

Worm Gear Motor

Worm Gear series

PG

IG

Right Angle

RA

RB

WG

SD

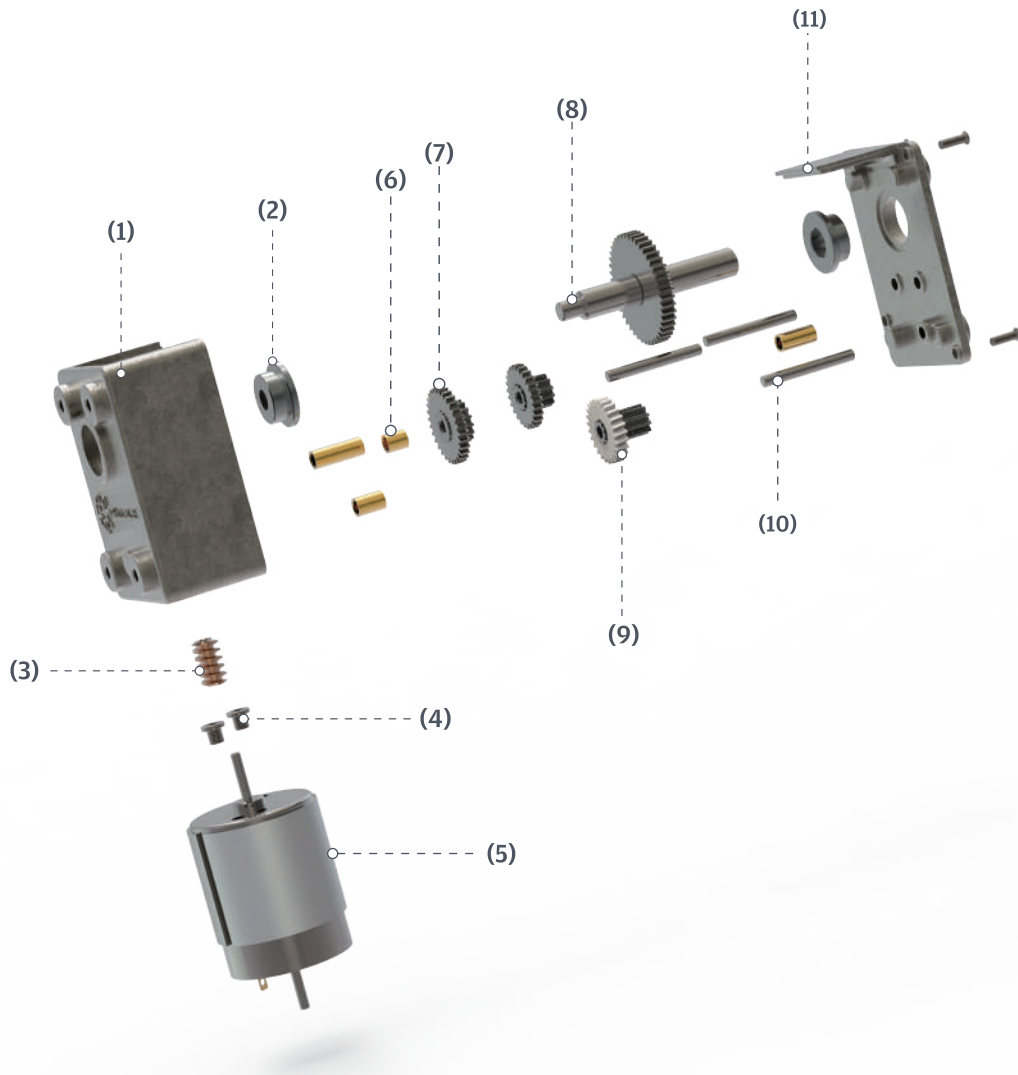
BLDC

Encoder

Driver

蝸桿蝸輪齒輪箱馬達

Worm Gear Motor

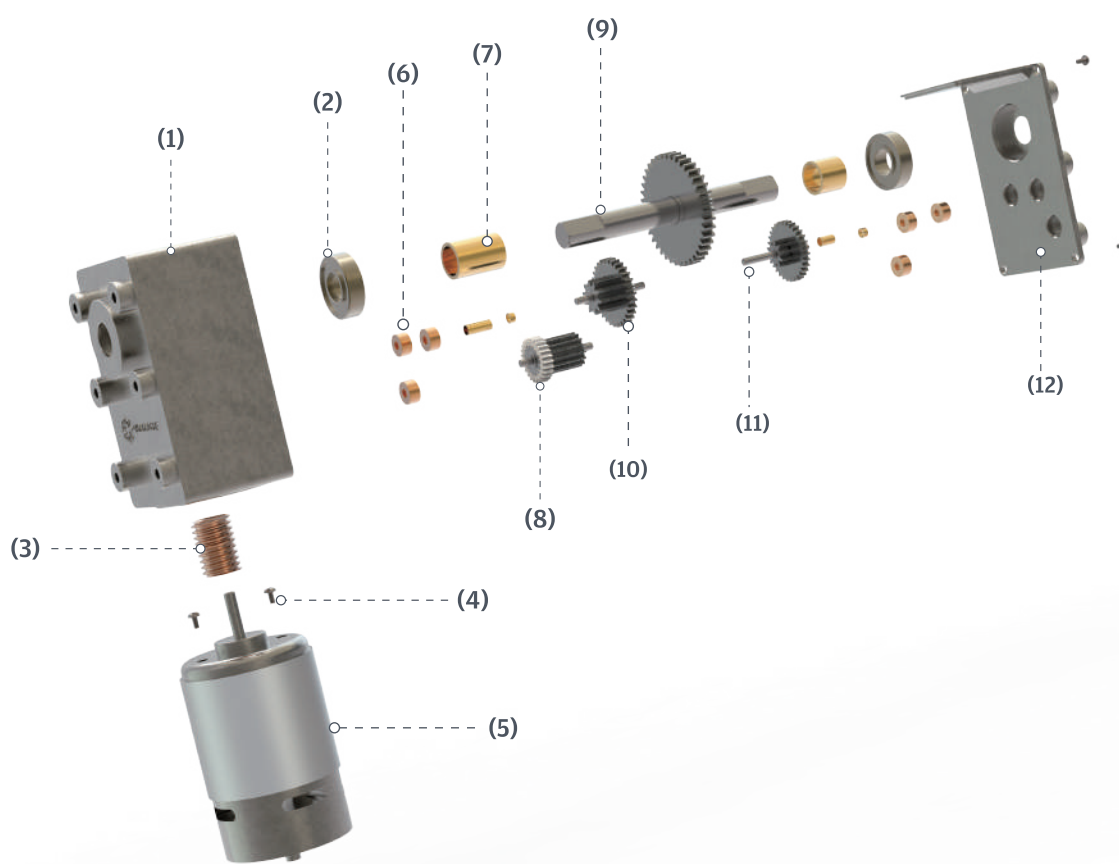


1	外殼	Housing
2	襯套	Bushing
3	蝸桿	Worms
4	螺絲	Screw
5	馬達	Motor
6	間隔套	Spacer sleeve
7	塔輪	Gear wheel

8	主軸	Output shaft
9	蝸輪	Worm gear
10	梢	Pin
11	外殼	Housing

蝸桿蝸輪齒輪箱馬達

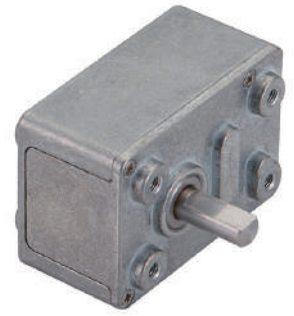
Worm Gear Motor



1	外殼	Housing
2	滾珠軸承	Ball bearing
3	蝸桿	Worms
4	螺絲	Screw
5	馬達	Motor
6	襯套	Bushing
7	間隔套	Spacer sleeve

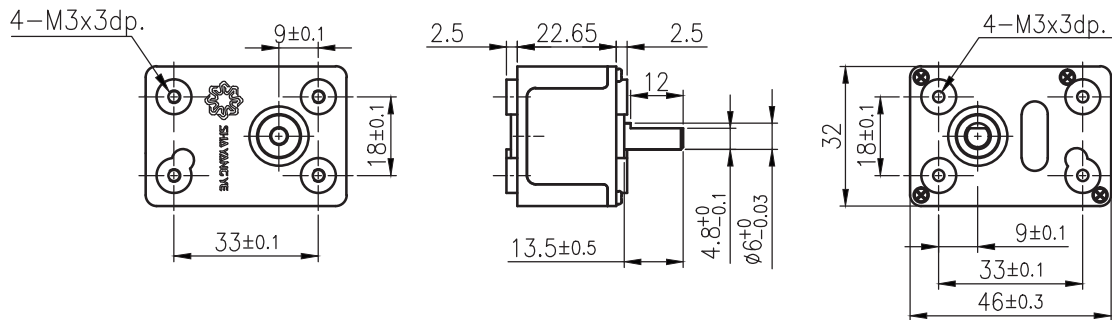
8	蝸輪	Worm gear
9	主軸	Output shaft
10	塔輪	Gear wheel
11	梢	Pin
12	外殼	Housing

WG-32



外形尺寸 / Appearance Size

可選擇單出軸或者雙出軸 / Single or dual output shaft are both available



unit:mm

產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Output shaft bearing	徑向負荷 Radial load (10mm from flange)	軸向負荷 Shaft axial load	主軸承受壓入力 Shaft press fit force	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	≤1kgf	≤0.7 kgf	≤5 kgf	≤0.05 mm	≤0.35 mm	≤3°

馬達齒輪型式 / Pinion Specification

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.5	1	20°	∅1.98	全機種通用 Practicable

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/75	1/100	1/200	1/300	1/500	1/700	1/900	1/1012					
定格容許扭力 (kgf-cm max.) Rated tolerance torque	1.4	1.9	3.8	5.5	6	6	6	6					
瞬間容許扭力 (kgf-cm) Max momentary tolerance torque	2.8	3.8	7.6	11.1	12	12	12	12					
效率 Efficiency	34%	34%	34%	34%	28%	28%	28%	28%					
重量 Weight (g)	117	117	117	117	120	120	120	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
- WG系列只搭配馬達販售
WG series are only sold with motors.

