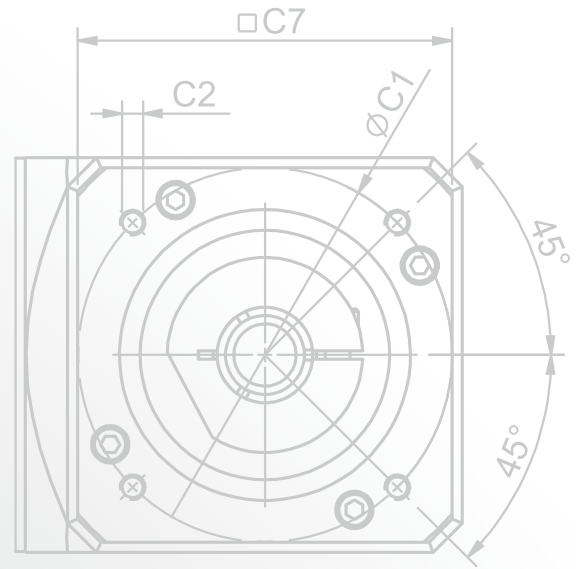
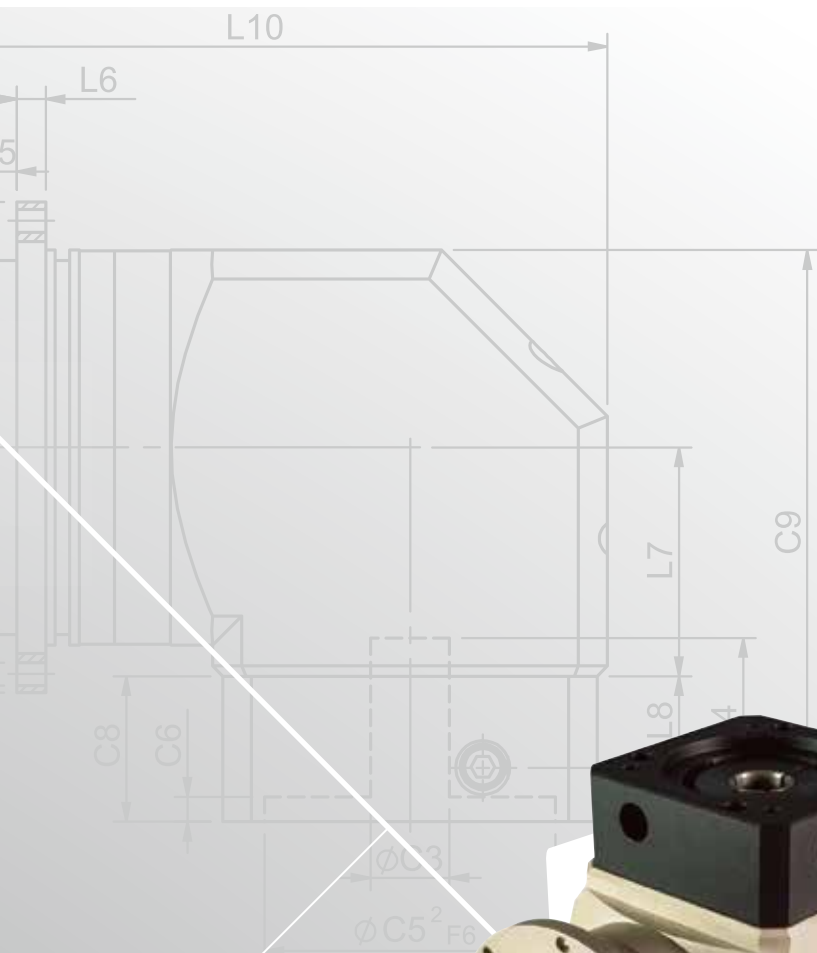
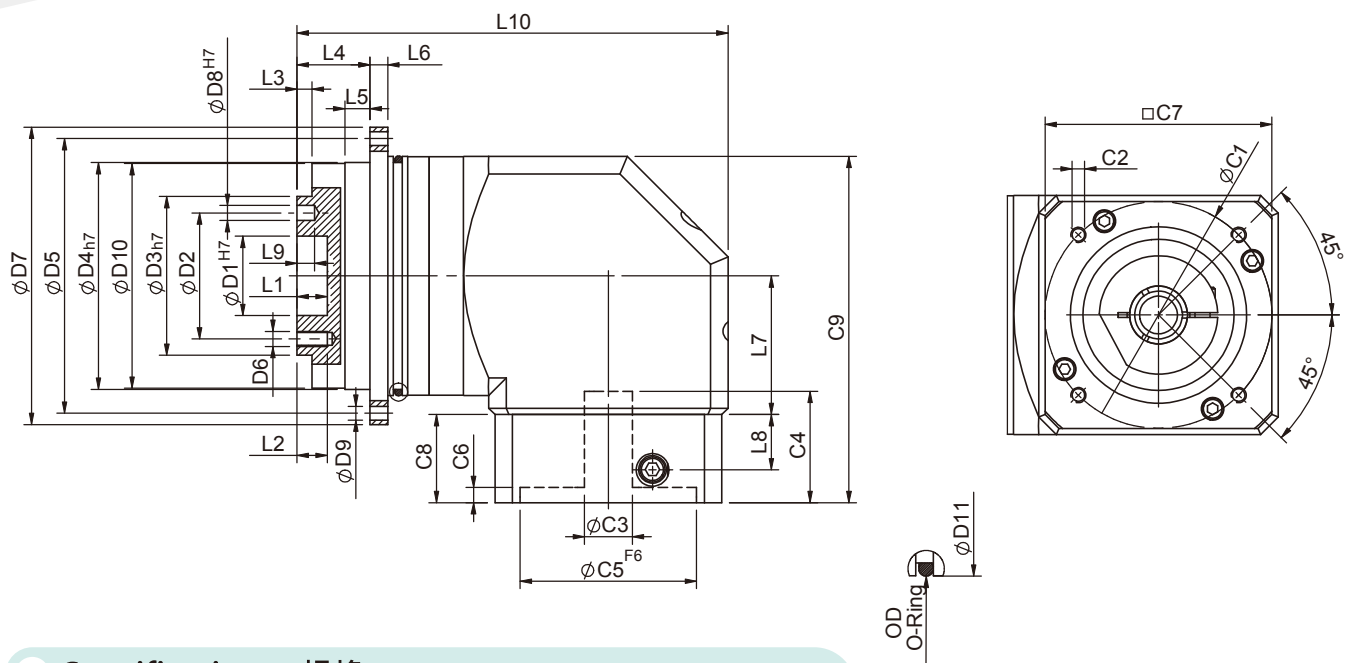


