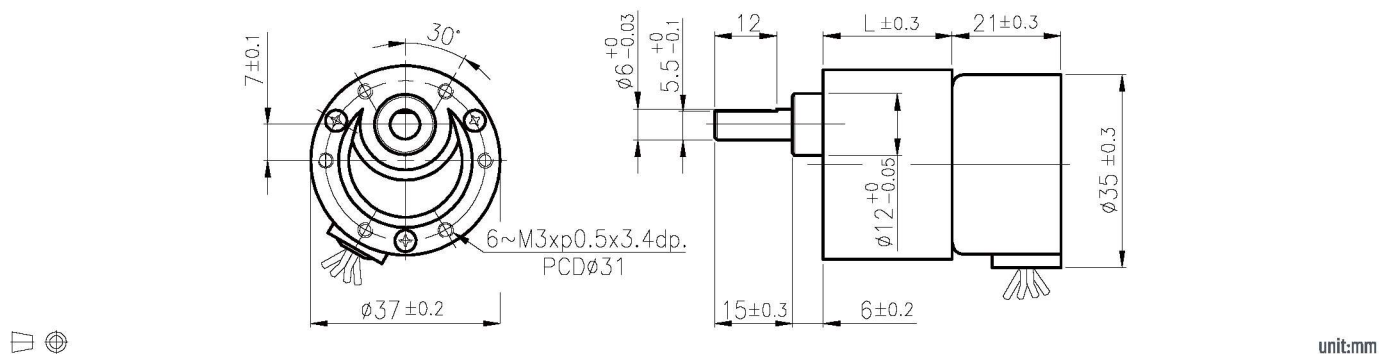


RB-37GM

51 TYPE



外形尺寸/ Appearance Size



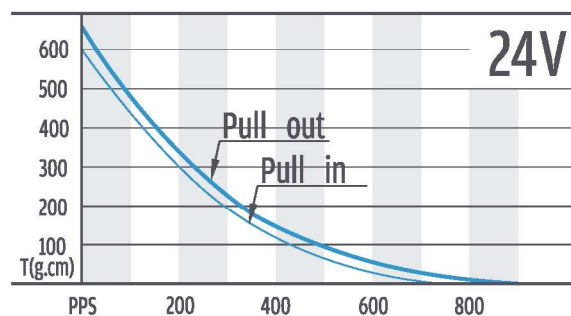
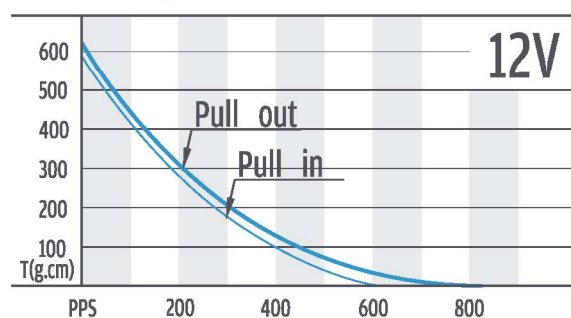
標準減速比型式/ Gearboxes Specifications

減速比 Reduction ratio	1/6-1/10	1/18-1/30	1/36-1/100	1/120-1/300	1/350-1/1000	1/1500-1/3000
長度 Length (L)	195	22	24.5	27	29.5	32

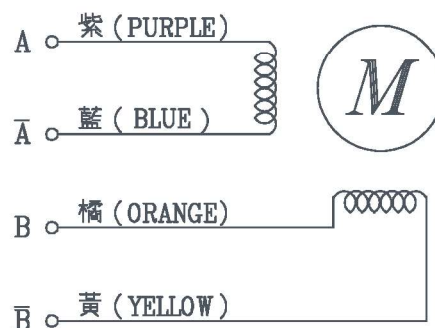
馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	線圈阻抗 Winding Resistance(Ω)	電流 Current Per Phase(mA)	相數 Number of phase	驅動方式 Drive System	迴轉角度 Step Angle (DEG)	拘束轉距 Holding Torque (g.cm)	未激磁轉距 Detent Torque (g.cm)	最大自起動頻率 Max. Starting Frequency (PPS)	最大響應頻率 Max. Response Frequency (PPS)	重量 Weight (g)
12	65	180	4	Bipolar	7.5°	580	≤ 150	≤ 600	800	76
24	120	200	4	Bipolar	7.5°	600	≤ 150	≤ 700	900	76

馬達單體特性/ Motor Characteristics



齒輪箱馬達接線圖/ Gear Motor Wiring Diagram



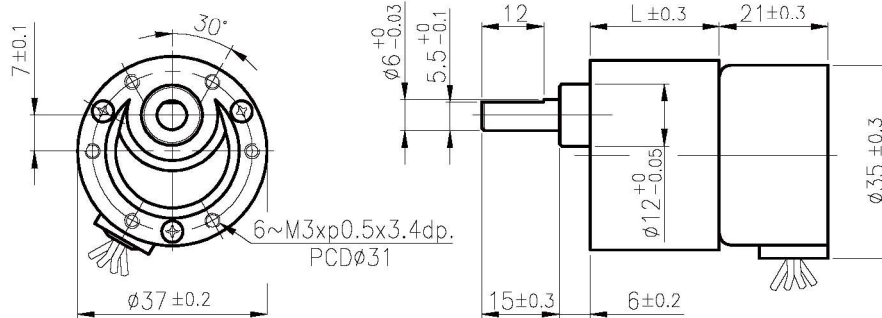
	WIRE COLOR	1	2	3	4	5	6	7	8
A	PURPLE	+	-	-	+	+	-	-	+
Ā	BLUE	-	+	+	-	-	+	+	-
B	ORANGE	+	+	-	-	+	+	-	-
B̄	YELLOW	-	-	+	+	-	-	+	+

RB-37GM

52 TYPE



外形尺寸/ Appearance Size



unit:mm

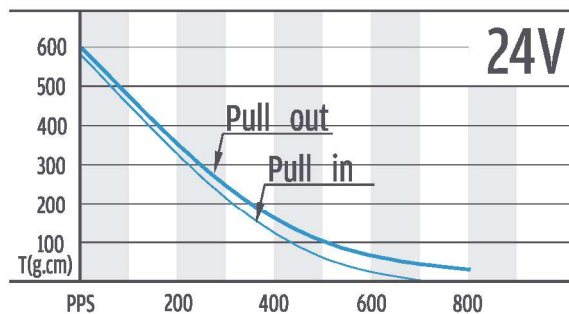
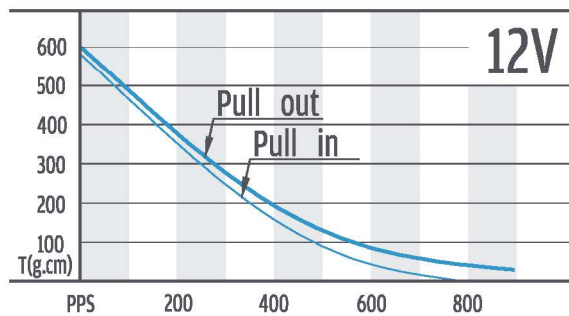
標準減速比型式/ Gearboxes Specifications

減速比 Reduction ratio	1/6-1/10	1/18-1/30	1/36-1/100	1/120-1/300	1/350-1/1000	1/1500-1/3000
長度 Length (L)	19.5	22	24.5	27	29.5	32

