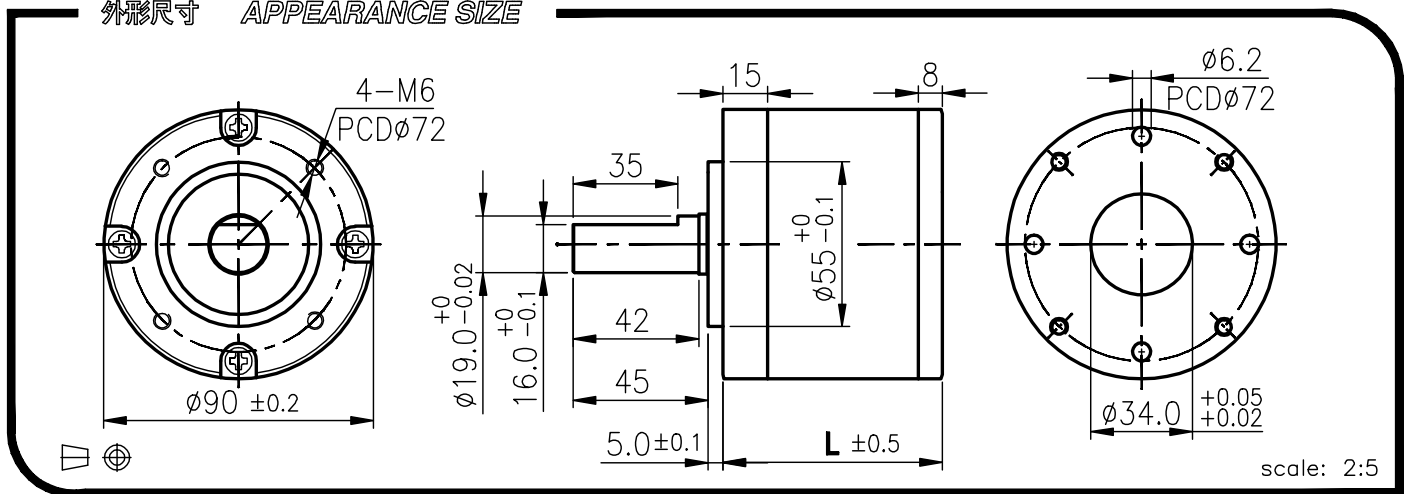


IG-90



外殼材質 Housing material	金屬 metal	背隙 (無負荷時) Backlash, at no-load	≤ 4°
輸出軸承型式 Bearing at output	滾珠軸承 Ball bearings		
徑向負荷 Radial load (10mm from flange)	≤ 40 kgf		
軸向負荷 Shaft axial load	≤ 10 kgf		
主軸最大承受壓力 Shaft press fit force, max.	≤ 100 kgf		
徑向間隙 Radial play of shaft	≤ 0.08 mm		
軸向間隙 Thrust play of shaft	≤ 0.4 mm		

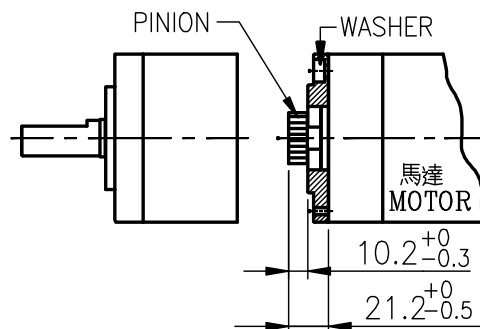
外形尺寸 APPEARANCE SIZE



馬達齒輪型式 / PINION SPECIFICATIONS

模數 Module	1.0		1.25	
齒數 No. of teeth	16	22	24	21
壓力角 Pressure angle	20°			
孔徑 Hole diameter	$\phi 10 \times 8$		$\phi 12 \times 10$	
減速比 Reduction ratio	1/19, 1/77 1/98, 1/294 1/403, 1/517	1/15 1/60	1/52 1/201	1/4

