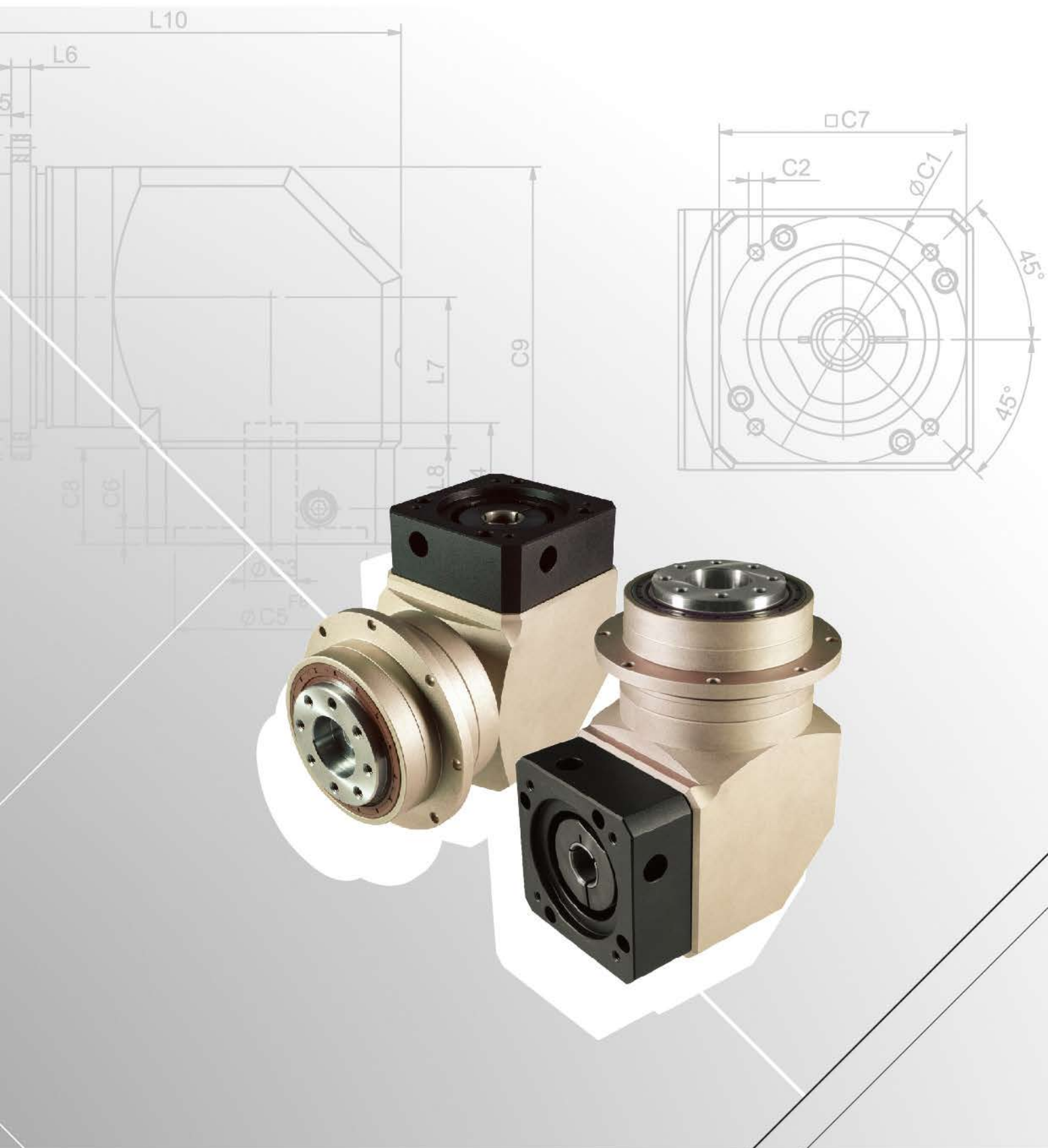
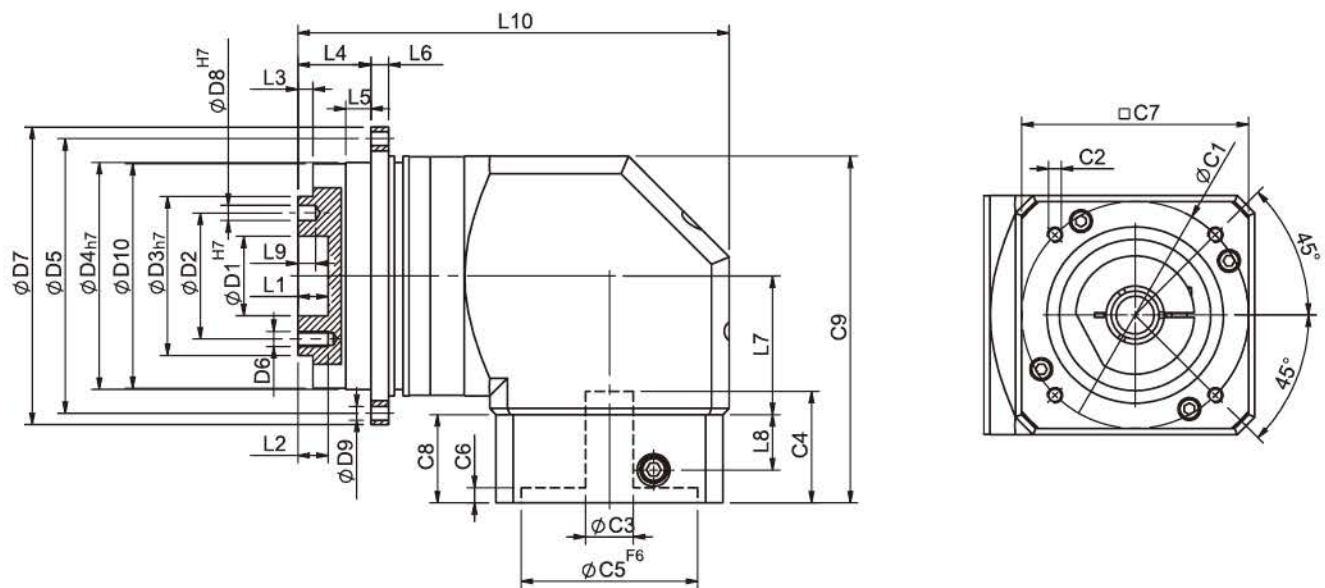