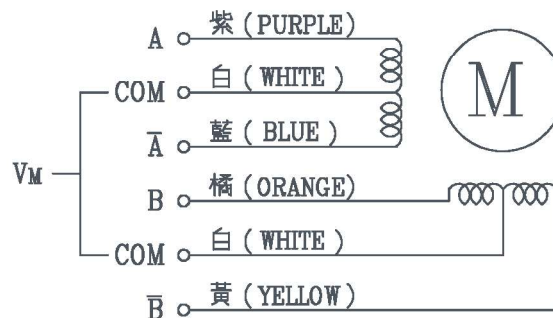
馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	線圈阻抗 Winding Resistance(Ω)	電流 Current Per Phase(mA)	相數 Number of phase	驅動方式 Drive System	迴轉角度 Step Angle (DEG)	拘束轉距 Holding Torque (g.cm)	未激磁轉距 Detent Torque (g.cm)	最大自起動頻率 Max. Starting Frequency (PPS)	最大響應頻率 Max. Response Frequency (PPS)	重量 Weight (g)
12	65	180	4	Unipolar	7.5°	550	≤ 150	800	900	77
24	120	200	4	Unipolar	7.5°	550	≤ 150	750	800	77

馬達單體特性/ Motor Characteristics



齒輪箱馬達接線圖/ Gear Motor Wiring Diagram

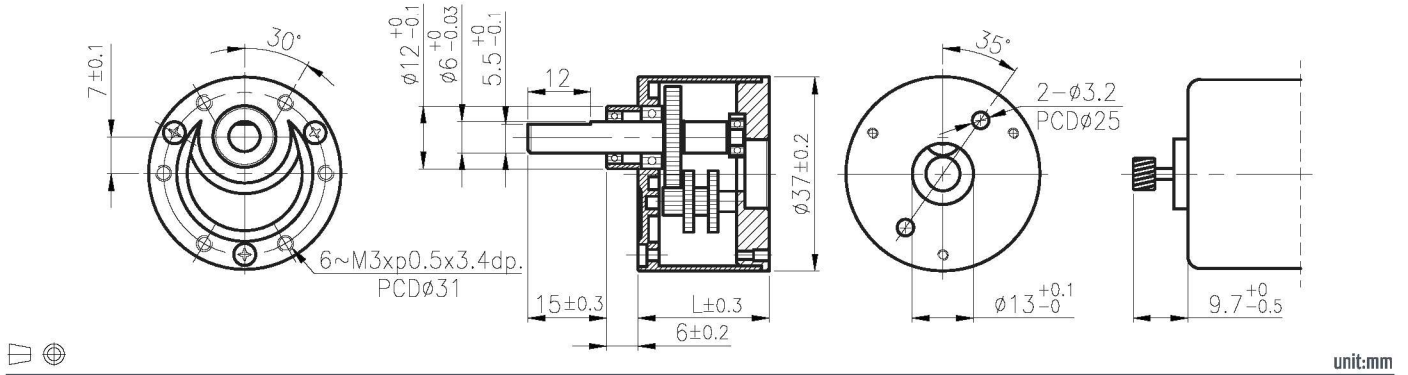


	WIRE COLOR	1	2	3	4	5	6	7	8
A	PURPLE	-	-	-	-	-	-	-	-
A-bar	BLUE	-	-	-	-	-	-	-	-
COM	WHITE	+	+	+	+	+	+	+	+
B	ORANGE	-	-	-	-	-	-	-	-
B-bar	YELLOW	-	-	-	-	-	-	-	-

RB-37B



外形尺寸 & 馬達齒鉚合尺寸 / Appearance Size & Pinion Assembly Dimension



產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (10mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
金屬 Metal	滾珠軸承 Ball bearings	≤ 2 kgf	≤ 0.7 kgf	≤ 20 kgf	≤ 0.04 mm	≤ 0.35 mm	≤ 2°

馬達齒輪型式 / Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	螺旋角 Helix angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.5	10	20°	18° (左, left)	∅ 1.98, ∅ 2.28, ∅ 2.48, ∅ 2.98, ∅ 3.16	全種適用 Practicable

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/6, 1/10	1/18	1/30	1/50, 1/60, 1/70	1/75, 1/90	1/100	1/120, 1/150, 1/180 1/200, 1/250, 1/300	1/350, 1/400, 1/450 1/500, 1/600, 1/700	1/750, 1/900, 1/1000	1/1500, 1/3000
定格容許扭力 (kgf-cm Max.) Rated tolerance torque	1	1	2	3	4	6	6	6	6	6
瞬間容許扭力 (kgf-cm) Max momentary tolerance torque	3	3	6	9	12	18	18	18	18	18
效率 Efficiency	81%	73%			66%		59%		53%	48%
長度 Length (L)	19.5	22			24.5		27		29.5	32
重量 Weight (g)	64	70			76		82		88	96

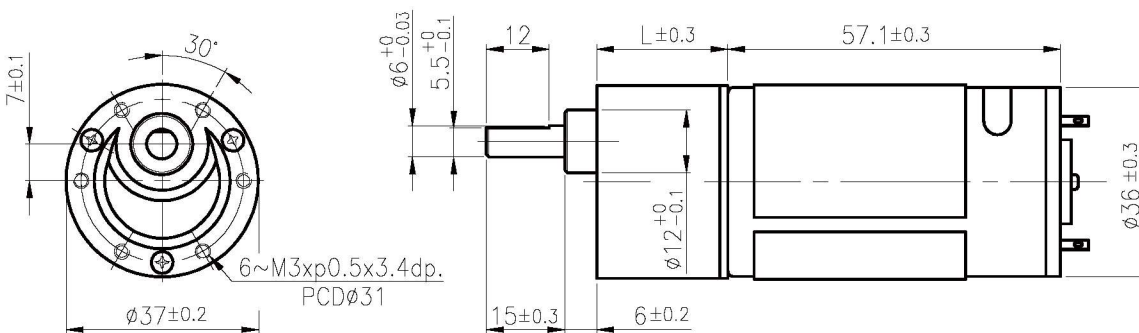
- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

RB-37BGM

07 & 09 TYPE



外形尺寸/ Appearance Size



unit:mm

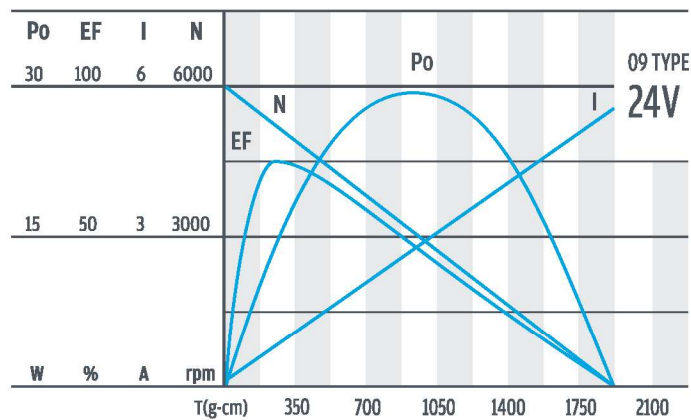
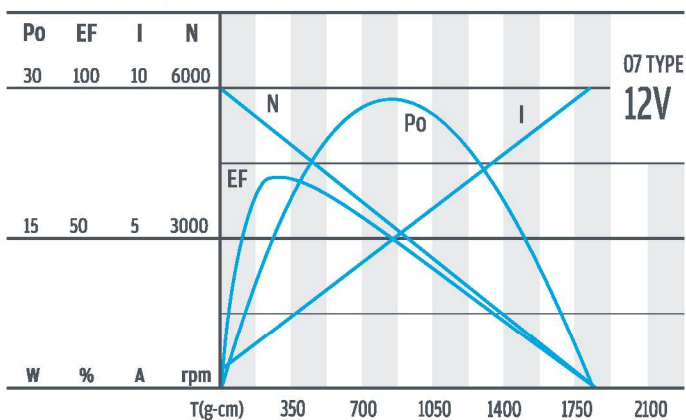
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