PGFR SERIES





PGFR Single Stage Dimensions PGFR單段外型尺寸圖



Specifications 規格

Unit:mm

尺寸 Dimensions	PGFR42	PGFR60	PGFR90	PGFR115	PGFR142
D1 ^{H7}	12	20	31.5	40	50
D2	20	31.5	50	63	80
D3 _{h7}	28	40	63	80	100
D4 _{h7}	47	64	90	110	140
D5	67	79	109	135	168
D6	M3x0.5P	M5x0.8P	M6x1.0P	M6x1.0P	M8x1.25P
D7	72	86	118	145	179
D8 ^{H7}	3	5	6	6	8
D9	3.4	4.5	5.5	5.5	6.6
D10	46.2	63.2	89.2	109.2	139.2
D11	60	70	95	120	152
L1	4	8	12	12	12
L2	6	7.2	12	13.5	16
L3	3	3	6	6	6
L4	19.5	19.5	29	29	38
L5	7	7	10	10	14.6
L6	4	4	7	8	10
L7	32.2	44.8	55	69	71
L8	13.5	21.5	22	32	44.7
L9	4	6	7	7	7
L10	92.2	123.9	171.1	200.2	250.7
C1 *	46	70	90	90	145
C2 *	M4x0.7P	M5x0.8P	M6x1.0P	M6x1.0P	M8x1.25P
C3 *	≤8/≤11	≤14/≤19	≤19/≤24	≤24/≤32	≤35
C4 *	29	34	44	53.5	76.8
C5 ^{F6} *	30	50	70	70	110
C6 *	6	5	5	5.5	9
C7 *	42.6	60	90	115	140
C8 *	25	33	35	48	65
C9 *	78.5	112.8	137.5	176.5	225.5
OD	56x2	66x2	90x3	110x3	145x3