PGFR SERIES





PGFR Single Stage Dimensions PGFR單段外型尺寸圖



Specifications 規格

Unit:mm

尺寸 Dimensions	PGFR42	PGFR60	PGFR90	PGFR115
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	-
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	92.2	123.9	171.1	-
C1 ²	46	70	90	-
C2 ²	M4x0.7P	M5x0.8P	M6x1.0P	-
C3 ²	≤ 8	≤ 14	≤ 19/≤ 24	-
C4 ²	29	34	44	-
C5 ² _{F6}	30	50	70	-
C6 ²	6	5	5	-
C7 ²	42.6	60	90	-
C8 ²	25	33	35	-
C9 ²	78.5	112.8	137.5	-

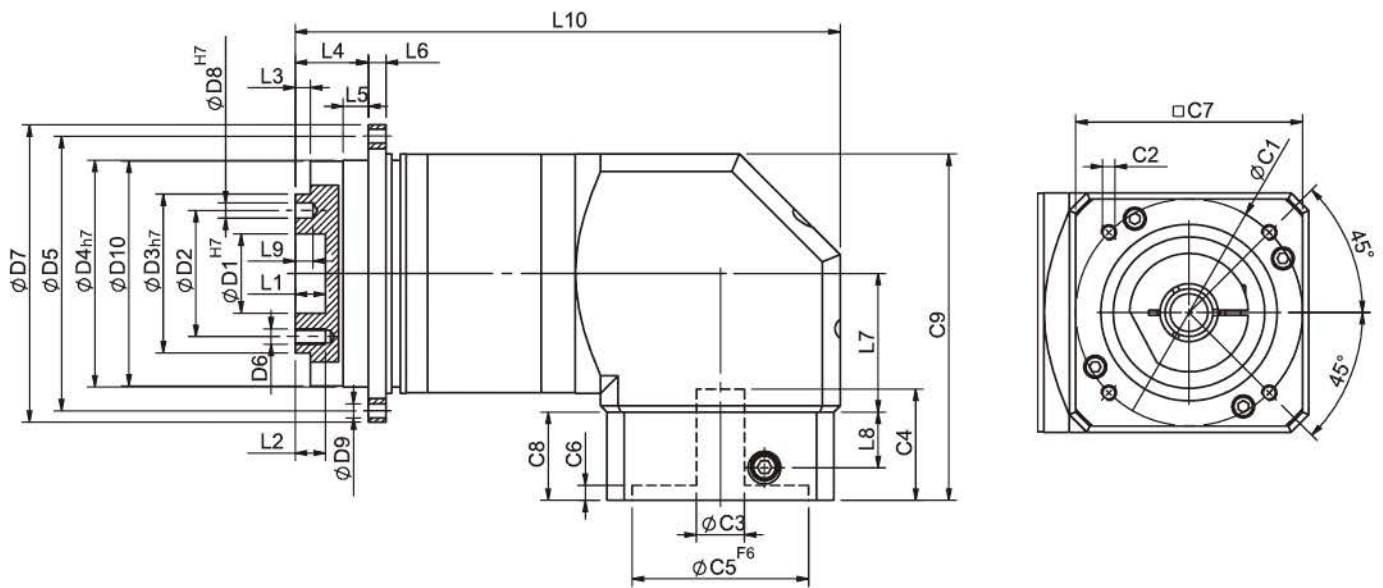
★ C1~C9是公製標準馬達連接板尺寸,請依所選用的馬達決定。

★ 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	PGFR115
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	-
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 ²	46	70	90	-
C2 ²	M4x0.7P	M5x0.8P	M6x1.0P	-
C3 ²	≤ 8	≤ 14	≤ 19/≤ 24	-
C4 ²	29	34	44	-
C5 ² F ₆	30	50	70	-
C6 ²	6	5	5	-
C7 ²	42.6	60	90	-
C8 ²	25	33	35	-
C9 ²	78.5	112.8	137.5	-