	減速比 Reduction ratio	1/10	1/18	1/30	1/50	1/60	1/75	1/90	1/100	1/120	1/150	1/180	1/200	1/250	1/300	1/500	1/600	1/750	1/1000	1/1500	1/3000
12V	定格扭力 Rated torque (kg-cm)	1	1	2	3	3	4	4	6	6	6	6	6	6	6	6	6	6	6	6	6
	定格轉速 Rated speed (rpm)	528	313	185	109	95	76	63	55	47	36	31.5	29	22.5	19.5	11.5	9.8	8	5.9	3.9	2
24V	定格扭力 Rated torque (Kg-cm)	1	1	2	3	3	4	4	6	6	6	6	6	6	6	6	6	6	6	6	6
	定格轉速 Rated speed (rpm)	532	315	186	111	96	77	64	55.5	48	36	32	29.5	23	20	11.8	9.9	8	6	4	2
	軸心迴轉方向 Rotation direction	CCW	CW				CCW						CW				CCW				CW
	長度 Length (L)	19.5	22				24.5						27				29.5				32

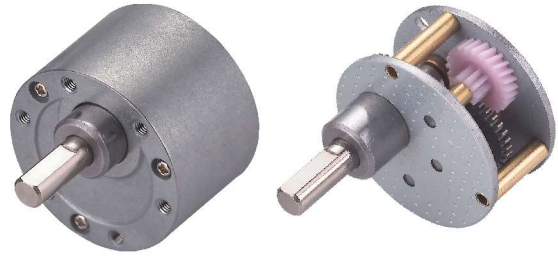
馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	250	4930	≤ 1.6	6000	≤ 0.25	12.80	220
24	240	5150	≤ 0.75	6000	≤ 0.13	12.70	220

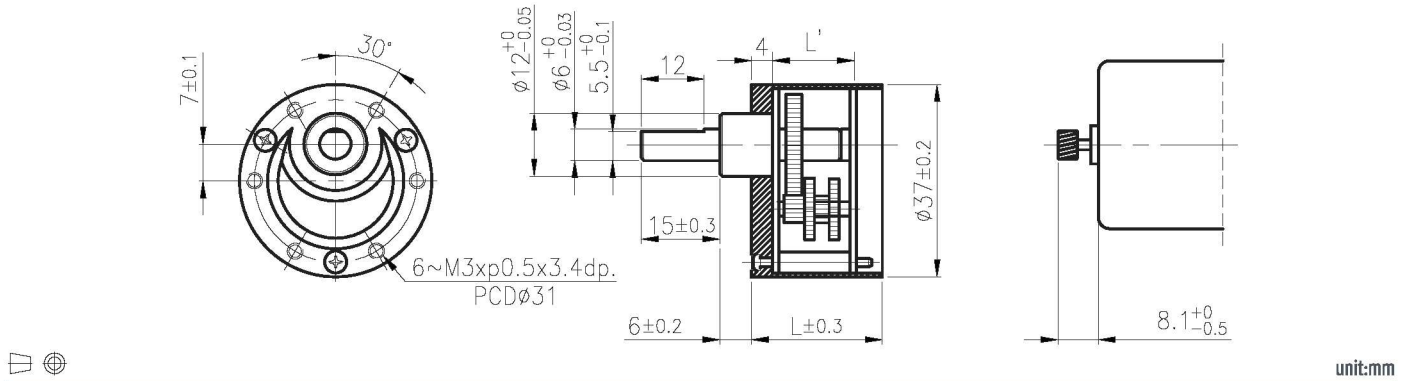
馬達單體特性/ Motor Characteristics



RB-35P



外形尺寸 & 馬達齒鉚合尺寸 / Appearance Size & Pinion Assembly Dimension



產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (10mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
金屬 Metal	含油軸承 Sleeve bearings	≤ 1 kgf	≤ 0.7 kgf	≤ 20 kgf	≤ 0.05 mm	≤ 0.35 mm	≤ 2°

馬達齒輪型式 / Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	螺旋角 Helix angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.5	10	20°	18° (左, left)	∅ 1.98, ∅ 2.28, ∅ 2.48, ∅ 2.98, ∅ 3.16	全種通用 Practicable

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/18	1/30	1/50, 1/60, 1/75	1/90, 1/100	1/120, 1/150, 1/180 1/200, 1/300	1/400, 1/450, 1/500 1/600	1/900, 1/1000	1/1500, 1/3000
定格容許扭力 (kgf-cm Max.) Rated tolerance torque	1	1.2	2	3	4	4	4	4
瞬間容許扭力 (kgf-cm) Max momentary tolerance torque	3	3.6	6	9	12	12	12	12
效率 Efficiency	73%		66%		59%		53%	
長度 Length (L)	15		17.5		20		22.5	
長度 Length (L)	22		24.5		27		29.5	
重量 Weight (g)	91		98		104		110	

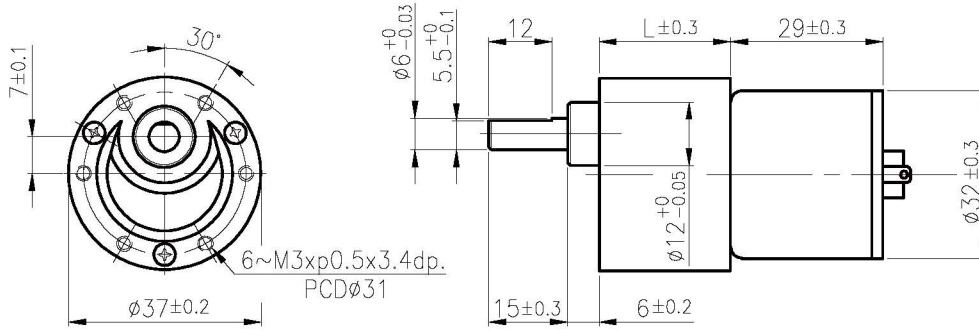
- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

