

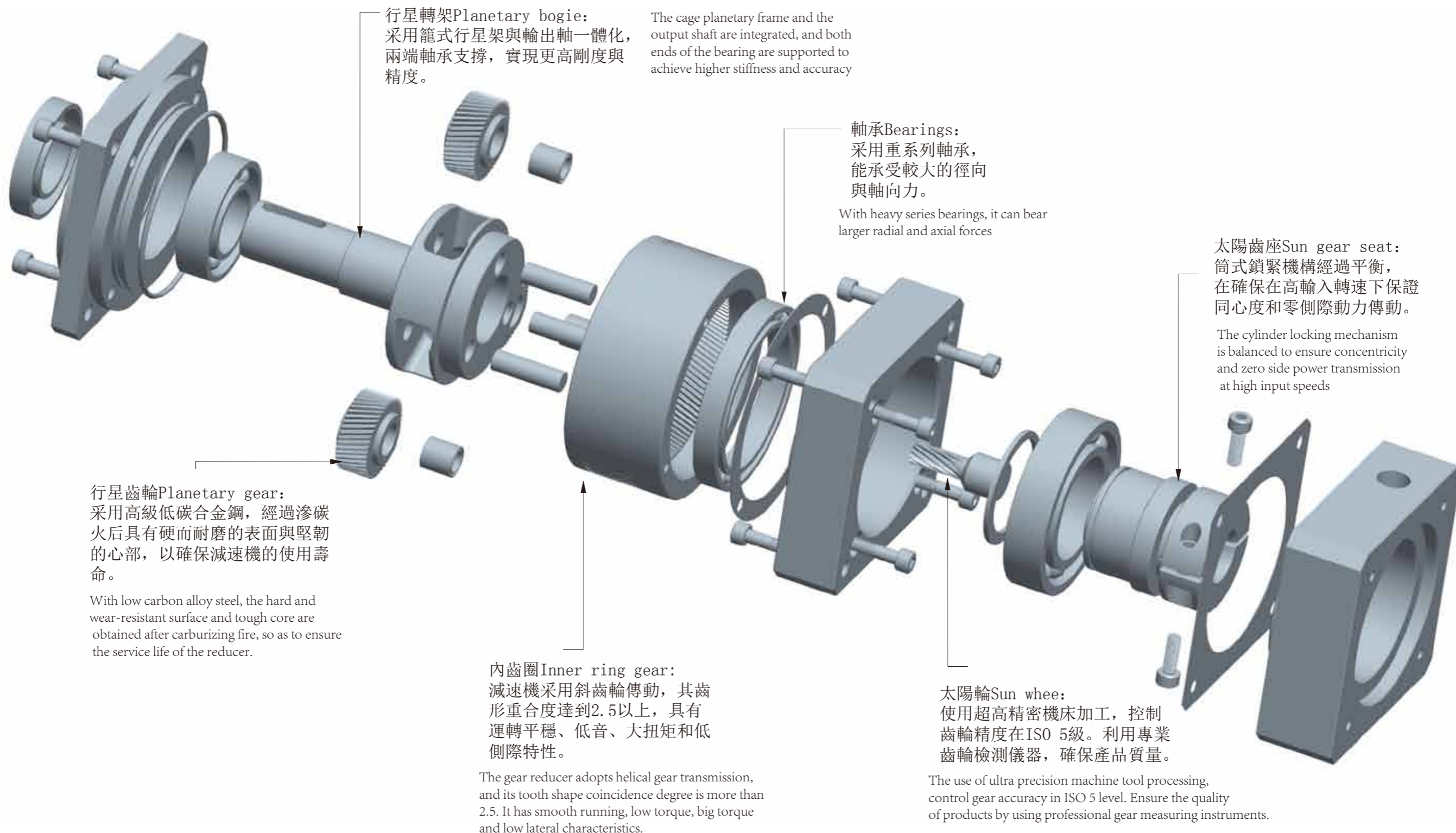
行星減速電機  
PLANETARY GEAR MOTOR

就是耐用！

德國技術 傳動未來

GERMAN TECHNOLOGY DRIVE IN  
THE FUTURE

● 結構圖  
Structure diagram



定速電機

調速電機

定速電磁制動電機

調速電磁制動電機

調速電磁制動電機

中型齒輪減速電機

行星減速機

鋁合金刀減速機

● 型號說明 Model Description

定速電機

調速電機

定速電磁制動電機


調速電磁制動電機

中型齒輪減速電機


行星減速機

鋁合金刀 $\angle$ 減速機

BRL系列標記說明 BRL series mark description

BRL	90	L1	10	P1	S1	
產品系列 Product series	產品規格 product specifications	級數 series	傳動比 transmission ratio	背際 back	輸出型式 output type	
	60、70、80 90、120、140 160	L1=1級 L2=2級	L1: 3、4、5 7、10 L2: 9、12 15、16 20、25 28、30 35、40 50、70 100	P0=精密背際 precision back P1=標準背際 standard back	S1=光軸輸出 optical axis output 無=帶鍵輸出 with key output	電機製造商及規格型號。也可以直接提供輸出連接尺寸 motor manufacturers and specifications models. You can also provide the output connection size directly


BRF系列標記說明 PRF series mark description

BRF	90	L2	7	P1		
產品系列 Product series	產品規格 product specifications	級數 series	傳動比 transmission ratio	背際 back	輸出型式 output type	
	60、90、120 142	L1=1級 L2=2級	L1: 3、4、5 7、10 L2: 9、12 15、16 20、25 28、30 35、40 50、70 100	P0=精密背際 precision back P1=標準背際 standard back	S1=光軸輸出 optical axis output 無=帶鍵輸出 with key output	電機製造商及規格型號。也可以直接提供輸出連接尺寸 motor manufacturers and specifications models. You can also provide the output connection size directly