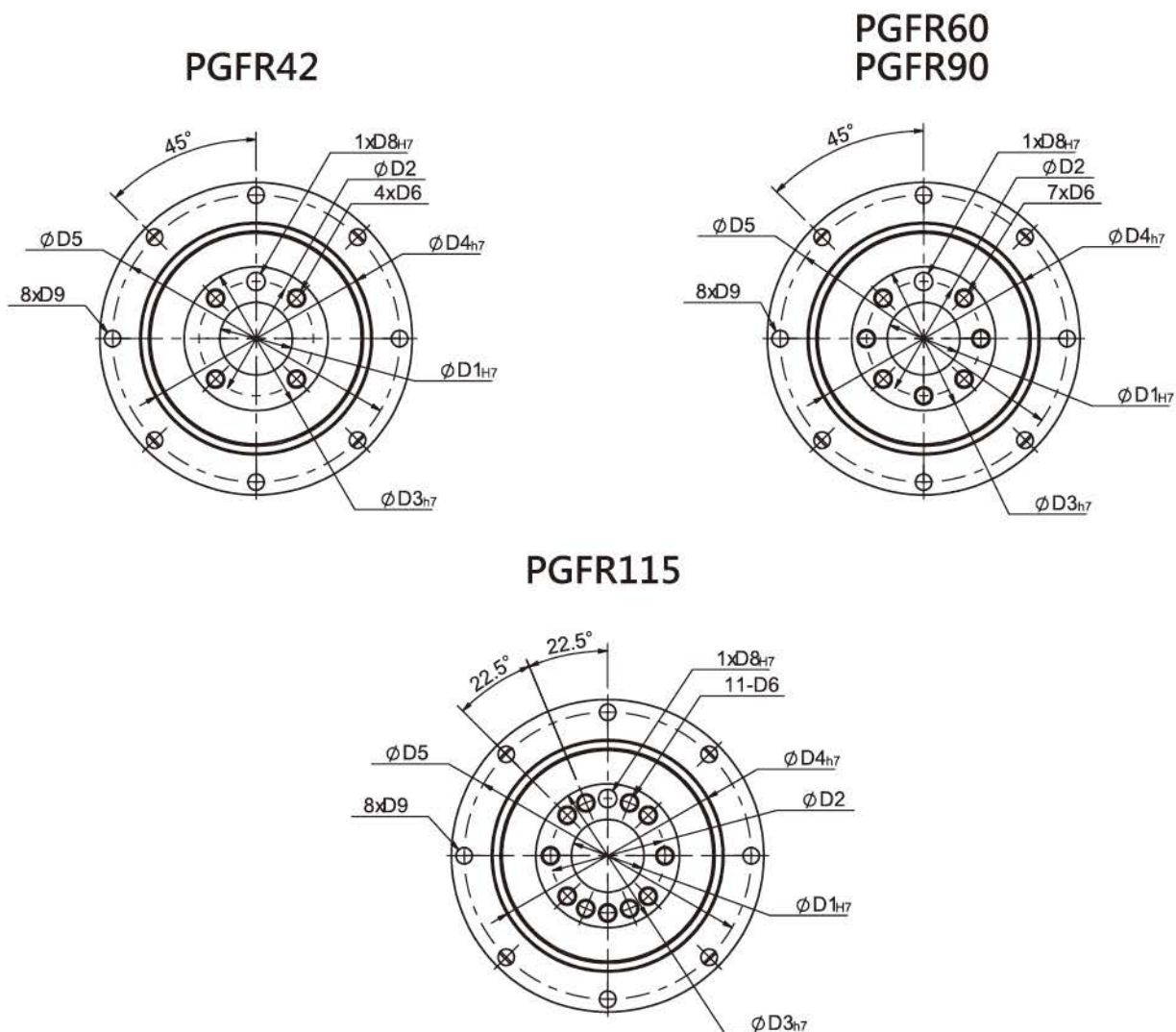
★ C1~C9是公製標準馬達連接板尺寸,請依所選用的馬達決定。

★ 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 Flange Dimensions PGFR法蘭面尺寸圖



Specifications 規格

Unit:mm

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

★ 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 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
額定輸出力矩 T _{2N} Nominal Output Torque	N • m	1	3	-	40	105	180
			4	16	43	110	240
			5	17	50	130	290
			7	14	44	125	270
			10	11	37	95	220
			14	14	44	125	270
			20	11	37	95	220
		節數 Stage	減速比 Ratio	PGFR-42	PGFR-60(T)	PGFR-90(T)	PGFR-115T
		2	15	-	40	105	180
			20	16	43	110	240
			25	17	50	130	290
			30	17	50	130	290
			35	17	50	130	290
			40	17	50	130	290
			50	17	50	130	290
			70	14	44	125	270
			100	11	37	95	220
			140	14	44	125	270
			200	11	37	95	220
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	3-100	5000	5000	4000	4000
最大輸入轉速 n _{1max} Max. Input Speed	rpm	1,2	3-100	10000	10000	8000	8000
超精密背隙 Micro Backlash P0	arcmin	1 2	3-10 12-100	- -	- -	≤ 4 ≤ 6	≤ 2 ≤ 4
精密背隙 Precision Backlash P1	arcmin	1 2	3-10 12-100	≤ 6 ≤ 8	≤ 6 ≤ 8	≤ 6 ≤ 8	≤ 4 ≤ 7
標準背隙 Standard Backlash P2	arcmin	1 2	3-10 12-100	≤ 8 ≤ 10	≤ 8 ≤ 10	≤ 8 ≤ 10	≤ 6 ≤ 9