RB-37PGM

11 & 12 TYPE



外形尺寸 / Appearance Size



unit:mm

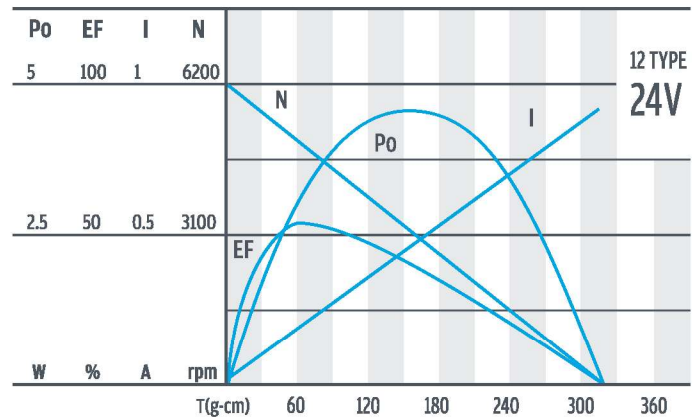
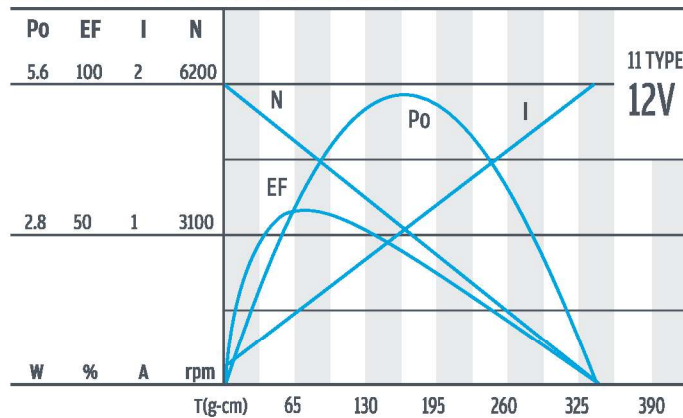
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

	減速比 Reduction ratio	1/18	1/30	1/50	1/60	1/75	1/90	1/100	1/120	1/150	1/180	1/200	1/250	1/300	1/500	1/600	1/750	1/1000	1/1500	1/3000	
12V	定格扭力 Rated torque (kg-cm)	0.8	1.2	2	2	2.9	3	3	4	4	4	4	4	4	4	4	4	4	4	4	
	定格轉速 Rated speed (rpm)	270	172	100	85	67	57.5	52	43	36	31	29	23	20.5	12	10	8	6.2	4.1	2.1	
24V	定格扭力 Rated torque (Kg-cm)	0.8	1.2	2	2	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	
	定格轉速 Rated speed (rpm)	278	170	98	84	65	57	51	42	35	31	29	23	20	12	10	8	6.2	4.1	2.1	
	軸心迴轉方向 Rotation direction	CCW				CW				CCW				CW				CCW			
	長度 Length (L)	22				24.5				27				29.5				32			

馬達單體型式 / Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	60	5100	≤0.47	6200	≤0.12	3.14	75
24	62	5000	≤0.21	6200	≤0.06	3.17	75

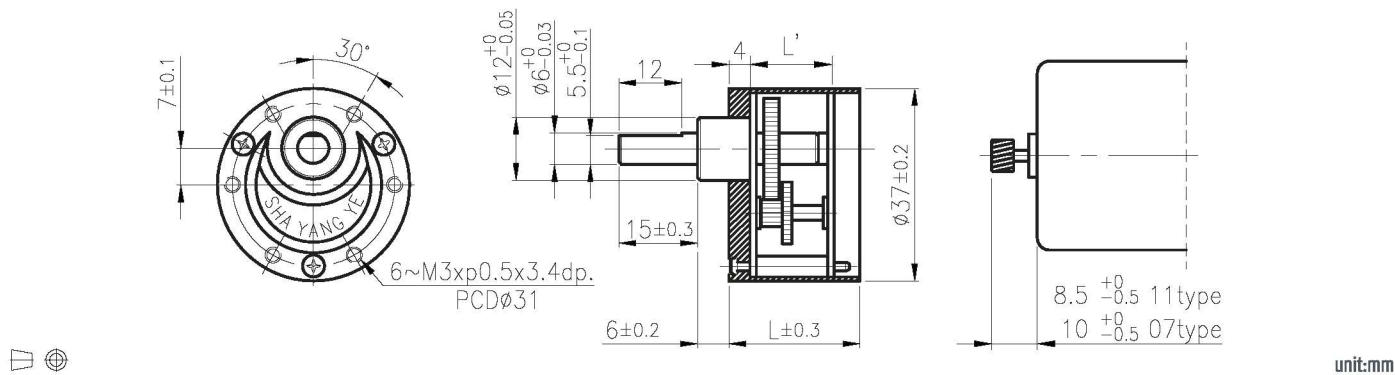
馬達單體特性 / Motor Characteristics



RB-35A



外形尺寸 & 馬達齒鉚合尺寸 / Appearance Size & Pinion Assembly Dimension



產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (10mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
金屬 Metal	含油軸承 Sleeve bearings	≤ 1 kgf	≤ 0.7 kgf	≤ 20 kgf	≤ 0.05 mm	≤ 0.35 mm	≤ 2°

馬達齒輪型式 / Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	螺旋角 Helix angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.4	12	20°	— 18° (左, left)	∅ 1.98, ∅ 2.28, ∅ 2.48, ∅ 3.16	全種通用 Practicable

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/6, 1/10	1/18	1/25, 1/30	1/36, 1/50, 1/60	1/75	1/120, 1/150, 1/180 1/250
定格容許扭力 (kgf-cm Max.) Rated tolerance torque	1	1	2	3	4	6
瞬間容許扭力 (kgf-cm) Max momentary tolerance torque	3	3	6	9	12	18
效率 Efficiency	81%		73%		66%	59%
長度 Length (L)	13.5		16		18.5	21
長度 Length (L)	19.5		22		24.5	27
重量 Weight (g)	91		98		105	111

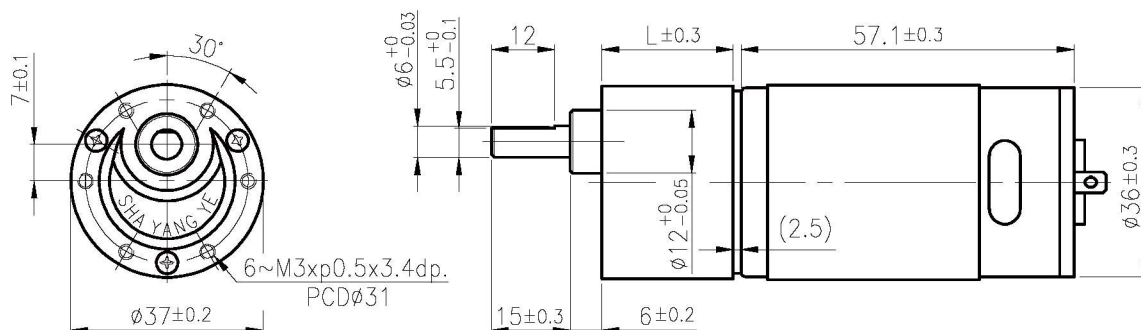
- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

RB-37AGM

07 & 09 TYPE



外形尺寸 / Appearance Size



unit:mm

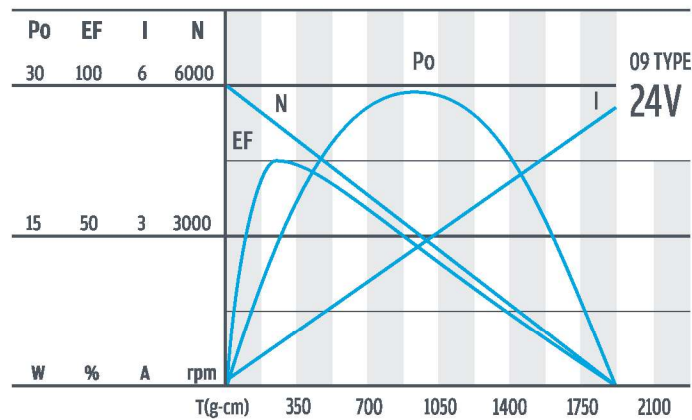
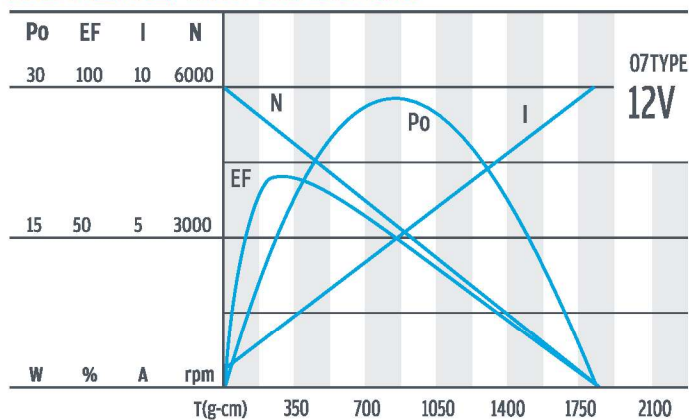
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