BR系列標記說明 BR series mark description

BR	90	L1	10	P0	S1	
產品系列 Product series	產品規格 product specifications	級數 series	傳動比 transmission ratio	背際 back	輸出型式 output type	
	60、90、120 150、180	L1=1級 L2=2級	L1: 3、4、5 7、10 L2: 12、15 16、20 25、28 30、35 40、50 70、100	P0=精密背際 precision back P1=標準背際 standard back	S1=光軸輸出 optical axis output 無=帶鍵輸出 with key output	電機製造商及規格型號。也可以直接提供輸出連接尺寸 motor manufacturers and specifications models. You can also provide the output connection size directly

BM系列標記說明 BM series mark description

BM	90	L1	5	P1		
產品系列 Product series	產品規格 product specifications	級數 series	傳動比 transmission ratio	背際 back	輸出型式 output type	
	60、90、120 140、180、 220	L1=1級 L2=2級	L1: 3、4、5 6、7、8 9、10 L2: 15、20 35、40 50、80 100	P0=精密背際 precision back P1=標準背際 standard back	S1=光軸輸出 optical axis output 無=帶鍵輸出 with key output	電機製造商及規格型號。也可以直接提供輸出連接尺寸 motor manufacturers and specifications models. You can also provide the output connection size directly

BT系列標記說明 PT series mark description

BT	5	C	400	P0		
產品系列 Product series	產品規格 product specifications	段位號 Segment number	馬達功率 Motor power	背際 back	輸出型式 output type	
	3、5、S9	C段 D段	400W 750W	P0=精密背際 precision back P1=標準背際 standard back	S1=光軸輸出 optical axis output 無=帶鍵輸出 with key output	電機製造商及規格型號。也可以直接提供輸出連接尺寸 motor manufacturers and specifications models. You can also provide the output connection size directly

定速電機

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鋁合金刀 $\angle$ 減速機

BVF系列標記說明 BVF series mark description

BVF	90	L1	10	P1	S1	
產品系列 Product series	產品規格 product specifications	級數 series	傳動比 transmission ratio	背際 back	輸出型式 output type	
	60、90、120、	L1=1級 L2=2級	L1: 3、4、5 7、10 L2: 12、15 16、20 25、28 30、35 40、50 70、100	P0=精密背際 precision back P1=標準背際 standard back	S1=光軸輸出 optical axis output 無=帶鍵輸出 with key output	電機製造商及規格型號。也可以直接提供輸出連接尺寸 motor manufacturers and specifications models. You can also provide the output connection size directly

BG系列標記說明 BG series mark description

BG	90	L2	7	P1		
產品系列 Product series	產品規格 product specifications	級數 series	傳動比 transmission ratio	背際 back	輸出型式 output type	
	64、90、110、	L1=1級 L2=2級	L1: 3、4、5 7、10 L2: 20、25 40、50、 80、100	P0=精密背際 precision back P1=標準背際 standard back	S1=光軸輸出 optical axis output 無=帶鍵輸出 with key output	電機製造商及規格型號。也可以直接提供輸出連接尺寸 motor manufacturers and specifications models. You can also provide the output connection size directly

## 產品系列 Product Series

### BRL系列 BRL series



- 型號model: 60-160
- 傳動比Transmission ratio: 3-100
- 精度Accuracy: 5-10arcmin
- 經濟、可靠、圓法蘭輸出  
Economical, reliable, round flange output

### BR系列 BR series



- 型號model: 60-180
- 傳動比Transmission ratio: 3-100
- 精度Accuracy: 3-8arcmin
- 一體式行星架、雙支撐、高剛性、高扭矩  
Integral planetary frame, double support, high rigidity and high torque,

### BRF系列 BRF series



- 型號model: 60-142
- 傳動比Transmission ratio: 3-100
- 精度Accuracy: 5-10arcmin
- 經濟、可靠、圓法蘭輸出  
Economical, reliable, round flange output

### BM系列 BM series



- 型號model: 60-220
- 傳動比Transmission ratio: 3-100
- 精度Accuracy: 3-5arcmin
- 一體式行星架、斜齒、雙支撐、高剛性、高扭矩  
Integral planetary frame, helical gear, double support, high rigidity and high torque

### BVF系列 BVF series



- 型號model: 60-120
- 傳動比Transmission ratio: 3-100
- 精度Accuracy: 8-15arcmin
- 直角輸出，安裝長度小，穩定可靠  
Right angle output, small installation length, stable and reliable



### BG系列 BG series



- 型號model: 60-200
- 傳動比Transmission ratio: 3-100
- 精度Accuracy: 3-15arcmin
- 法蘭盤輸出、斜齒、雙支撐一體式行星架、高剛性、高扭矩  
Flange output, bevel gear, double support planetary frame, high rigidity, high torque

### BT系列 BT series

- 型號model: C、D段
- 傳動比Transmission ratio: 3-9
- 精度Accuracy: 5-10arcmin
- 斜齒，能傳遞更大的扭矩，更靜音  
一體式行星架，雙支撐架構，剛性更高  
殼體壓鑄成形，設計巧妙，結構非常緊湊  
經濟、實用  
Bevel gear can deliver more torque, more silent, integrated planetary frame, double support structure, higher rigidity. The shell die casting is ingenious in design, compact in structure, economical and practical