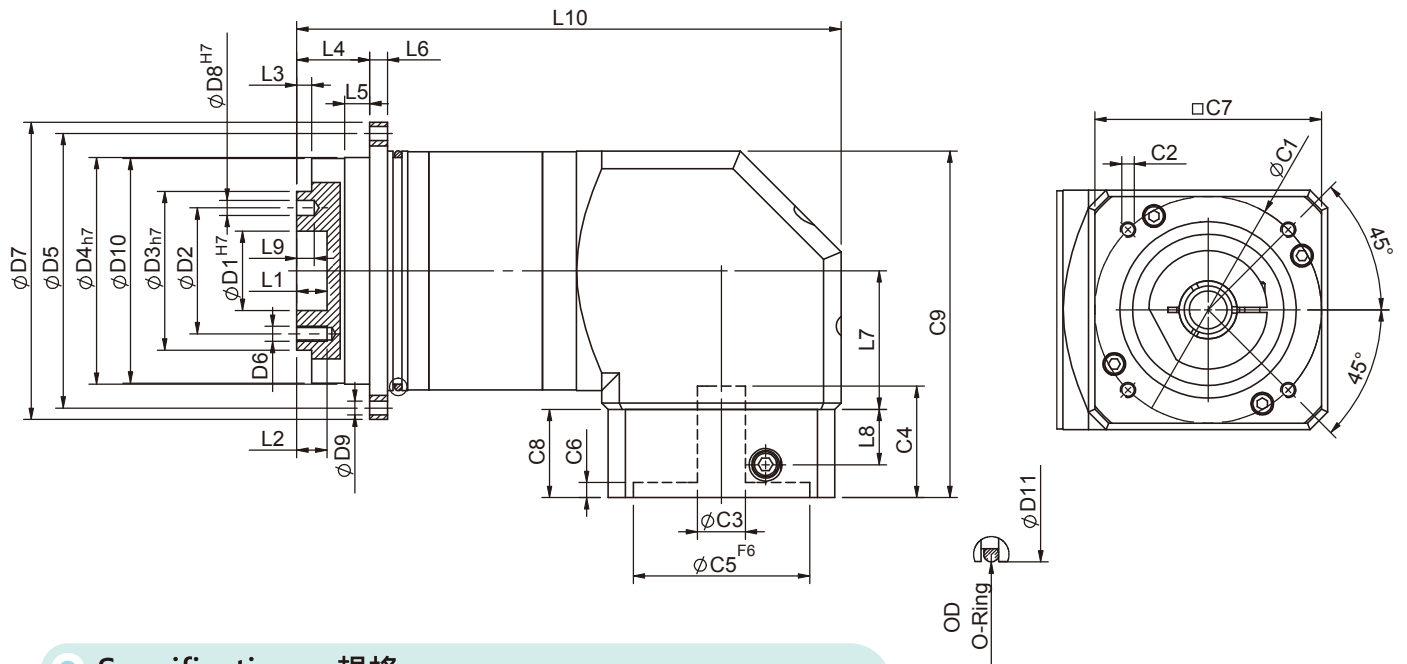
★ C1~C9是公製標準馬達連接板尺寸,請依所選用的馬達決定。

★ 本公司有權針對以上數據規格進行設計變更不先行告知。

★ C1~C9 are motor specific dimensions(metric std shown), Size may vary according to motor flange.

★ Specification subject to change without notice.

PGFR Double Stage Dimensions-1 PGFR雙段外型尺寸圖-1



Specifications 規格

Unit:mm

尺寸 Dimensions	PGFR42	PGFR60	PGFR90
D1 ^{H7}	12	20	31.5
D2	20	31.5	50
D3 _{h7}	28	40	63
D4 _{h7}	47	64	90
D5	67	79	109
D6	M3x0.5P	M5x0.8P	M6x1.0P
D7	72	86	118
D8 ^{H7}	3	5	6
D9	3.4	4.5	5.5
D10	46.2	63.2	89.2
D11	60	70	95
L1	4	8	12
L2	6	7.2	12
L3	3	3	6
L4	19.5	19.5	29
L5	7	7	10
L6	4	4	7
L7	32.2	44.8	55
L8	13.5	21.5	22
L9	4	6	7
L10	119.9	159.3	216.1
C1 *	46	70	90
C2 *	M4x0.7P	M5x0.8P	M6x1.0P
C3 *	≤8/≤11	≤14/≤19	≤19/≤24
C4 *	29	34	44
C5 ^{F6} *	30	50	70
C6 *	6	5	5
C7 *	42.6	60	90
C8 *	25	33	35
C9 *	78.5	112.8	137.5
OD	56x2	66x2	90x3