	減速比 Reduction ratio	1/6	1/10	1/18	1/25	1/30	1/50	1/60	1/75	1/100	1/120	1/150	1/180	1/250
12V	定格扭力 Rated torque (kg-cm)	1	1	1	2	2	3	3	4	6	6	6	6	6
	定格轉速 Rated speed (rpm)	900	528	313	210	185	109	95	76	55	47	36	31.5	21
24V	定格扭力 Rated torque (Kg-cm)	1	1	1	2	2	3	3	4	6	6	6	6	6
	定格轉速 Rated speed (rpm)	910	532	315	220	186	111	96	77	55.5	48	36	32	22
	軸心迴轉方向 Rotation direction	CCW			CW			CCW			CW			
	長度 Length (L)	19.5			22			24.5			27			

馬達單體型式 / Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	250	4930	≤1.6	6000	≤0.25	12.80	220
24	240	5150	≤0.75	6000	≤0.13	12.70	220

馬達單體特性 / Motor Characteristics

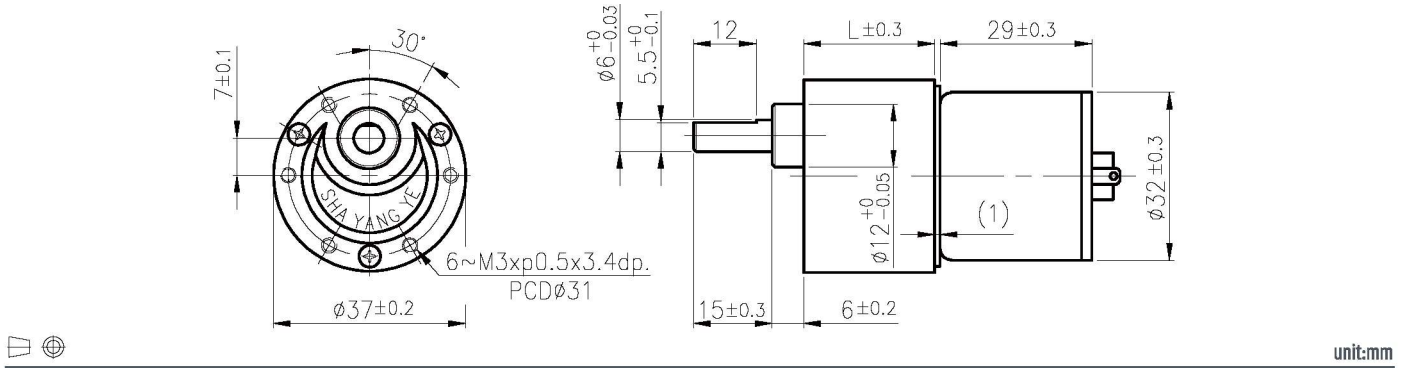


RB-37AGM

11 & 12 TYPE



外形尺寸 / Appearance Size



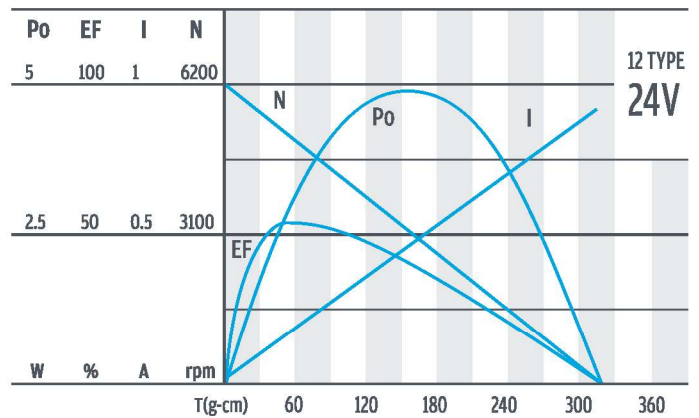
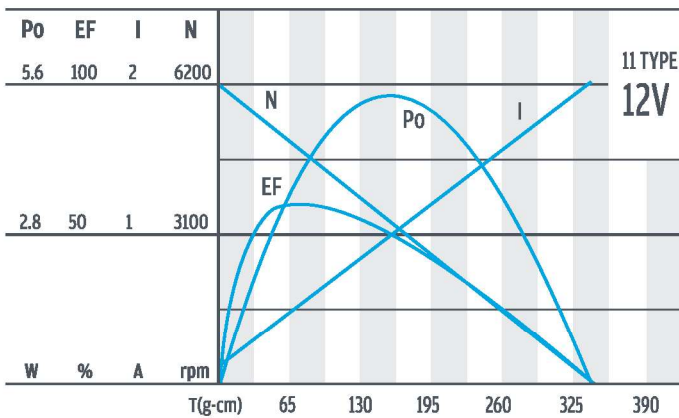
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

減速比 Reduction ratio	1/6	1/10	1/18	1/25	1/30	1/50	1/60	1/75	1/100	1/120	1/150	1/180	1/250
12V 定格扭力 Rated torque (kg-cm)	0.3	0.5	0.8	1	1.3	2	2.4	2.9	3.9	4.2	5.3	6	6
12V 定格轉速 Rated speed (rpm)	850	490	270	200	168	100	84	67	51	42.5	34	29	22
24V 定格扭力 Rated torque (Kg-cm)	0.3	0.5	0.8	1	1.4	2	2.4	3	4	4.4	5.4	6	6
24V 定格轉速 Rated speed (rpm)	833	480	250	200	160	98	83	65	50	41.5	33	28.5	22
軸心迴轉方向 Rotation direction	CCW			CW			CCW			CW			
長度 Length (L)	19.5			22			24.5			27			

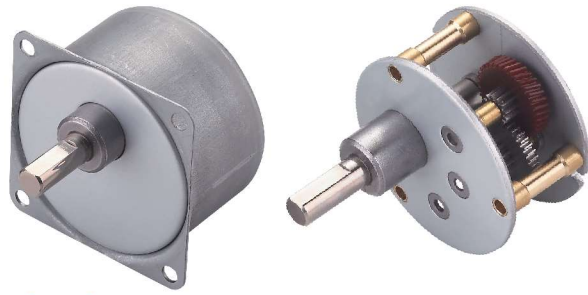
馬達單體型式 / Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	60	5100	≤ 0.47	6200	≤ 0.12	3.14	75
24	62	5000	≤ 0.21	6200	≤ 0.06	3.17	75

