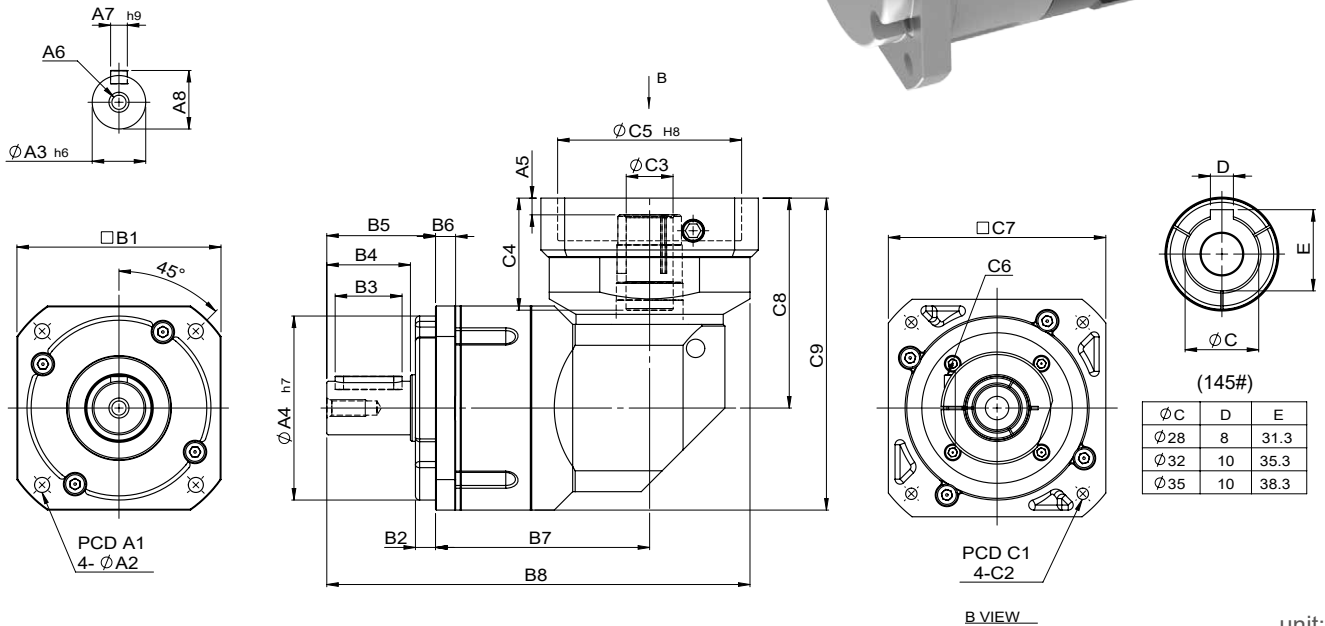
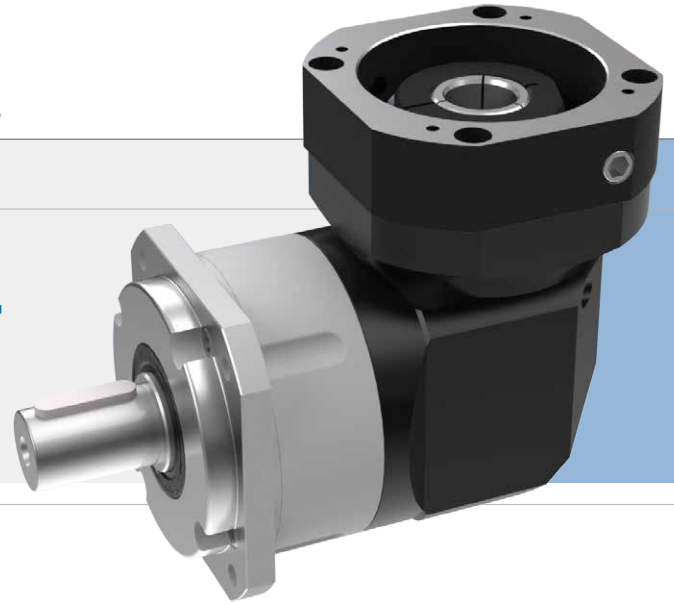


# FABGEAR Planetary Reducers

## MODEL : FCL

單段 1-Stage

RATIO : 3, 4, 5, 6, 7, 8, 9, 10, 15,  
20, 30, 40, 50



(145#)

$\varnothing C$	D	E
$\varnothing 28$	8	31.3
$\varnothing 32$	10	35.3
$\varnothing 35$	10	38.3