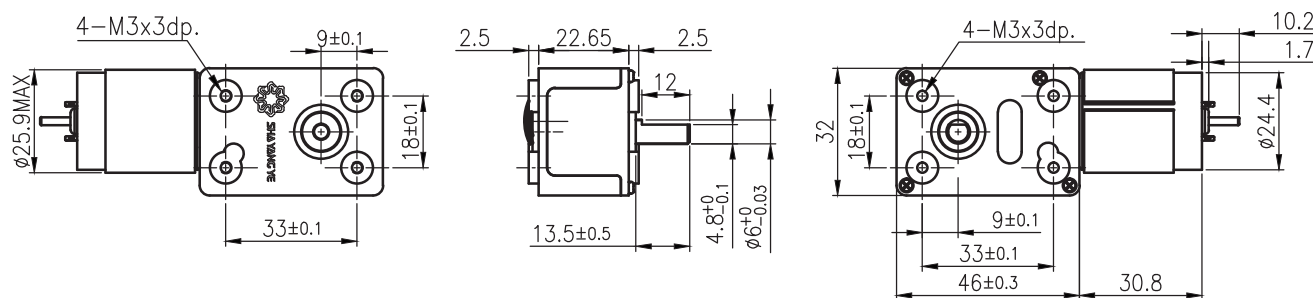
WG-32GM

01 & 02 TYPE



外形尺寸 / Appearance Size

可選擇單出軸或者雙出軸 / Single or dual output shaft are both available



unit:mm

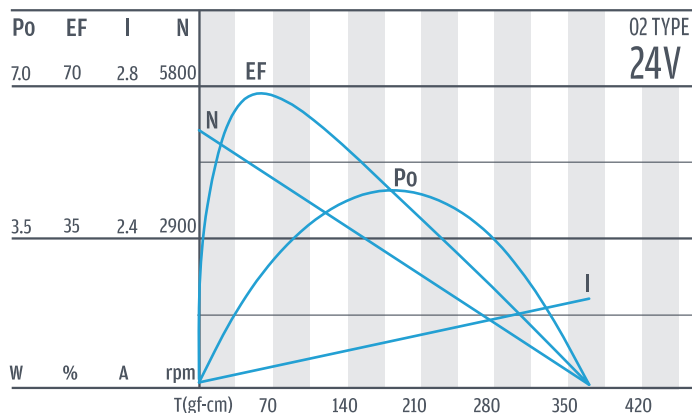
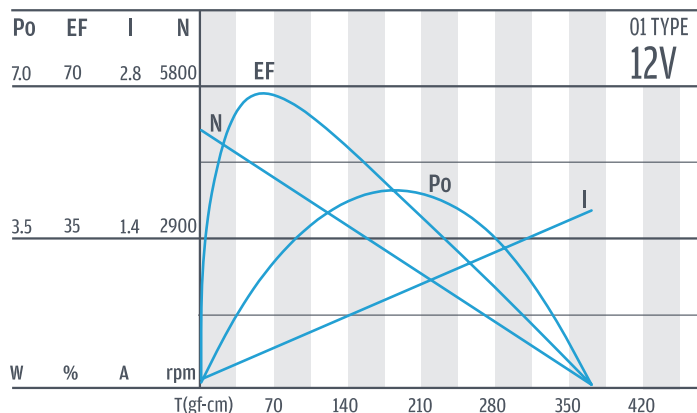
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

	減速比 Reduction ratio	1/75	1/100	1/200	1/300	1/500	1/700	1/900	1/1012
12V	定格扭力 Rated torque (kgf-cm)	1.4	1.9	3.8	5.5	6	6	6	6
	定格轉速 Rated speed (rpm)	55.5	42	20.5	14	8.8	6.5	5.1	4.6
24V	定格扭力 Rated torque (kgf-cm)	1.4	1.9	3.8	5.5	6	6	6	6
	定格轉速 Rated speed (rpm)	55.5	42	20.5	14	8.8	6.5	5.1	4.6
	軸心迴轉方向 Rotation direction	CW			CCW				

馬達單體型式 / Motor Data

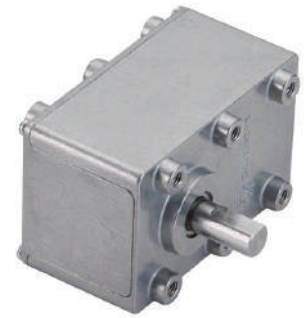
定格電壓 Rated volt (V)	定格扭力 Rated torque (gf-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (mA)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (mA)	定格出力 Rated output (W)	重量 Weight (g)
12	55.3	4160	≤ 240	4900	≤ 60	2.37	60
24	55.3	4160	≤ 140	4900	≤ 30	2.37	60