## ● BR系列行星減速機技術參數

BR series planetary reducer technical parameters

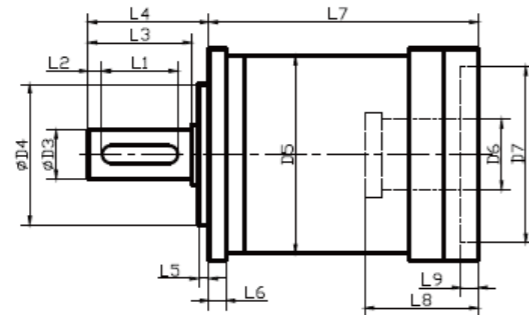
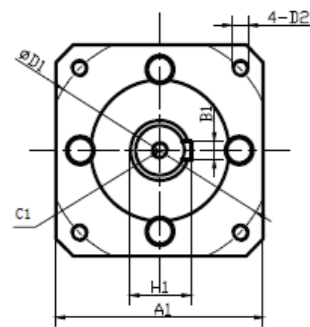
技術參數 Technical parameters		規格 specifications		BR60	BR90	BR120	BR150	BR180
		級數	速比					
最大扭矩 The maximum torque		Nm		2倍額定扭矩				
緊急製動扭矩 braking torque		Nm		3倍額定扭矩				
最大容許徑向力 maximum permissible radial force		N		1100	2000	5500	9000	14200
最大容許軸向力 the maximum allowable axial force		N		550	1000	2750	4500	7100
扭矩剛性 torque rigidity		Nm/arcmin		5	18	28	51	142
最大輸入轉速 maximum input speed		rpm		5000	5000	4500	4500	4000
額定輸入轉速 rated input speed		rpm		3000	3000	3000	3000	3000
噪音 noise		dB		≤65	≤65	≤68	≤68	≤70
平均壽命 life expectancy		h		20000				
滿載效率 full load efficiency		%		L1≥96% L2≥93%				
回程 間隙 Backhaul gap	P0	L1	arcmin	≤3	≤3	≤3	≤3	≤3
		L2	arcmin	≤5	≤5	≤5	≤6	≤6
	P1	L1	arcmin	≤6	≤6	≤6	≤6	≤6
		L2	arcmin	≤10	≤10	≤10	≤10	≤10
轉動 慣量 Turn Inertia	L1	3	Kg. cm <sup>2</sup>	0.135	0.65	3.13	12.41	29.15
		4	Kg. cm <sup>2</sup>	0.136	0.52	2.79	7.66	24.78
		5	Kg. cm <sup>2</sup>	0.136	0.45	2.55	7.66	23.76
		7	Kg. cm <sup>2</sup>	0.13	0.47	2.32	7.54	23.68
		10	Kg. cm <sup>2</sup>	0.073	0.39	2.28	7.57	23.68
	L2	12	Kg. cm <sup>2</sup>	0.127	0.72	2.56	7.57	23.71
		15	Kg. cm <sup>2</sup>	0.073	0.52	2.40	7.55	23.73
		20	Kg. cm <sup>2</sup>	0.074	0.37	1.65	7.57	23.66
		25	Kg. cm <sup>2</sup>	0.074	0.37	1.58	7.46	23.66
		28	Kg. cm <sup>2</sup>	0.074	0.35	1.57	7.46	23.58
		40	Kg. cm <sup>2</sup>	0.078	0.37	1.58	7.38	23.54
		50	Kg. cm <sup>2</sup>	0.078	0.36	1.57	7.29	23.52
		100	Kg. cm <sup>2</sup>	0.079	0.50	1.50	7.20	23.46

技術參數 Technical parameters		規格 specifications		BR60	BR90	BR120	BR150	BR180	
		級數 series	速比 speed ratio						
額定 扭矩 (Nm) $T_N$ rated torque	L1	3		30	75	208	342	558	
		4		45	90	290	542	1050	
		5		50	100	330	650	1200	
		7		50	100	300	550	1100	
		10		35	75	230	450	900	
		12			75	208	342	588	
		15			75	208	342	588	
		16		45	90	290	542	1050	
		20		50	90	290	542	1050	
		25		50	100	330	650	1200	
	L2	28		50	90	290	542	1050	
		30			75	330	342	588	
		35		50	100	330	650	1200	
		40		40	75	290	542	1050	
		50		35	75	330	650	1200	
		70		35	75	300	550	1100	
		100		35	75	230	450	900	
		L1			1.6	4.5	8.0	17.0	35.0
		L2			2.0	6.0	11.0	22.0	43.0
		重量 (Kg) weight							

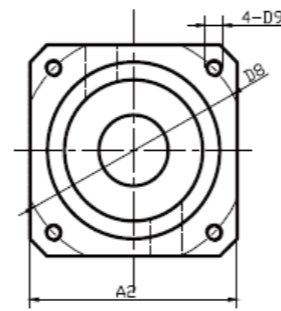
## BR系列行星減速機標準尺寸

BR series planetary reducer standard size

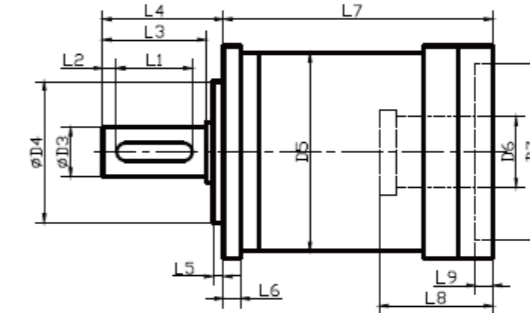
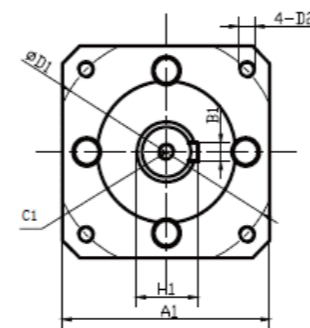
輸出端output



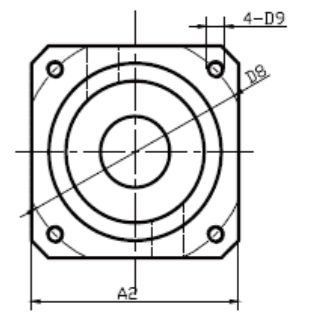
輸入端input



輸出端output



輸入端input



BR60-L1

D1	D2	D3	D4	D5	D6	D7	D8	D9	L1	L2	L3	L4	L5	L6	L7	L8	L9	A1	A2	B1	H1	C1
70	5.5	16	50	60	14	50	70	M5	20	3	26.5	33.5	5	6.5	83	34	4	62	62	5	18.5	M5

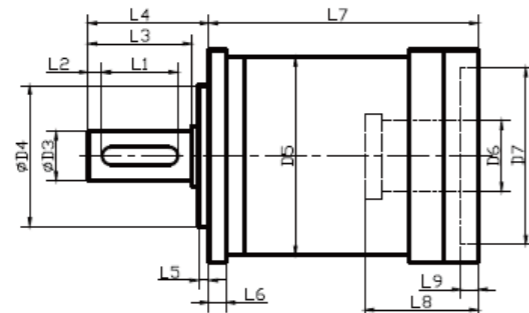
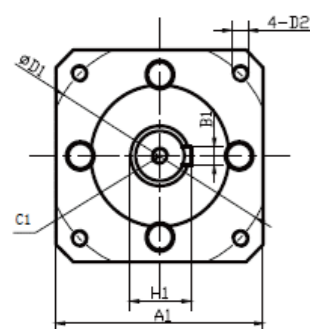
填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