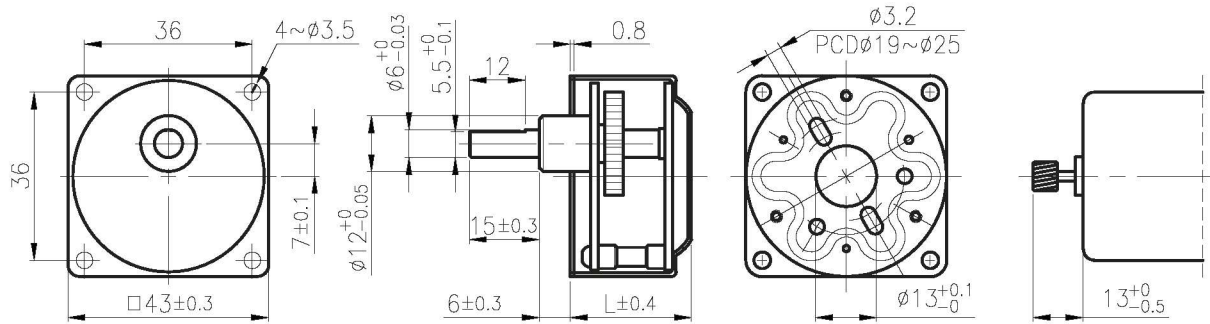
馬達單體特性 / Motor Characteristics



RB-40



外形尺寸 & 馬達齒鉚合尺寸 / Appearance Size & Pinion Assembly Dimension



unit:mm

產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (10mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
金屬 Metal	含油軸承 Sleeve bearings	≤ 1 kgf	≤ 0.7 kgf	≤ 20 kgf	≤ 0.05 mm	≤ 0.35 mm	≤ 2'

馬達齒輪型式 / Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	螺旋角 Helix angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.5	10	20°	--	$\phi 2.28, \phi 3.16$	全種通用 Practicable
0.4	12	20°	18 (Left, 左)	$\phi 3.16$	全種通用 Practicable

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/10	1/15, 1/18	1/25, 1/30, 1/36	1/50, 1/60, 1/75	1/90, 1/100, 1/120, 1/150	1/180, 1/200, 1/250, 1/300	1/360, 1/400, 1/500
定格容許扭力 (kgf-cm Max.) Rated tolerance torque	1	3	4	5	7	7	7
瞬間容許扭力 (kgf-cm) Max momentary tolerance torque	3	9	12	15	21	21	21
效率 Efficiency	81%	73%			66%		59%
長度 Length (L)	23.9	26.4			28.9		31.4
重量 Weight (g)	110	116			125		130

- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

IG

Right Angle

RA

RB

WG

Encoder

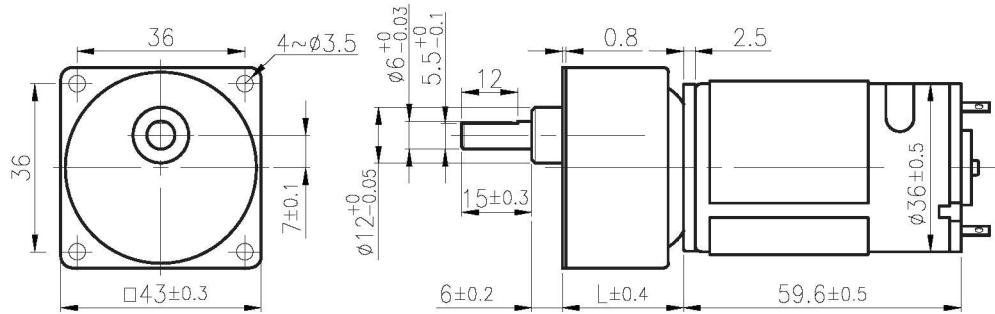
Driver

RB-40GM

03 & 04 TYPE



外形尺寸/ Appearance Size



unit:mm

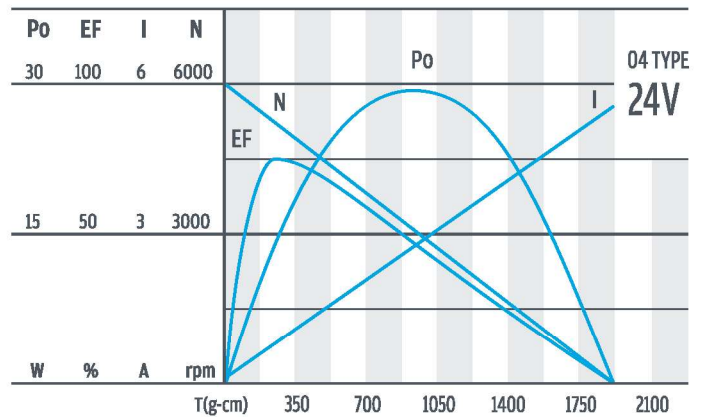
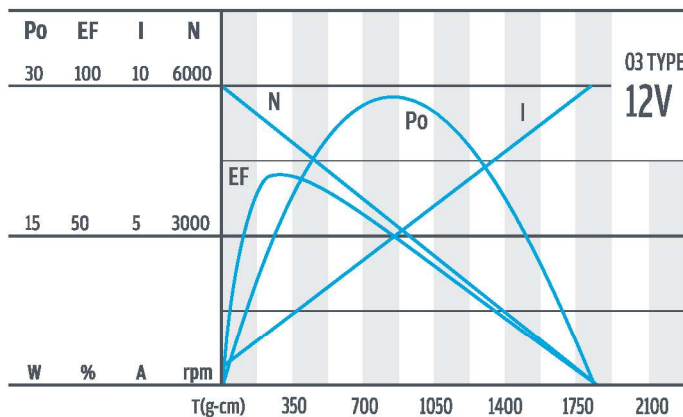
齒輪箱馬達轉矩 & 速度/ Gear Motor Torque & Speed

減速比 Reduction ratio	1/10	1/15	1/18	1/25	1/30	1/36	1/50	1/60	1/75	1/90	1/100	1/120	1/150	1/180	1/200	1/250	1/300	1/360	1/400	1/500
12V 定格扭力 Rated torque (kg-cm)	1	2.7	3	4	4	4	5	5	5	7	7	7	7	7	7	7	7	7	7	7
12V 定格轉速 Rated speed (rpm)	519	321	275	198	172	145	103	91	72.5	61	54	46	37	31	28.2	22.5	19.2	16	14.5	11.8
24V 定格扭力 Rated torque (Kg-cm)	1	2.6	3	4	4	4	5	5	5	7	7	7	7	7	7	7	7	7	7	7
24V 定格轉速 Rated speed (rpm)	530	340	283	207	176	149	107	92	73	61	54	46	37	31	28.5	23	19.1	16.2	14.5	11.8
軸心迴轉方向 Rotation direction	CCW					CW					CCW					CW				
長度 Length (L)	23.9					26.4					28.9					31.4				

馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	250	4930	≤ 1.6	6000	≤ 0.25	12.80	220
24	240	5150	≤ 0.75	6000	≤ 0.13	12.70	220