馬達單體特性 / Motor Characteristics



PG

WG-40

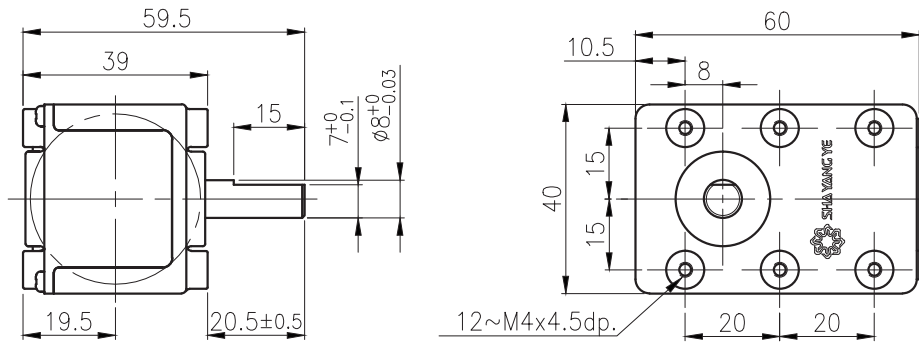


IG

外形尺寸 / Appearance Size

可選擇單出軸或者雙出軸 / Single or dual output shaft are both available

Right Angle



unit:mm

RA

RB

產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Output shaft bearing	徑向負荷 Radial load (10mm from flange)	軸向負荷 Shaft axial load	主軸承受壓力 Shaft press fit force	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	≤8kgf	≤3kgf	≤15kgf	≤0.05mm	≤0.5mm	≤3°

WG

馬達齒輪型式 / Pinion Specification

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.5	1	20°	∅3.16	全機種通用 Practicable

SD

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/50	1/75	1/100	1/150	1/200	1/350	1/600	1/700	1/1050
定格容許扭力 (kgf-cm max.) Rated tolerance torque	2	3	4	6	8	10	20	20	20
瞬間容許扭力 (kgf-cm) Max momentary tolerance torque	4	6	8	12	16	20	40	40	40
效率 Efficiency	34%	34%	34%	34%	34%	34%	28%	28%	28%
重量 Weight (g)	215	215	215	215	215	215	220	220	220

BLDC

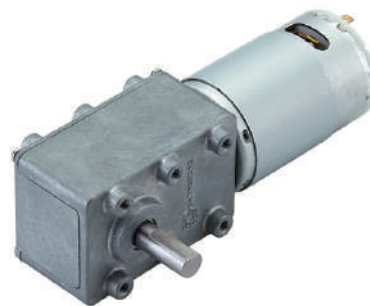
- 使用相對溼度：20%~85%RH
Operating relative humidity
- 使用溫度範圍：-10°C~+60°C
Operating temperature range
- WG系列只搭配馬達販售
WG series are only sold with motors.

Encoder

Driver

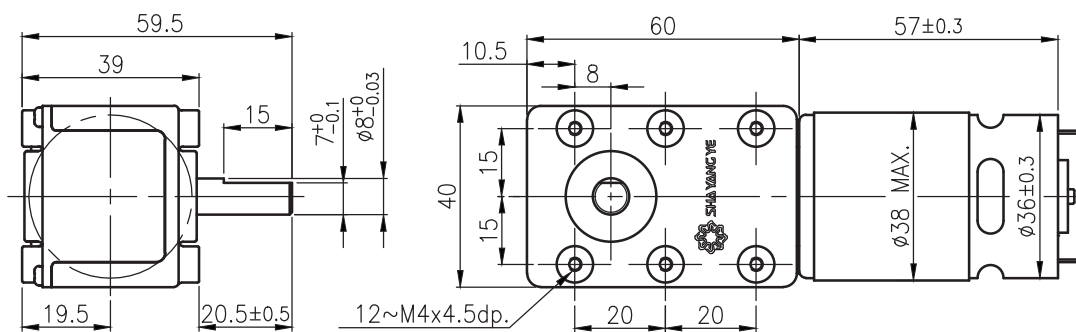
WG-40GM

01 & 02 TYPE



外形尺寸 / Appearance Size

可選擇單出軸或者雙出軸 / Single or dual output shaft are both available



unit:mm

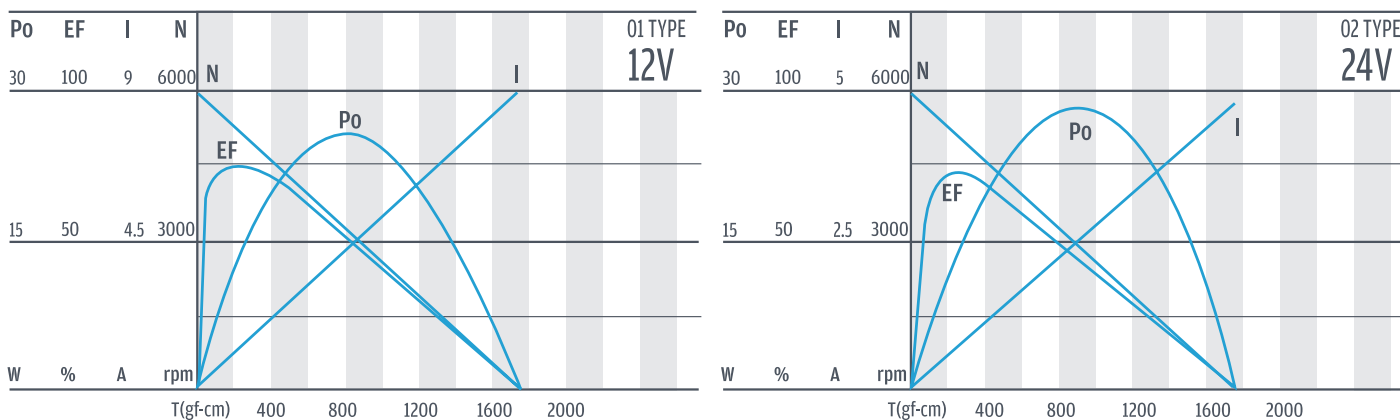
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