BR90-L1

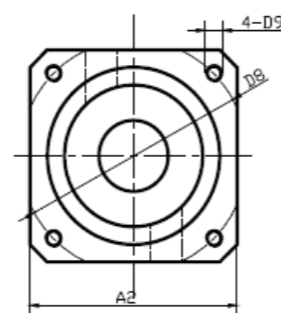
D1	D2	D3	D4	D5	D6	D7	D8	D9	L1	L2	L3	L4	L5	L6	L7	L8	L9	A1	A2	B1	H1	C1
100	6.5	22	80	90	19	70	90	M5	25	3	40	47.5	5	10	108	47	5	90	90	6	24.5	M6

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

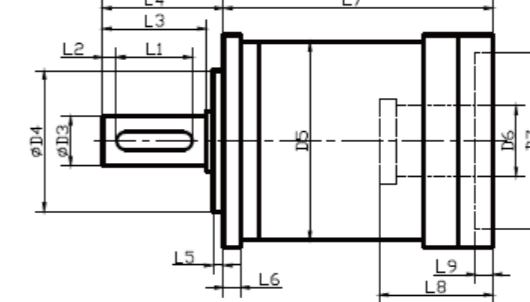
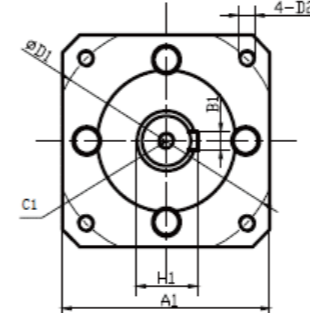
輸出端output



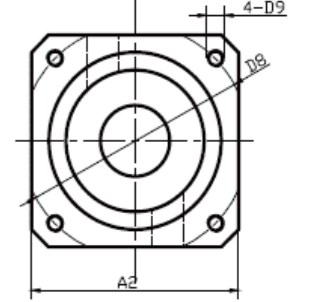
輸入端input



輸出端output



輸入端input



BR60-L2

D1	D2	D3	D4	D5	D6	D7	D8	D9	L1	L2	L3	L4	L5	L6	L7	L8	L9	A1	A2	B1	H1	C1
70	5.5	16	50	60	14	50	70	M5	20	3	26.5	33.5	5	6.5	106	34	4	62	62	5	18.5	M5

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

BR90-L2

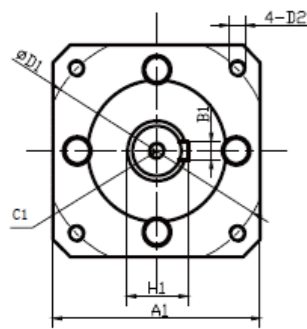
D1	D2	D3	D4	D5	D6	D7	D8	D9	L1	L2	L3	L4	L5	L6	L7	L8	L9	A1	A2	B1	H1	C1
100	6.5	22	80	90	19	70	90	M5	25	3	40	47.5	5	10	135	47	5	90	90	6	24.5	M6

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

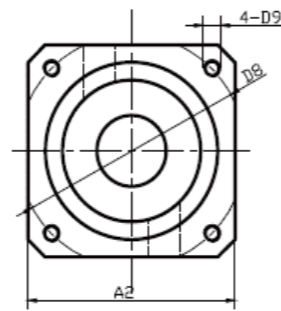
## BR系列行星減速機標準尺寸

BR series planetary reducer standard size

輸出端output



輸入端input

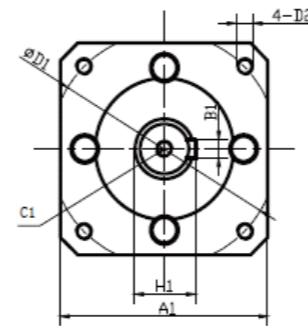


BR120-L1

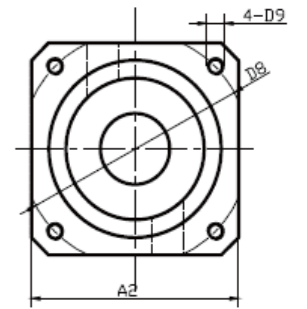
D1	D2	D3	D4	D5	D6	D7	D8	D9	L1	L2	L3	L4	L5	L6	L7	L8	L9	A1	A2	B1	H1	C1
145	8.7	32	110	120	24	110	145	M8	40	3	59	70	10	15	147	65	7	120	120	10	35	M8

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

輸出端output



輸入端input

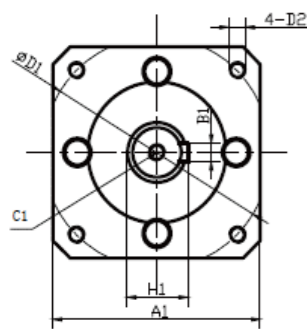


BR150-L1

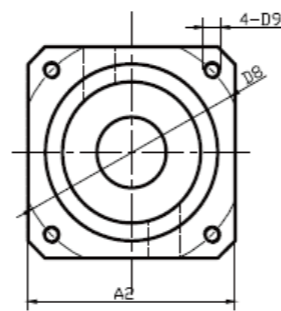
D1	D2	D3	D4	D5	D6	D7	D8	D9	L1	L2	L3	L4	L5	L6	L7	L8	L9	A1	A2	B1	H1	C1
165	10.5	40	130	142	35	114.3	200	M12	45	5	68	75	4	15	187	69	6	142	176	10	43	M12