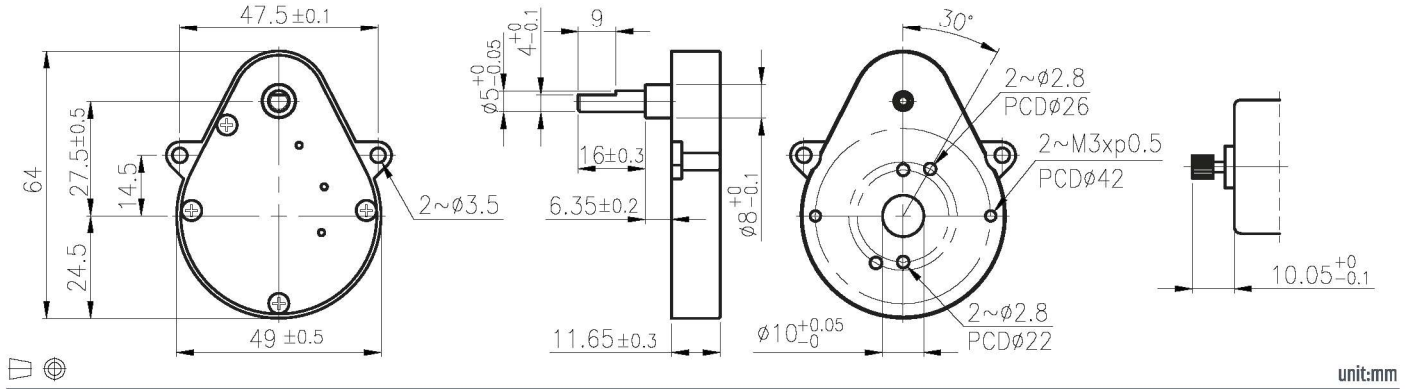
馬達單體特性/ Motor Characteristics



RB-64



外形尺寸 & 馬達齒鉚合尺寸 / Appearance Size & Pinion Assembly Dimension



產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (5mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
金屬 Metal	含油軸承 Sleeve bearings	≤ 0.8 kgf	≤ 0.6 kgf	≤ 10 kgf	≤ 0.05 mm	≤ 0.35 mm	≤ 2°

馬達齒輪型式 / Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.3	15	20°	∅ 2.48, ∅ 2.98	全種通用 Practicable

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/30	1/45	1/60	1/90	1/120	1/150	1/225	1/340
定格容許扭力 (Kgf-cm Max.) Rated tolerance torque					3			
瞬間容許扭力 (Kgf-cm) Max momentary tolerance torque					9			
效率 Efficiency					66%			
重量 Weight (g)					90			

- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

IG

Right Angle

RA

RB

WG

Encoder

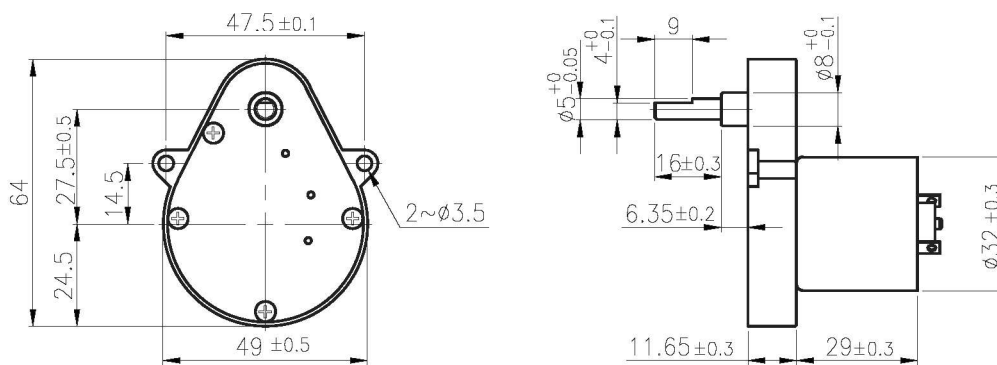
Driver

RB-64GM

11 & 12 TYPE



外形尺寸 / Appearance Size



unit:mm

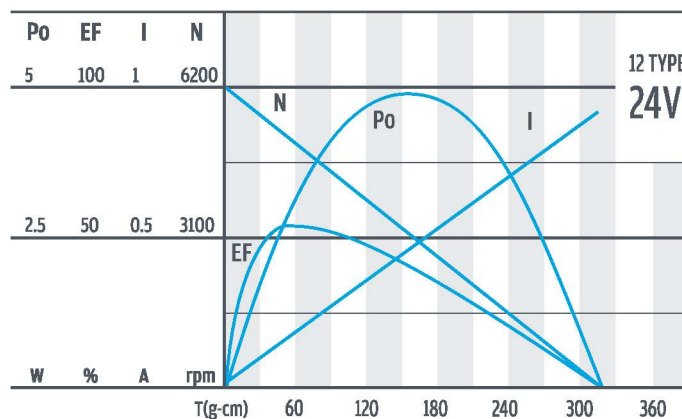
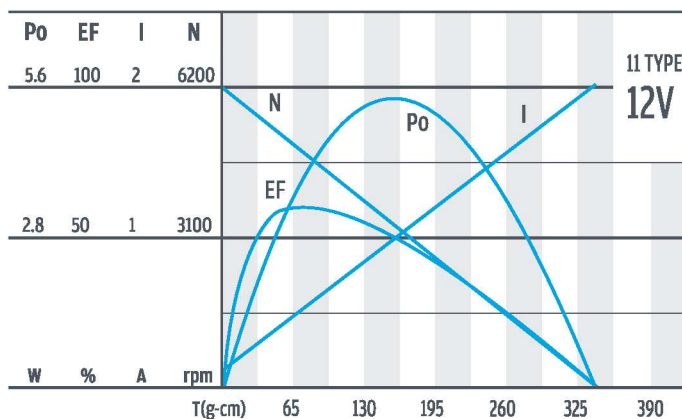
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

減速比 Reduction ratio	1/30	1/45	1/60	1/90	1/120	1/150	1/225	1/340
12V								
定格扭力 Rated torque (kg-cm)	0.12	0.18	0.24	0.36	0.49	0.61	0.92	1.39
定格轉速 Rated speed (rpm)	166	110	83	55	41	33	22	14
24V								
定格扭力 Rated torque (kg-cm)	0.13	0.19	0.26	0.39	0.52	0.65	0.98	1.48
定格轉速 Rated speed (rpm)	153	102	76	51	38	30	20	13
軸心迴轉方向 Rotation direction	CW							

馬達單體型式 / Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	60	5100	≤0.47	6200	≤0.12	3.14	75
24	62	5000	≤0.21	6200	≤0.06	3.17	75

馬達單體特性 / Motor Characteristics

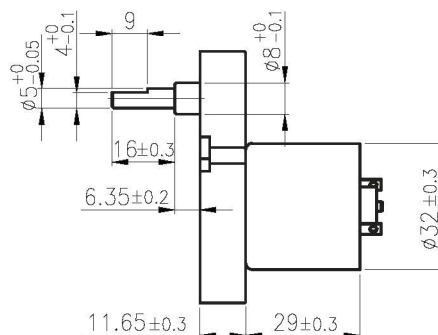
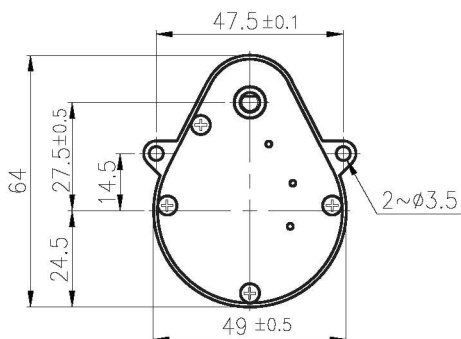