	減速比 Reduction ratio	1/50	1/75	1/100	1/150	1/200	1/350	1/600	1/700	1/1050							
12V	定格扭力 Rated torque (kgf-cm)	2	3	4	6	8	10	20	20	20							
	定格轉速 Rated speed (rpm)	104	69.3	52	34.6	26	14.8	8.6	7.4	4.9							
24V	定格扭力 Rated torque (kgf-cm)	2.85	4.2	5.7	8.5	10	10	20	20	20							
	定格轉速 Rated speed (rpm)	103	68	51	34	25.5	14.5	8.5	7.3	4.9							
	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 (gf-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	200	5200	≤1.6	6000	≤0.30	10.5	220
24	285	5100	≤1.2	6000	≤0.16	15	220

馬達單體特性 / Motor Characteristics



- PG
- IG
- Right Angle
- RA
- RB
- WG
- SD
- BLDC
- Encoder
- Driver

PG

IG

Right Angle

RA

RB

WG

SD

BLDC

Encoder

Driver

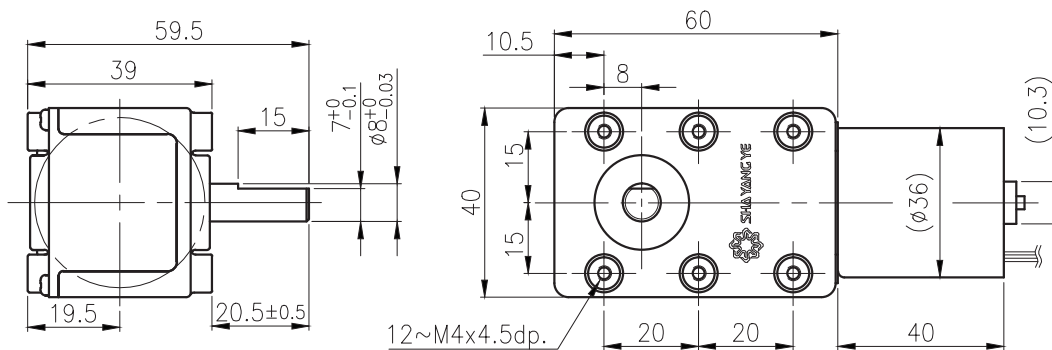
WG-40GM

41 & 42 TYPE



外形尺寸 / Appearance Size

可選擇單出軸或者雙出軸 / Single or dual output shaft are both available



unit:mm

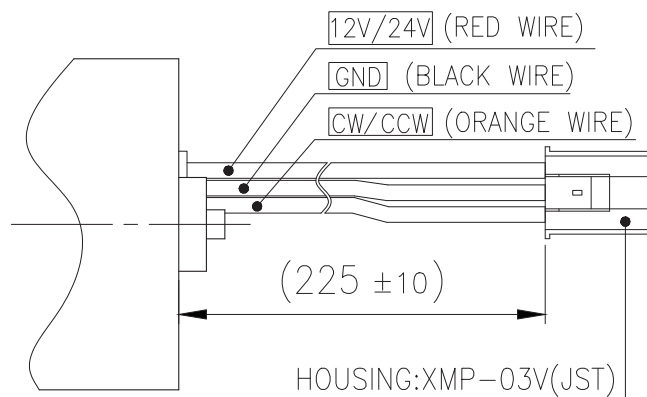
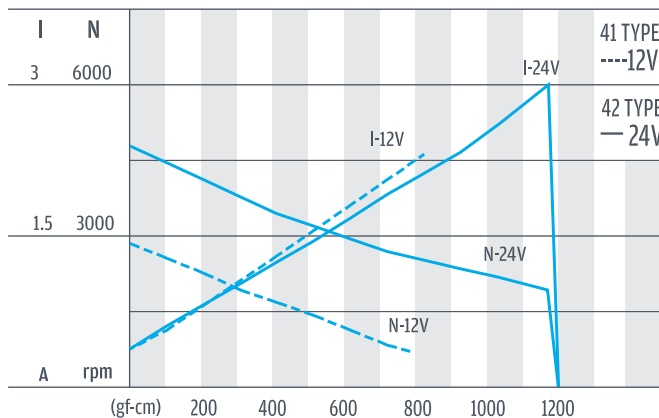
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

減速比 Reduction ratio	1/50	1/75	1/100	1/150	1/200	1/350	1/600	1/700	1/1050
12V 定格扭力 Rated torque (kgf-cm)	2	3	4	6	8	10	20	20	20
12V 定格轉速 Rated speed (rpm)	40	26.7	20	13.3	10	5.7	3.3	2.8	1.9
24V 定格扭力 Rated torque (kgf-cm)	2.5	3.7	5	7.5	10	10	20	20	20
24V 定格轉速 Rated speed (rpm)	78	52	39	26	19.5	11.1	6.5	5.6	3.7

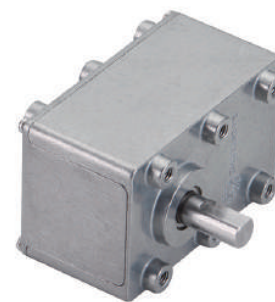
馬達單體型式 / Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (gf-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	200	2000	≤1.0	2800	≤0.35	4.1	145
24	250	3900	≤1.23	5000	≤0.4	10	145