扭轉剛性Torsional Rigidity	N • m /arcmin	1,2	3-100	6	12	28	75
容許彎曲力矩 M _{2kB} ¹ Max. Bending Moment	N • m	1,2	3-100	22.5	36	76	140
容許軸向力 F _{2aB} ¹ Max. Axial Load	N	1,2	3-100	465	635	1060	1580
使用溫度 Operating Temp.	°C		3-100	-10 °C ~ +90 °C			
使用壽命Service Life	hr		3-100	20,000 (10,000/ 連續運轉 Continuous operation)			
效率 Efficiency	%	1 2	3-10 12-100	≥ 95% ≥ 92%			
重量 Weight	kg	1 2	3-10 12-100	1.1 1.6	2.2 2.9/2.1	6.3 8.3/5.0	13.5 14.8
安裝方向 Mounting Position	-	1,2	3-100	任意方向Any direction			
噪音值 Noise Level ²	dBA/1m	1,2	3-100	62	64	66	68
防護等級 Protection Class	-	1,2	3-100	IP65			
潤滑 Lubrication	-	1,2	3-100	全合成潤滑油 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
1	3/4/5/7/9	Kg • cm ²		0.06	0.40	2.28	6.87
	10/14/20			0.05	0.30	1.45	4.76
節數Stage	減速比Ratio			PGFR-42	PGFR-60(T)	PGFR-90(T)	PGFR-115T
2	15/20/25/35			0.06	0.40(0.08)	2.28(0.72)	3.02
	others			0.05	0.30(0.06)	1.45(0.38)	1.64

* 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 空載重測 Measured at 3000rpm with no load

※本公司有權對以上數據規格逕行設計變更不先行告知。 The above figures/specifications are subject to change without prior notice.

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。

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