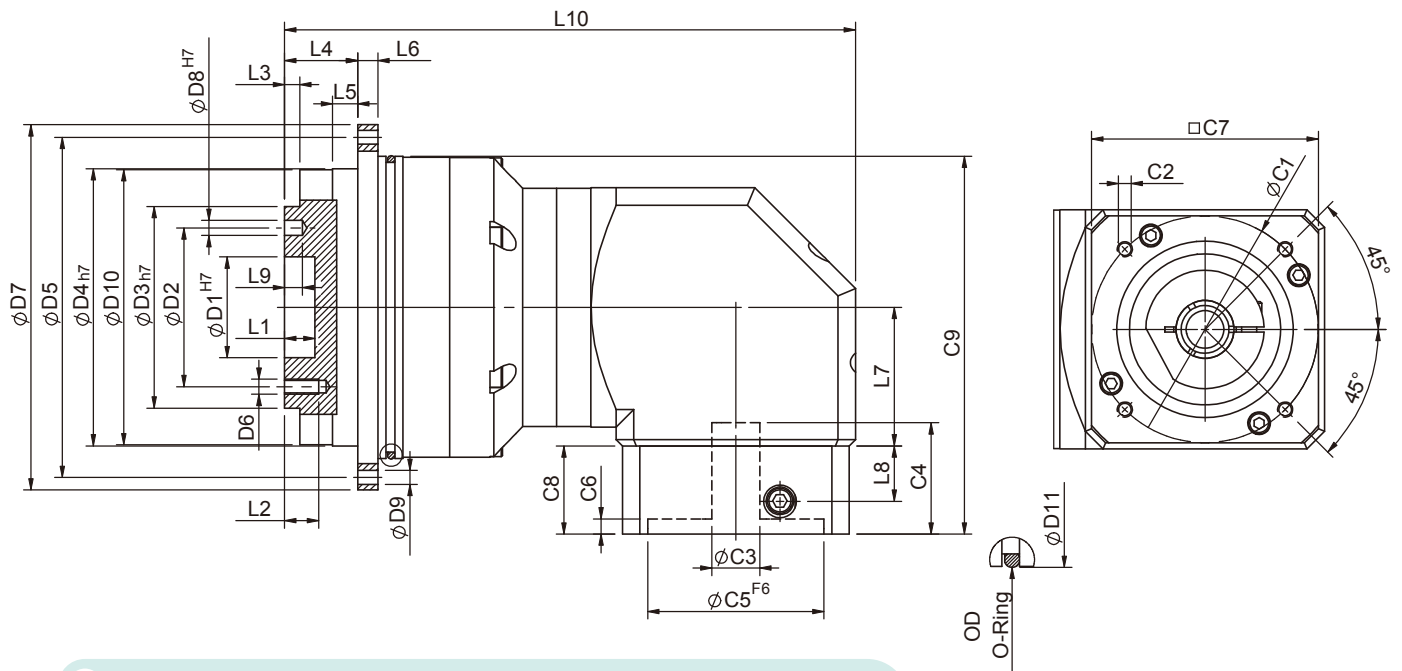
★ C1~C9是公製標準馬達連接板尺寸,請依所選用的馬達決定。

★ 本公司有權針對以上數據規格進行設計變更不先行告知。

★ C1~C9 are motor specific dimensions(metric std shown), Size may vary according to motor flange.

★ Specification subject to change without notice.

PGFR Double Stage Dimensions-2 PGFR雙段外型尺寸圖-2



Specifications 規格

Unit:mm

尺寸 Dimensions	PGFR60T	PGFR90T	PGFR115T	PGFR142T
D1 ^{H7}	20	31.5	40	50
D2	31.5	50	63	80
D3 _{h7}	40	63	80	100
D4 _{h7}	64	90	110	140
D5	79	109	135	168
D6	M5x0.8P	M6x1.0P	M6x1.0P	M8x1.25P
D7	86	118	145	179
D8 ^{H7}	5	6	6	8
D9	4.5	5.5	5.5	6.6
D10	63.2	89.2	109.2	139.2
D11	70	95	120	152
L1	8	12	12	12
L2	7.2	12	13.5	16
L3	3	6	6	6
L4	19.5	29	29	38
L5	7	10	10	14.6
L6	4	7	8	10
L7	32.2	44.8	55	69
L8	13.5	21.5	22	32
L9	6	7	7	7
L10	126.6	171.3	226.6	270.7
C1 *	46	70	90	90
C2 *	M4x0.7P	M5x0.8P	M6x1.0P	M6x1.0P
C3 *	≤8/≤11	≤14/≤19	≤19/≤24	≤24/≤32
C4 *	29	34	44	53.5
C5 ^{F6} *	30	50	70	70
C6 *	6	5	5	5.5
C7 *	42.6	60	90	115
C8 *	25	33	35	48
C9 *	84.4	125.3	150	176.5
OD	66x2	90x3	110x3	145x3