馬達單體特性 / Motor Characteristics

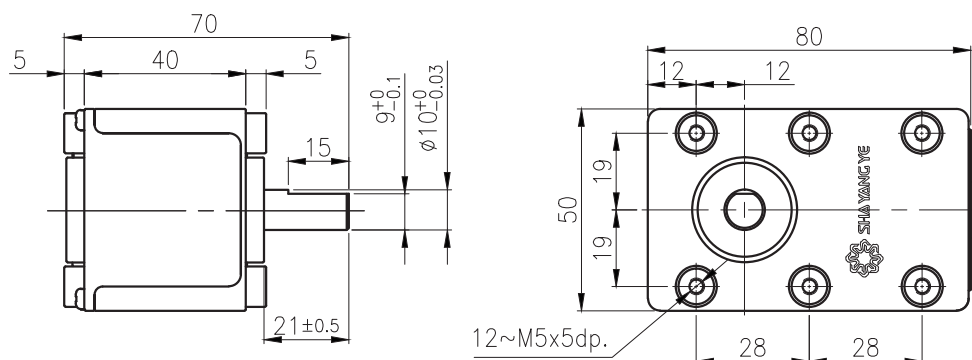


WG-50



外形尺寸 / Appearance Size

可選擇單出軸或者雙出軸 / Single or dual output shaft are both available



unit:mm

產品規格 / Product Specifications

外殼材質 Housing material	輸出軸承型式 Output shaft bearing	徑向負荷 Radial load (10mm from flange)	軸向負荷 Shaft axial load	主軸承受壓入力 Shaft press fit force	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	≤20kgf	≤10kgf	≤30kgf	≤0.05mm	≤0.5mm	≤3°

馬達齒輪型式 / Pinion Specification

模數 Module	齒數 No. of teeth	壓力角 Pressure angle	孔徑 (mm) Hole diameter	減速比 Reduction ratio
0.6	1	20°	∅3.98	全機種通用 Practicable

標準減速比型式 / Gearboxes Specifications

減速比 Reduction ratio	1/50	1/75	1/100	1/120	1/200	1/350	1/600	1/700	1/1050
定格容許扭力 (kgf·cm max.) Rated tolerance torque	7	10	13	15	25	30	40	40	40
瞬間容許扭力 (kgf·cm) Max momentary tolerance torque	14	20	26	30	50	60	80	80	80
效率 Efficiency	34%	34%	34%	34%	34%	34%	28%	28%	28%
重量 Weight (g)	450	450	450	450	450	450	480	480	480

- 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
- WG系列只搭配馬達販售
WG series are only sold with motors.