B VIEW

unit: mm

Model Code	50	70	90	120	145	
<b>A</b>	A1	50	70	100	130	165
	A2	4.5	5.5	6.8	9	11
	A3	13	16	22	32	40
	A4	35	50	80	110	130
	A5	6	6	9	10	11.5
	A6	M4 x P0.7	M5 x P0.8	M8 x P1.25	M10 x P1.5	M12 x P1.75
	A7	5	5	6	10	12
	A8	15	18	24.5	35	43
<b>B</b>	B1	51	69	90	122	145
	B2	5	7	10	12	12
	B3	15	20	30	40	65
	B4	20	28	36	50	74
	B5	26	36	48	65	92
	B6	5	7	9	12	14
	B7	63.5	77	95.5	128	151.5
	B8	111.5	144	188.5	253	314.5
<b>C</b>	C1	46 · 60 · 63	70 · 75 · 90	90 · 100 · 115 · 145	115 · 145 · 165	145 · 165 · 215
	C2	M3 · M4 · M5	M4 · M5 · M6	M5 · M6 · M8	M6 · M8 · M10	M8 · M10 · M12
	C3	8 · 11	14 · 19	19 · 24	24 · 28 · 32	28 · 32 · 35
	C4	26	42	53	67	81.5
	C5	30 · 40 · 50	50 · 60 · 70	70 · 80 · 95 · 110	95 · 110 · 130	110 · 130 · 180
	C6	M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5
	C7	46 · 55	64 · 70 · 80	92 · 110 · 130	122 · 130 · 150	146 · 150 · 190
	C8	59	83.5	97	125.5	165
	C9	84.5	118.5	142	186.5	237.5



規格 Parameter	代號	單位 Unit	速比 Ratio	50	70	90	120	145
額定輸出扭矩 Rated Output Torque (Nominal output torque)	$T_{2N}$	Nm	3	16	50	135	276	496
			4	14	45	120	245	432
			5	15	42	118	230	423
			6	16	50	135	276	496
			7	12	40	114	215	393
			8	14	45	120	245	432
			9	16	50	135	276	496
			10	15	42	118	230	423
			15	15	42	118	230	423
			20	15	42	118	230	423
			30	11	37	108	204	375
			40	11	37	108	204	375
50	11	37	108	204	375			
最大加速扭矩 Max. Acceleration Torque	$T_{2B}$	Nm	3 ~ 50	1.8 倍額定輸出扭矩 1.8 Times of Rated Output Torque				
最大輸出扭矩 Max. Output Torque 急停扭矩 Emergency Stop Torque	$T_{2NOT}$	Nm	3 ~ 50	3 倍額定輸出力矩 3 Times of Rated Output Torque				
額定輸入轉速 Rated Input Speed	$n_{1N}$	rpm	3 ~ 50	3,000	3,000	3,000	3,000	3,000
最大輸入轉速 Max. Input Speed	$n_{1B}$	rpm	3 ~ 50	5,000	5,000	5,000	5,000	5,000
背隙 Backlash		arcmin	3 ~ 50	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10
扭轉剛性 Torsional Rigidity		Nm/arcmin	3 ~ 50	2.5	5	12	26	58
容許徑向力 Max. Radial Force	$F_{2rB}$	N	3 ~ 50	750	1,196	2,650	6,100	8,600
容許軸向力 Max. Axial Force	$F_{2aB}$	N	3 ~ 50	375	598	1,425	3,050	4,300
使用壽命 Service Life	$L_H$	hr	3 ~ 50	S5 周期運轉 : >30,000 (S1 連續運轉 : >15,000 hrs) S5 Cycle Operation: >30,000 (S1 Continuous Operation: >15,000 hrs)				
效率 Efficiency	$\eta$	%	3 ~ 50	≥ 94%				
使用溫度 Operating Temperature		°C	3 ~ 50	- 25° C ~ + 90° C				
潤滑 Lubrication			3 ~ 50	全合成潤滑油脂 Synthetic Grease				
防護等級 Protection Class			3 ~ 50	IP65				
安裝方向 Mounting Position			3 ~ 50	任意方向 Any				
噪音值 Noise Level		dB	3 ~ 50	≤ 68	≤ 70	≤ 72	≤ 74	≤ 76
重量 Weight ±3%		Kg	3 ~ 50	0.87	1.86	3.7	9.45	15.3

■ 轉動慣量 Mass Moments of Inertia (kg.cm<sup>2</sup>)

Ratio	50	70	90	120	145
3 ~ 50	0.09	0.36	1.8	4.93	12.5