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

輸出端output



輸入端input

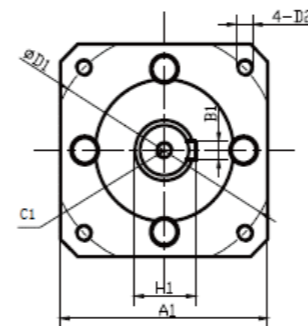


BR120-L2

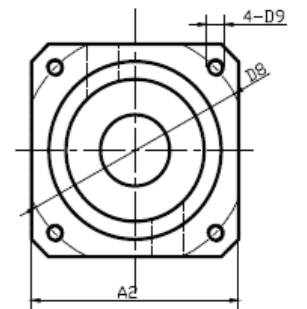
D1	D2	D3	D4	D5	D6	D7	D8	D9	L1	L2	L3	L4	L5	L6	L7	L8	L9	A1	A2	B1	H1	C1
145	8.7	32	110	120	24	110	145	M8	40	3	59	70	10	15	178	65	7	120	120	10	35	M8

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

輸出端output



輸入端input



BR150-L2

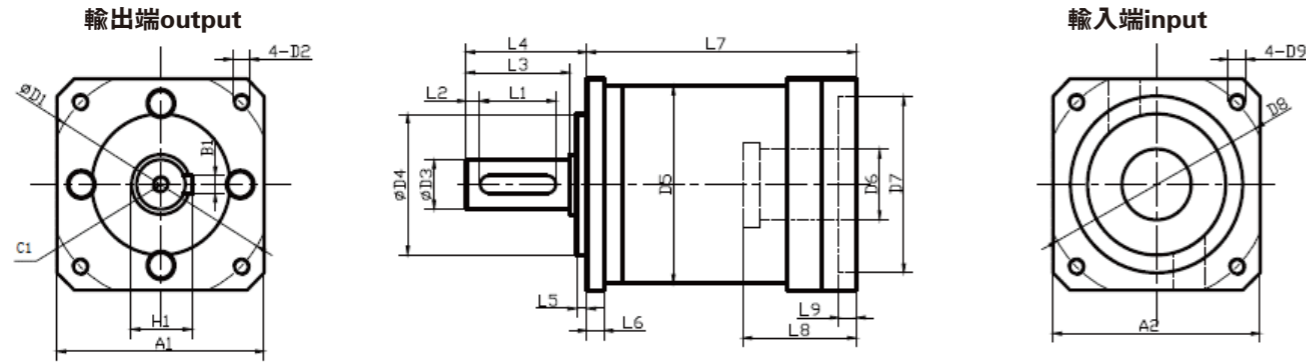
D1	D2	D3	D4	D5	D6	D7	D8	D9	L1	L2	L3	L4	L5	L6	L7	L8	L9	A1	A2	B1	H1	C1
165	10.5	40	130	142	35	114.3	200	M12	45	5	68	75	4	15	233	69	6	142	176	10	43	M12

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor



## ● BR系列行星減速機標準尺寸

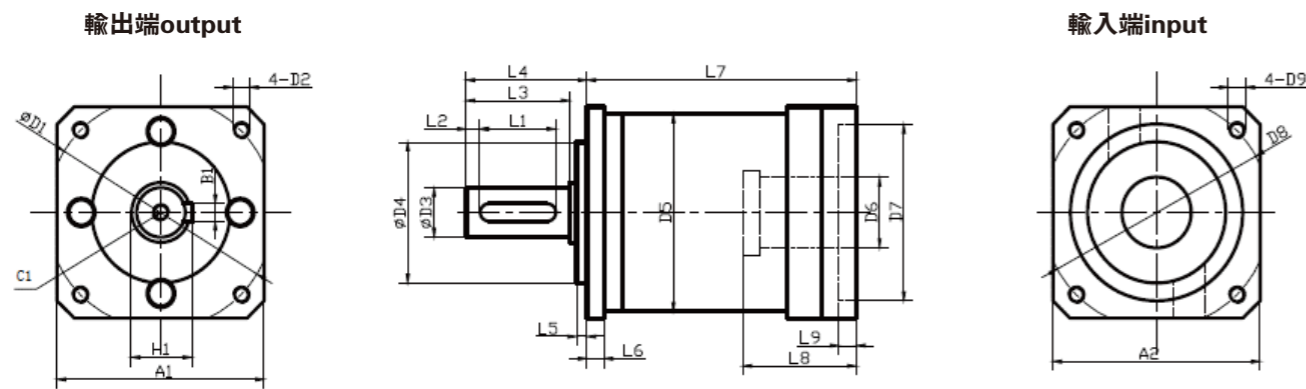
BR series planetary reducer standard size



BR180-L1

D1	D2	D3	D4	D5	D6	D7	D8	D9	L1	L2	L3	L4	L5	L6	L7	L8	L9	A1	A2	B1	H1	C1
215	13	50	160	180	55	200	235	M12	70	6	83.5	95.5	10	26	240	86	10	182	182	14	53.5	M12

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor



BR180-L2

D1	D2	D3	D4	D5	D6	D7	D8	D9	L1	L2	L3	L4	L5	L6	L7	L8	L9	A1	A2	B1	H1	C1
215	13	50	160	180	55	200	235	M12	70	6	83.5	95.5	10	26	292	86	10	182	182	14	53.5	M12

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

## ● BRL系列行星減速機技術參數

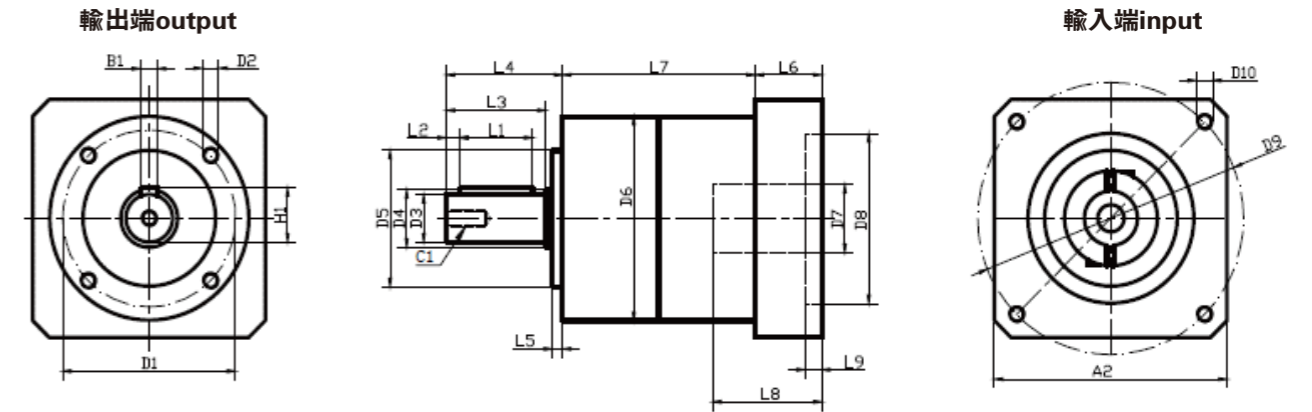
BRL series planetary reducer technical parameters