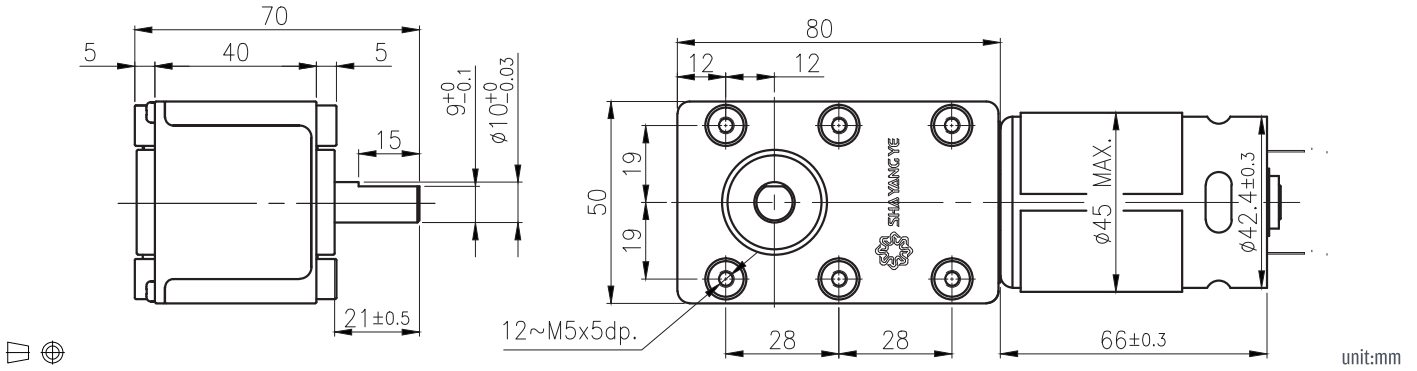
WG-50GM

01 & 02 TYPE



外形尺寸 / Appearance Size

可選擇單出軸或者雙出軸 / Single or dual output shaft are both available



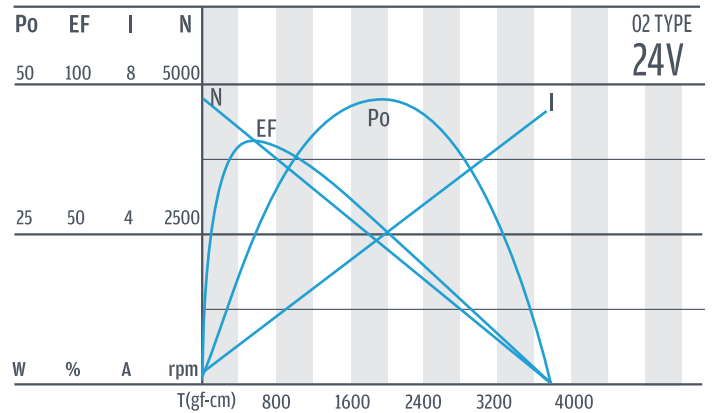
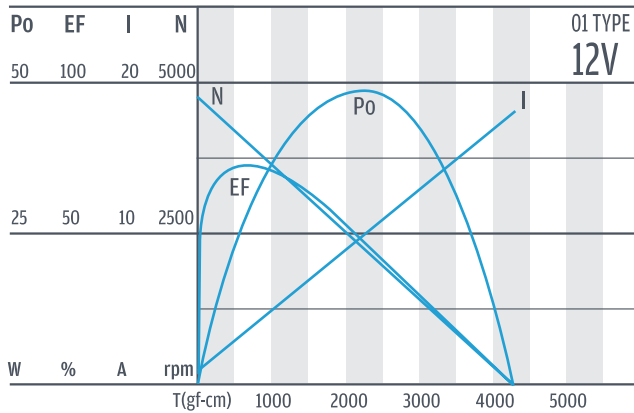
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

減速比 Reduction ratio	1/50	1/75	1/100	1/120	1/200	1/350	1/600	1/700	1/1050
12V 定格扭力 Rated torque (kgf-cm)	6.1	9.1	12.2	14.6	24.4	30	40	40	40
12V 定格轉速 Rated speed (rpm)	77	51.3	38.5	32	19.3	11	6.4	5.5	3.7
24V 定格扭力 Rated torque (kgf-cm)	5.6	8.4	11.2	13.4	22.4	30	40	40	40
24V 定格轉速 Rated speed (rpm)	77.8	51.9	38.9	32.4	19.5	11.1	6.5	5.6	3.7
軸心迴轉方向 Rotation direction	CCW					CW			

馬達單體型式 / Motor Data

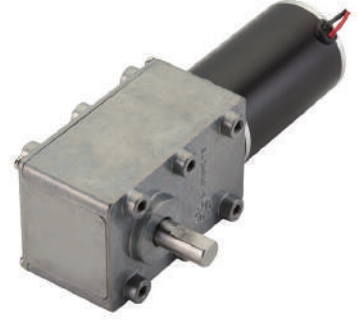
定格電壓 Rated volt (V)	定格扭力 Rated torque (gf-cm)	定格轉速 Rated speed (rpm)	定格電流 Rated current (A)	無負荷轉速 No load speed (rpm)	無負荷電流 No load current (A)	定格出力 Rated output (W)	重量 Weight (g)
12	610	3850	≤2.8	4600	≤0.65	24.2	360
24	560	3890	≤1.3	4600	≤0.3	22.3	360