★ C1~C9是公製標準馬達連接板尺寸,請依所選用的馬達決定。

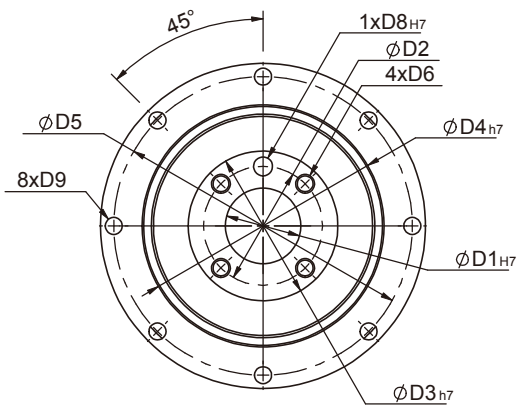
★ C1~C9 are motor specific dimensions(metric std shown), Size may vary according to motor flange.

★ 本公司有權針對以上數據規格進行設計變更不先行告知。

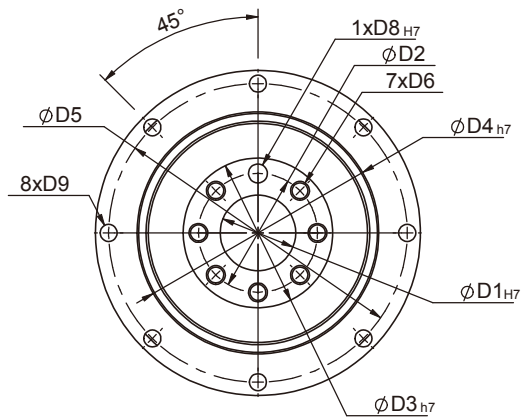
★ Specification subject to change without notice.

PGFR Flange Dimensions PGFR法蘭面尺寸圖

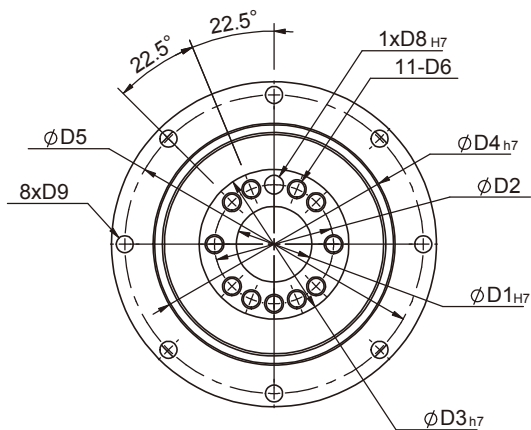
PGFR42



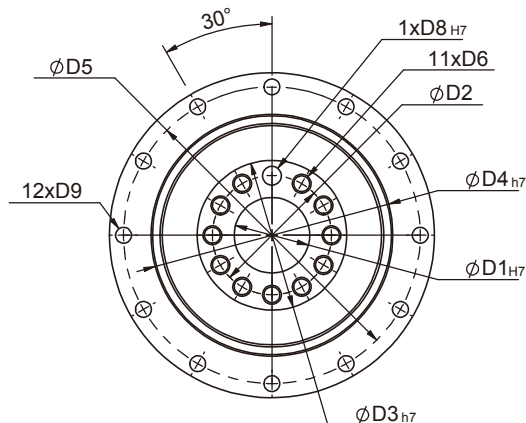
PGFR60
PGFR90



PGFR115



PGFR142



Specifications 規格 Unit:mm

尺寸 Dimensions	PGFR42	PGFR60	PGFR90	PGFR115	PGFR142
D1 _{H7}	12	20	31.5	40	50
D2	20	31.5	50	63	80
D3 _{h7}	28	40	63	80	100
D4 _{h7}	47	64	90	110	140
D5	67	79	109	135	168
D6	M3x0.5P	M5x0.8P	M6x1.0P	M6x1.0P	M8x1.25P
D8 _{H7}	3	5	6	6	8
D9	3.4	4.5	5.5	5.5	6.6

★ 本公司有權針對以上數據規格運行設計變更不先行告知。

★ Specification subject to change without notice.