RB-64GM

51 TYPE



外形尺寸/ Appearance Size

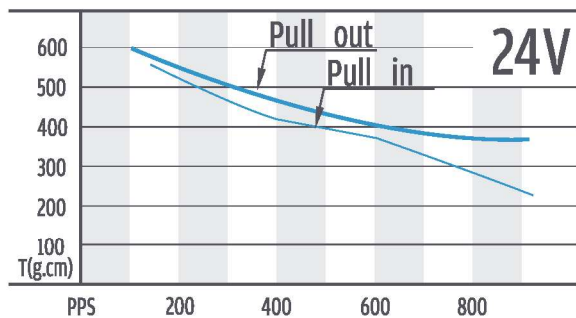


unit:mm

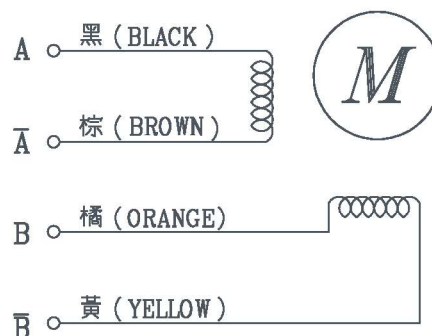
馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	線圈阻抗 Winding Resistance(Ω)	電流 Current Per Phase(mA)	相數 Number of phase	驅動方式 Drive System	迴轉角度 Step Angle (DEG)	拘束轉矩 Holding Torque (g.cm)	未激磁轉矩 Detent Torque (g.cm)	最大自起動頻率 Max. Starting Frequency (PPS)	最大響應頻率 Max. Response Frequency (PPS)	重量 Weight (g)
24	5.5	500	4	Bipolar	75°	600	≤50	≤700	900	85
減速比 Reduction ratio	1/30, 1/45, 1/60, 1/90, 1/120, 1/150, 1/225, 1/340									

馬達單體特性/ Motor Characteristics



齒輪箱馬達接線圖/ Gear Motor Wiring Diagram



	WIRE COLOR	1	2	3	4		
A	BLACK	+	+	-	-		
Ā	BROWN	-	-	+	+		
B	ORANGE	-	+	+	-		
B̄	YELLOW	+	-	-	+		

IG

Right Angle

RA

RB

WG

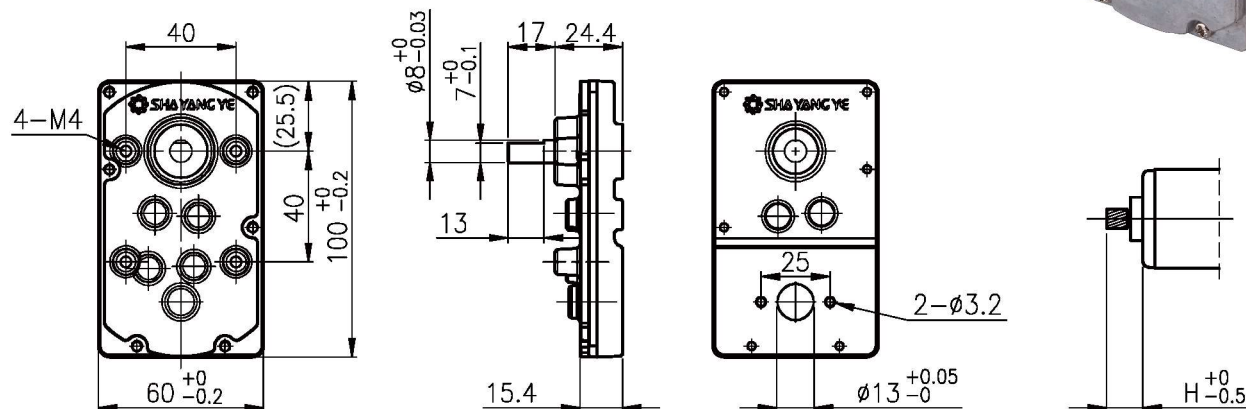
Encoder

Driver

RB-99W



外形尺寸 & 馬達齒鉚合尺寸 / Appearance Size & Pinion Assembly Dimension



unit:mm

產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Bearing at output	徑向負荷 Radial load (10mm from flange)	軸向負荷 Shaft axial load	主軸最大承受壓入力 Shaft press fit force, max.	徑向間隙 Radial play of shaft	軸向間隙 Thrust play of shaft	背隙 (無負荷時) Backlash, at no-load
金屬 Metal	含油軸承 Sleeve bearings	≤ 3 kgf	≤ 5 kgf	≤ 30 kgf	≤ 0.10 mm	≤ 0.35 mm	≤ 3°

馬達齒輪型式 / Pinion Specifications

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	螺旋角 Helix angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.5	11	20°	18° (左, left)	∅ 3.16	1/30, 1/100, 1/147, 1/305, 1/459
0.5	13	20°	18° (左, left)	∅ 3.16	1/24, 1/54, 1/81, 1/246

標準減速比型式 / Gearboxes Specifications

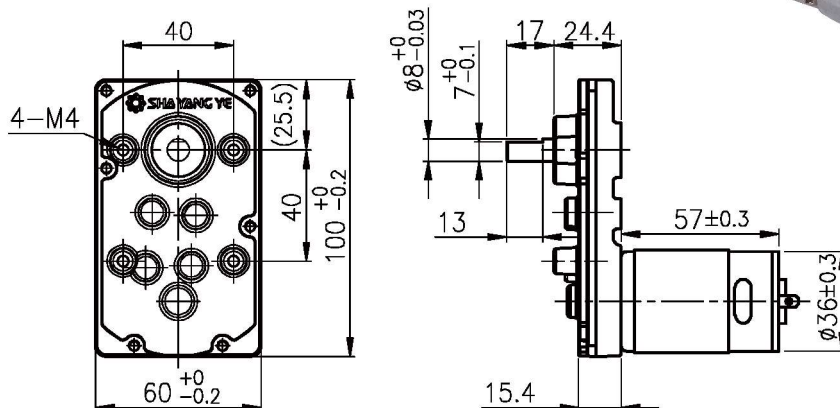
減速比 Reduction ratio	1/24, 1/30	1/54	1/81, 1/100	1/147	1/246, 1/305	1/459
定格容許扭力 (kgf-cm Max.) Rated tolerance torque	3	6	8	8	10	10
瞬間容許扭力 (kgf-cm) Max momentary tolerance torque	9	18	24	24	30	30
效率 Efficiency	73%				66%	
馬達齒高度 Pinion Height (H)	10.6				7	
重量 Weight (g)	325				340	

- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range

RB-99WGM

01 & 02 TYPE

外形尺寸/Appearance Size



unit:mm

齒輪箱馬達轉矩 & 速度/Gear Motor Torque & Speed

	減速比 Reduction ratio	1/24	1/30	1/54	1/81	1/100	1/147	1/246	1/305	1/459
12V	定格扭力 Rated torque (kg-cm)	3	3	6	8	8	8	10	10	10
	定格轉速 Rated speed (rpm)	210	170	93	63	52	35	22	17	12
24V	定格扭力 Rated torque (Kg-cm)	3	3	6	8	8	8	10	10	10
	定格轉速 Rated speed (rpm)	210	170	93	63	52	35	22	17	12
	軸心迴轉方向 Rotation direction	CW				CCW				

馬達單體型式/ Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	250	4930	≤ 1.6	6000	≤ 0.25	12.80	220
24	240	5150	≤ 0.75	6000	≤ 0.13	12.70	220

馬達單體特性/ Motor Characteristics