馬達單體特性 / Motor Characteristics



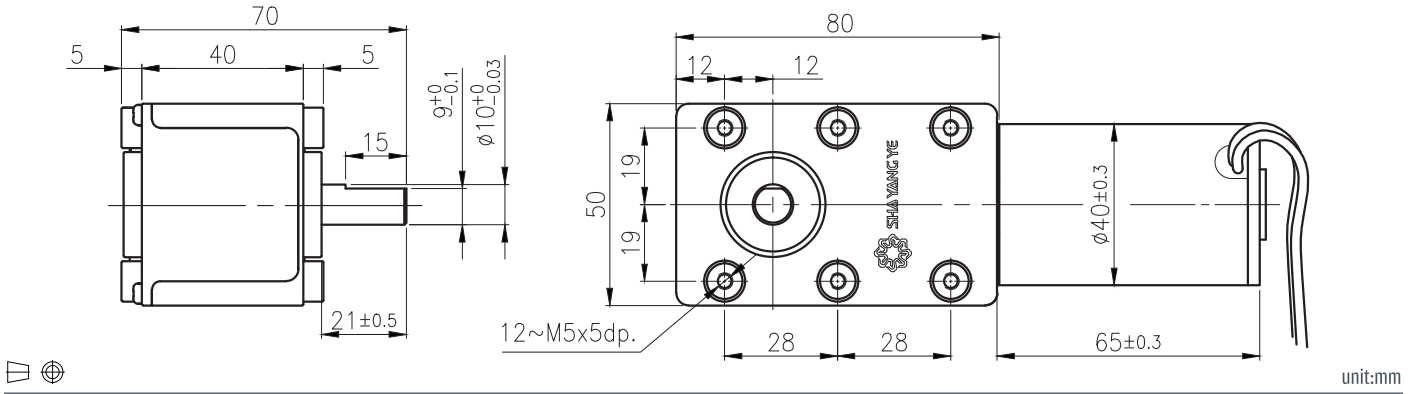
WG-50GM

03 & 04 TYPE



外形尺寸 / Appearance Size

可選擇單出軸或者雙出軸 / Single or dual output shaft are both available



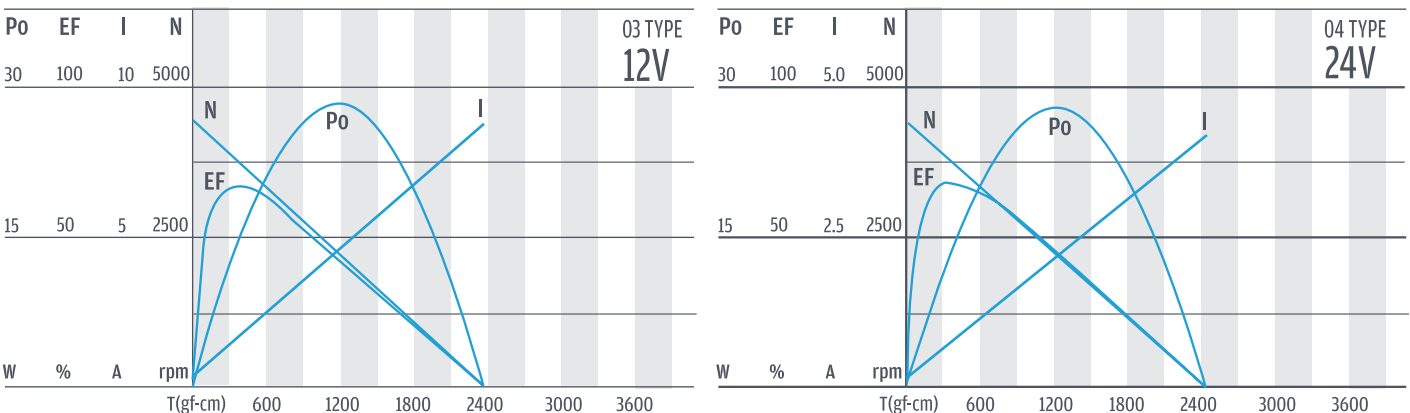
齒輪箱馬達轉矩 & 速度 / Gear Motor Torque & Speed

	減速比 Reduction ratio	1/50	1/75	1/100	1/120	1/200	1/350	1/600	1/700	1/1050	
12V	定格扭力 Rated torque (kgf-cm)	4.3	6.4	8.6	10.3	17.2	30	40	40	40	
	定格轉速 Rated speed (rpm)	75	50	37.5	31.3	18.8	10.7	6.3	5.4	3.6	
24V	定格扭力 Rated torque (kgf-cm)	3.5	5.2	7	8.4	14	24.5	40	40	40	
	定格轉速 Rated speed (rpm)	76	50.7	38	31.7	19	10.9	6.3	5.4	3.6	
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 (gf-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	430	3750	≤2.0	4500	≤0.5	16.56	310
24	350	3800	≤0.82	4500	≤0.22	13.65	310

馬達單體特性 / Motor Characteristics



PG

IG

Right Angle

RA

RB

WG

SD

BLDC

Encoder

Driver

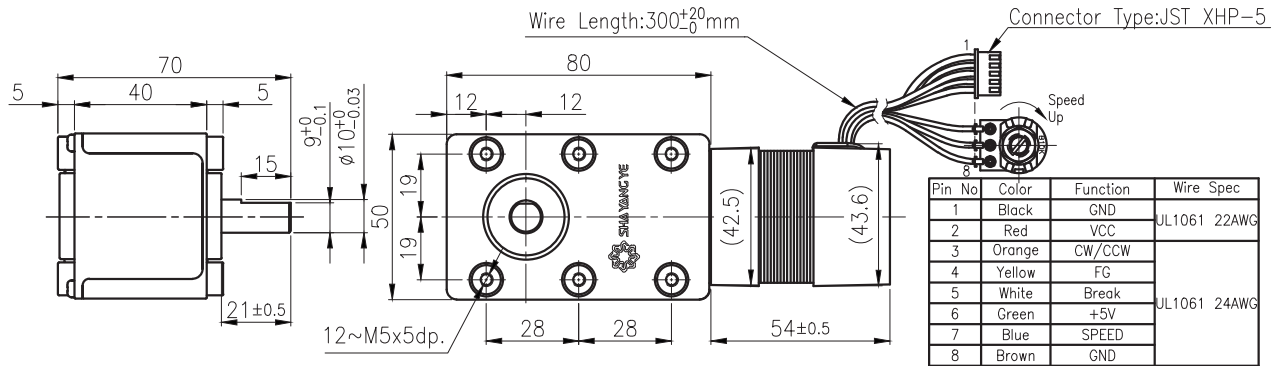
WG-50GM

41 & 42 TYPE



外形尺寸 / Appearance Size

可選擇單出軸或者雙出軸 / Single or dual output shaft are both available



unit:mm

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

	減速比 Reduction ratio	1/50	1/75	1/100	1/120	1/200	1/350	1/600	1/700	1/1050
		12V	2.0	3.0	4.0	4.8	8.0	14	24	28
12V	定格轉速 Rated speed (rpm)	60	40	30	25	15	8.6	5	4.3	2.9
24V	定格轉速 Rated speed (rpm)	88	58.7	44	36.7	22	12.6	7.3	6.3	4.2

馬達單體型式 / Motor Data

定格電壓 Rated volt (V)	定格扭力 Rated torque (gf-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	200	3000	≤0.8	3700	≤0.16	6.16	260
24	370	4400	≤1.0	5000	≤0.25	16.7	260

馬達單體特性 / Motor Characteristics