技術參數 Technical parameters		規格 specifications	BRL60	BRL70	BRL80	BRL90	BRL120	BRL140	BRL160	
最大扭矩 The maximum torque	Nm	1.5倍額定扭矩 rated torque								
緊急製動扭矩 braking torque	Nm	2倍額定扭矩 rated torque								
最大容許徑向力 maximum permissible radial force	N	240	265	400	450	1240	2250	4800		
最大容許軸向力 the maximum allowable axial force	N	220	230	420	430	1000	1500	4500		
扭矩剛性 torque rigidity	Nm/arcmin	1.8	1.95	4.7	4.85	11	22	55		
最大輸入轉速 maximum input speed	rpm	8000	8000	6000	6000	6000	4500	4000		
額定輸入轉速 rated input speed	rpm	4000	4000	3500	3500	3500	3000	2500		
噪音 noise	dB	< 58	< 58	< 60	< 60	< 65	< 68	< 70		
平均壽命 life expectancy	h	20000								
滿載效率 full load efficiency	%	L1 ≥ 96% L2 ≥ 94%								
回程 間隙 Backhaul gap	P0	L1	arcmin	< 3	< 3	< 3	< 3	< 3	< 3	
		L2	arcmin	< 5	< 5	< 5	< 5	< 6	< 6	
	P1	L1	arcmin	< 6	< 6	< 6	< 6	< 8	< 8	
		L2	arcmin	< 10	< 10	< 10	< 10	< 10	< 10	
轉動 慣量 Turn Inertia	L1	3	Kg. cm <sup>2</sup>	0.135	0.135	0.77	0.77	2.63	5.83	12.14
		4	Kg. cm <sup>2</sup>	0.093	0.093	0.52	0.52	1.79	3.21	7.78
		5	Kg. cm <sup>2</sup>	0.078	0.078	0.45	0.45	1.53	3.10	6.07
		7	Kg. cm <sup>2</sup>	0.06	0.062	0.40	0.39	1.32	2.05	4.63
		10	Kg. cm <sup>2</sup>	0.063	0.063	0.39	0.39	1.28	1.95	4.60
	L2	12	Kg. cm <sup>2</sup>	0.127	0.127	0.72	0.72	2.56	5.38	12.37
		15	Kg. cm <sup>2</sup>	0.039	0.039	0.72	0.72	2.40	3.35	7.47
		20	Kg. cm <sup>2</sup>	0.049	0.049	0.35	0.35	1.60	2.73	6.95
		25	Kg. cm <sup>2</sup>	0.039	0.039	0.25	0.25	1.40	2.25	6.65
		28	Kg. cm <sup>2</sup>	0.038	0.038	0.18	0.18	1.40	2.25	5.81
		40	Kg. cm <sup>2</sup>	0.027	0.027	0.18	0.18	1.30	2.25	5.81
		50	Kg. cm <sup>2</sup>	0.039	0.039	0.28	0.20	1.57	2.87	6.83
		100	Kg. cm <sup>2</sup>	0.075	0.075	0.50	0.50	1.50	3.20	7.50

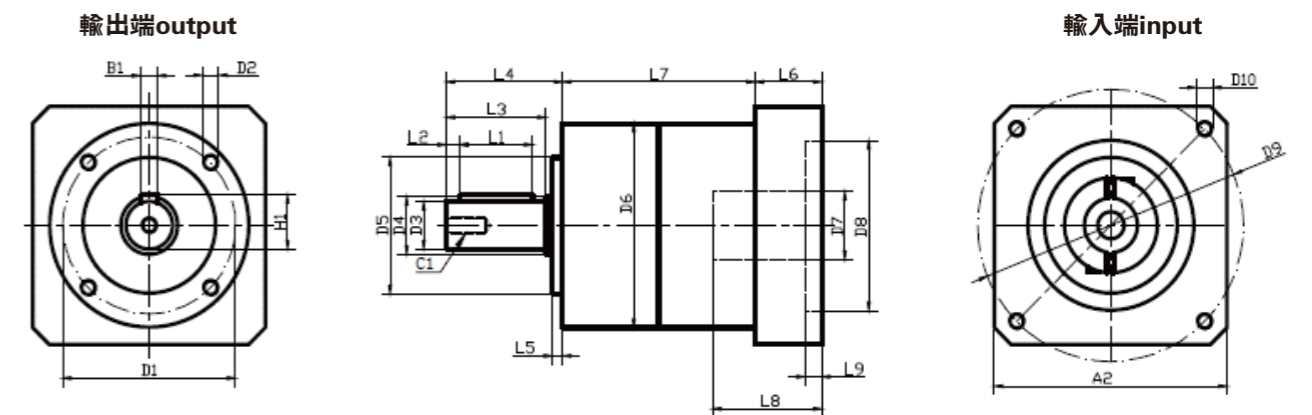
● BRL系列行星減速機技術參數  
BRL series planetary reducer technical parameters