馬達裝卸方法 / MOTOR INSTALLATION



標準減速比型式 / GEARBOXES SPECIFICATIONS

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

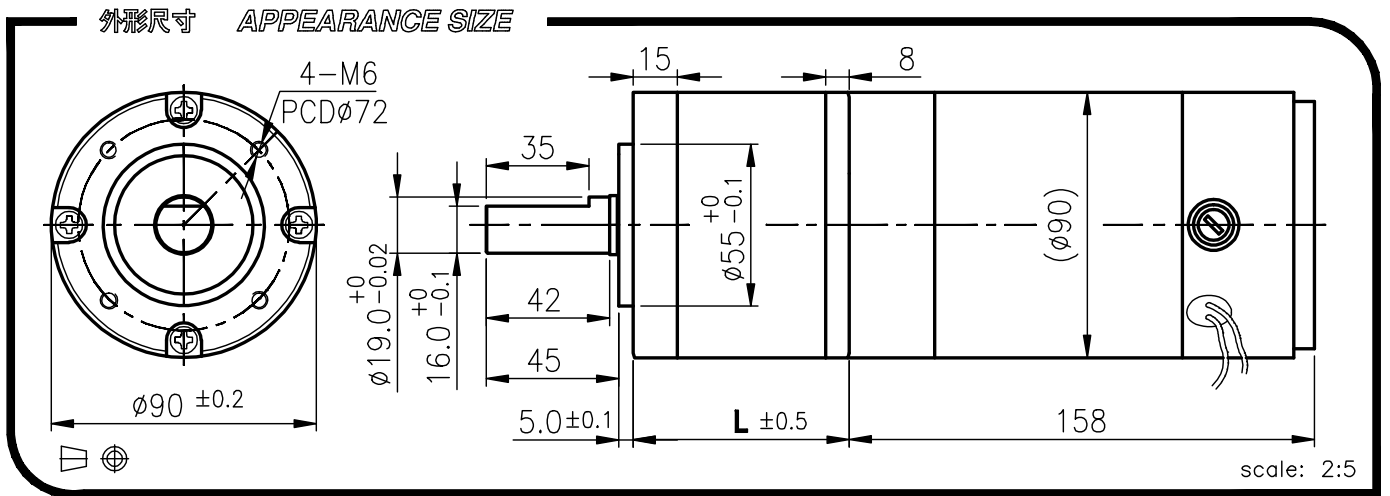
減速比 Reduction ratio	精確減速比 Exact reduction ratio	定格容許扭力 Rated tolerance torque	瞬間容許扭力 Max momentary tolerance torque	效率 Efficiency	L	重量 Weight (g)
1/4	3 4/7	20 kgf-cm Max.	60 kgf-cm	80%	57.3	1670
1/15, 1/19	14 47/77, 18 3/4	80 kgf-cm Max.	240 kgf-cm	70%	73.8	2230
1/52, 1/60	52 121/252, 59 652/847	150 kgf-cm Max.	450 kgf-cm	60%	90.3	2800
1/77	76 31/44	150 kgf-cm Max.	450 kgf-cm	60%	90.3	2800
1/98	98 7/16	150 kgf-cm Max.	450 kgf-cm	60%	90.3	2800
1/201	201 263/1512	180 kgf-cm Max.	540 kgf-cm	50%	106.8	3370
1/294	294 3/88	180 kgf-cm Max.	540 kgf-cm	50%	106.8	3370
1/403	402 123/176	180 kgf-cm Max.	540 kgf-cm	50%	106.8	3370
1/517	516 51/64	180 kgf-cm Max.	540 kgf-cm	50%	106.8	3370

IG-90GM

01&02 TYPE



REDUCTION RATIO	L	REDUCTION RATIO	L
1/4	57.3	1/201~1/517	106.8
1/15~1/19	73.8		
1/52~1/98	90.3		



GEARED MOTOR TORQUE/SPEED

	減速比 Reduction ratio	1/4	1/15	1/19	1/52	1/60	1/77	1/98	1/201	1/294	1/403	1/517				
		4	15	19	52	60	77	98	201	294	403	517				
12V	定格扭力(Kg-cm) Rated torque	10	37	48	115	132	150	150	180	180	180	180				
	定格回轉數(rpm) Rated speed	500	123	96	34	31	24	19	9.2	6.4	4.6	3.6				
24V	定格扭力(Kg-cm) Rated torque	12	42	55	130	150	150	180	180	180	180	180				
	定格回轉數(rpm) Rated speed	510	127	99	35	31	25	20	9.4	6.5	4.7	3.7				

馬達單體型式 / MOTOR DATA

定格電壓 Rated volt (V)	定格扭力 Rated torque (g-cm)	定格回轉數 Rated speed (rpm)	定格電流 Rated current (mA)	無負荷回轉數 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	3700	1800	≤ 8300	2000	≤ 1500	68.4	2150
24	4200	1860	≤ 3900	2000	≤ 950	80.0	2150

馬達單體特性圖 / MOTOR CHARACTERISTICS