PGFR Specifications Table PGFR性能規格共表

規格 Specifications		節數 Stage	減速比 Ratio	PGFR-42	PGFR-60	PGFR-90	PGFR-115	PGFR-142		
額定輸出力矩 T_{2N} Nominal Output Torque	N • m	1	3	-	40	105	180	340		
			4	16	43	110	240	500		
			5	17	50	130	290	600		
			7	14	44	125	270	530		
			10	17	50	130	260	540		
			14	14	44	125	270	530		
				20	11	37	95	220	430	
				節數 Stage	減速比 Ratio	PGFR-42	PGFR-60/ PGFR-60T	PGFR-90/ PGFR-90T	PGFR-115T	PGFR-142T
				2	15	-	40	105	180	600
					20	16	43	110	240	600
					25	17	50	130	290	600
					30	17	40	105	180	600
					35	17	50	130	290	600
					40	16	43	110	240	600
		50	17		50	130	290	600		
		70	14		44	125	270	530		
		100	11		37	95	220	430		
		140	14		44	125	270	530		
		200	11	37	95	220	430			
急停力矩 T_{2NOT} Emergency Stop Torque	N • m		3.0 倍額定輸出力矩 (3.0 times of Nominal Output Torque) (* 最大輸出力矩 Max. Output Torque T_{2B} =60% of Emergency Stop Torque)							
額定輸入轉速 n_{1N} Nominal Input Speed	rpm	1,2	3-200	5000	5000	4000	4000	3000		
最大輸入轉速 n_{1max} Max. Input Speed	rpm	1,2	3-200	10000	10000	8000	8000	5000		
超精密背隙 Micro Backlash P0	arcmin	1	3-20	-	-	≤ 4	≤ 2	≤ 2		
		2	15-200	-	-	≤ 6	≤ 4	≤ 4		
精密背隙 Precision Backlash P1	arcmin	1	3-20	≤ 6	≤ 6	≤ 6	≤ 4	≤ 4		
		2	15-200	≤ 8	≤ 8	≤ 8	≤ 7	≤ 7		
標準背隙 Standard Backlash P2	arcmin	1	3-20	≤ 8	≤ 8	≤ 8	≤ 6	≤ 6		
		2	15-200	≤ 10	≤ 10	≤ 10	≤ 9	≤ 9		
扭轉剛性 Torsional Rigidity	N • m /arcmin	1,2	3-200	6	12	28	75	145		
容許彎曲力矩 M_{2kB}^1 Max. Bending Moment	N • m	1,2	3-200	22.5	36	76	140	950		
容許軸向力 F_{2aB}^1 Max. Axial Load	N	1,2	3-200	465	635	1060	1580	6400		
使用溫度 Operating Temp.	°C		3-200	-10 °C ~ +90 °C						
使用壽命 Service Life	hr		3-200	20,000 (10,000/ 連續運轉 Continuous operation)						
效率 Efficiency	%	1	3-20	≥ 95%						
		2	15-200	≥ 92%						
重量 Weight	kg	1	3-20	1.1	2.2	6.3	13.5	25.1		
		2	15-200	1.6	2.9/2.1	8.3/5.0	14.8	26.7		
安裝方向 Mounting Position	-	1,2	3-200	任意方向 Any direction						
噪音值 Noise Level ²	dBA/1m	1,2	3-200	62	64	66	68	70		
防護等級 Protection Class	-	1,2	3-200	IP65						
潤滑 Lubrication	-	1,2	3-200	全合成潤滑油脂 Synthetic Lubricant						
減速機轉動慣量 Inertia(J1)										
節數 Stage	減速比 Ratio	單位 unit	PGFR-42	PGFR-60	PGFR-90	PGFR-115	PGFR-142			
1	3/4/5/7	Kg • cm ²	0.06	0.40	2.28	6.87	24.2			
	10/14/20		0.05	0.30	1.45	4.76	14.5			
節數 Stage	減速比 Ratio		PGFR-42	PGFR-60(T)	PGFR-90(T)	PGFR-115T	PGFR-142T			
2	15/20/25/35		0.06	0.40(0.08)	2.28(0.72)	3.02	7.83			
	others		0.05	0.30(0.06)	1.45(0.38)	1.64	5.00			

* 1. 輸出轉速 100rpm 時，作用於輸出軸中心位置。Applied to the output shaft center @100rpm.
 * 2. 3000rpm 空載量測。Measured at 3000 rpm with no load. These values are measured by gearbox with ratio = 10 (1-stage) or ratio = 100 (2-stage) at nominal input speed or 3000 rpm (if nominal input speed is higher than 3000 rpm) with no load.
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Products due to human error, natural disasters or other factors lead to poor or damaged, will not be covered under warranty.
 產品因人為原因或天災等因素導致不良或損壞，不在保固範圍內。