技術參數 Technical parameters			規格 specifications						
級數 series	速比 speed ratio	BRL60 BRL70 BRL80 BRL90 BRL120 BRL140 BRL160							
		額定扭距 (Nm) $T_N$ rated torque	L1	3	18	22	40	50	125
4	40			45	110	125	260	450	800
5	36			41	90	110	230	400	700
7	20			22	40	50	90	160	340
10	12			15	22	32	70	130	210
L2	9		18	22	40	50	125	210	400
	12		40	45	110	125	260	450	800
	15		36	41	90	110	230	400	700
	16		40	45	110	125	260	450	800
	20		40	45	110	125	260	450	800
	25		36	41	90	110	230	400	700
	28		35	44	100	110	235	350	800
	30		36	41	80	110	230	260	700
	35		22	22	66	65	125	260	550
	40		36	41	90	110	230	400	700
	50		20	25	50	67	120	210	450
70	40	45	110	125	200	450	800		
100	40	45	110	125	260	450	800		
重量 (Kg) weight	L1	0.93	0.93	2.35	2.35	6.15	11.30	19.00	
	L2	1.15	1.15	2.70	2.70	8.00	13.50	24.00	

● BRL系列行星減速機標準尺寸  
BRL series planetary reducer standard size



BRL60-L1																						
D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A2	B1	C1	H1
52	M5	14	17	40	60	14	50	70	M5	22	4	30	35	3	26	58	32	6.5	60	5	M5	16
填充顏色的數據與選配電機相關，可以根據實際情況改變 Fill the color of the data associated with the optional motor																						

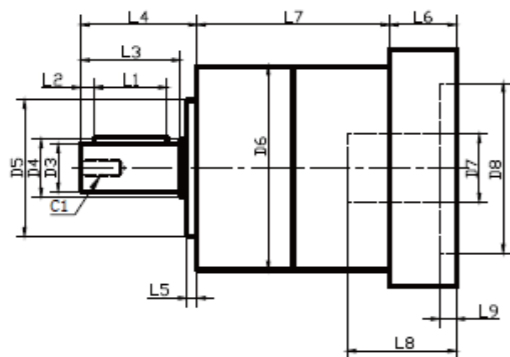
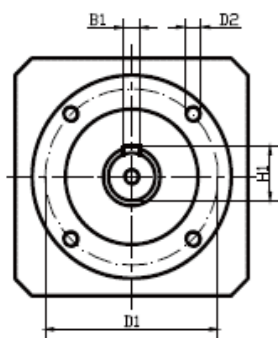


BRL60-L2																						
D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A2	B1	C1	H1
52	M5	14	17	40	60	14	50	70	M5	22	4	30	35	3	80	58	32	6.5	60	5	M5	16
填充顏色的數據與選配電機相關，可以根據實際情況改變 Fill the color of the data associated with the optional motor																						

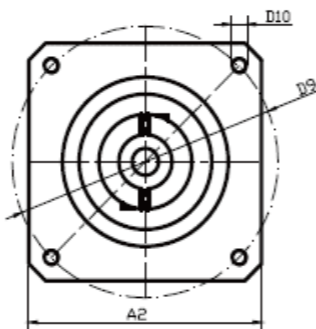
## ● BRL系列行星減速機標準尺寸

BRL series planetary reducer standard size

輸出端output



輸入端input

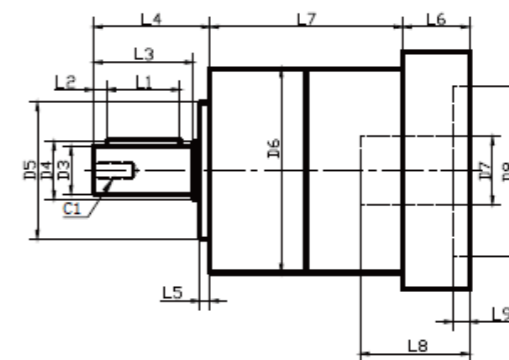
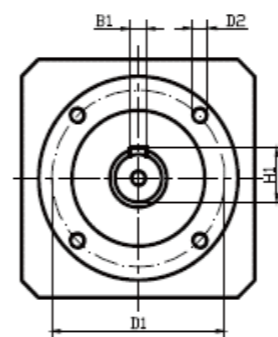


BRL70-L1

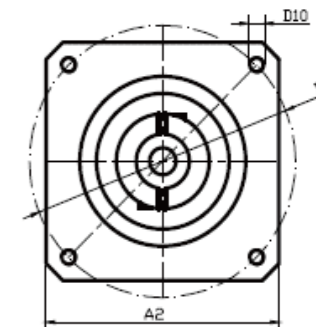
D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A2	B1	C1	H1
62	M5	16	17	52	70	14	50	70	M5	22	4	30	35	3	26	58	32	6.5	70	5	M5	18

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

輸出端output



輸入端input

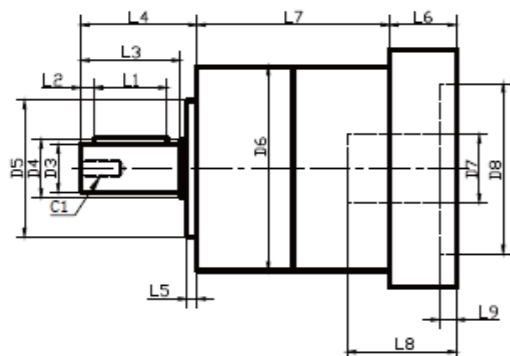
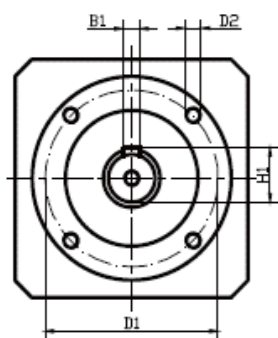


BRL80-L1

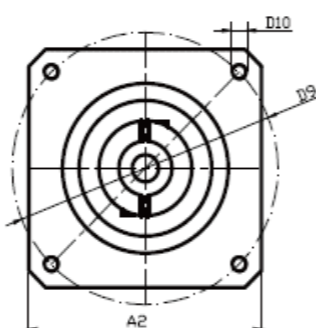
D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A2	B1	C1	H1
70	M6	20	25	60	90	19	70	90	M6	25	4	36	40	3	31	81	42	6.5	80	6	M6	22.5

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

輸出端output



輸入端input

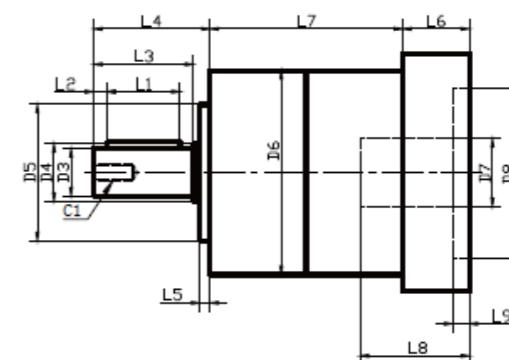
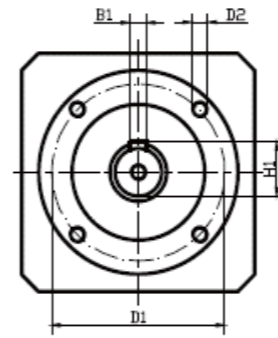


BRL70-L2

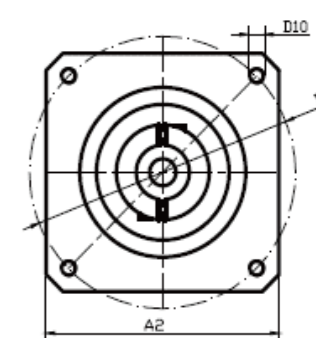
D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A2	B1	C1	H1
62	M5	16	17	52	70	14	50	70	M5	22	4	30	35	3	80	58	32	6.5	70	5	M5	18

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

輸出端output



輸入端input



BRL80-L2

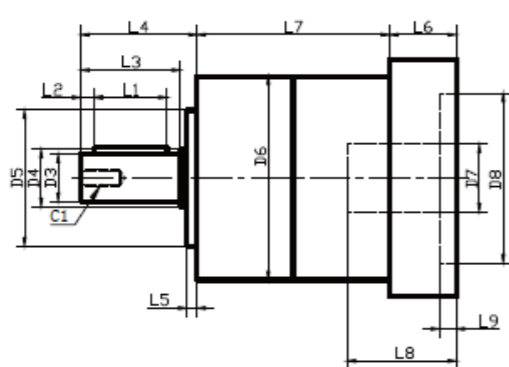
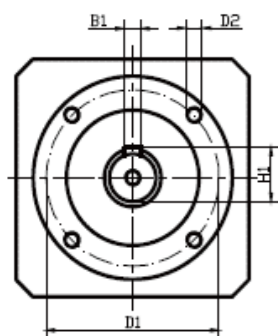
D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A2	B1	C1	H1
70	M6	20	25	60	90	19	70	90	M6	25	4	36	40	3	141	81	42	6.5	80	6	M6	22.5

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

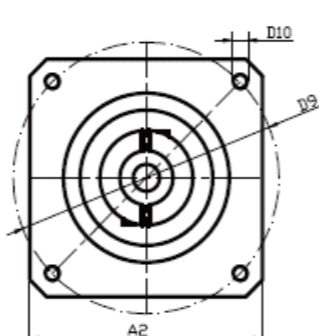
## ● BRL系列行星減速機標準尺寸

BRL series planetary reducer standard size

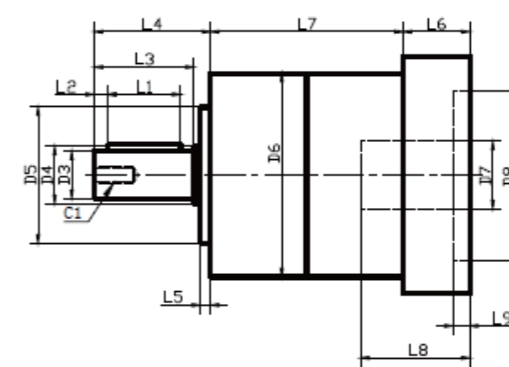
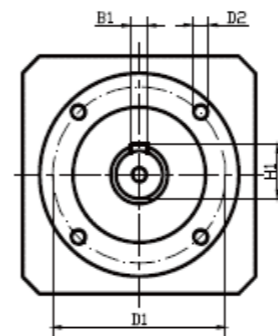
輸出端output



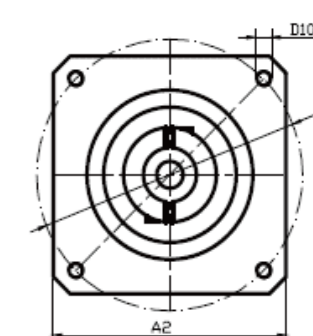
輸入端input



輸出端output



輸入端input



BRL90-L1

D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A2	B1	C1	H1
80	M6	22	25	68	90	19	70	90	M6	25	4	40	46	5	31	81	42	6.5	80	6	M6	24.5

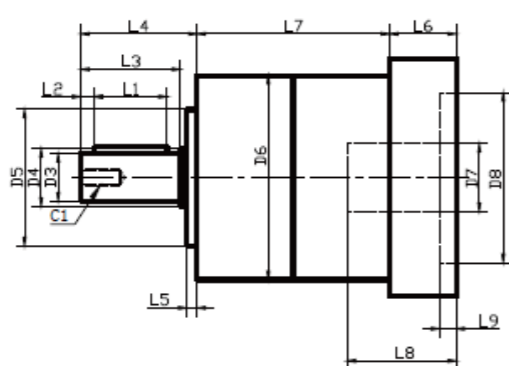
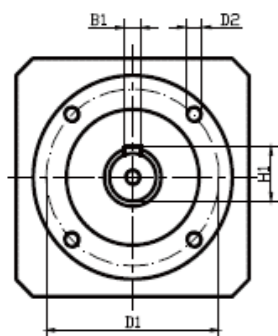
填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

BRL120-L1

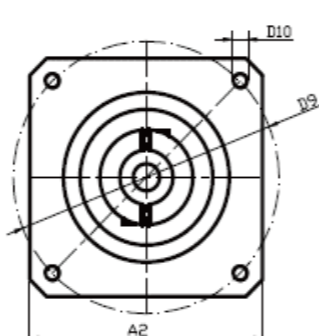
D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A2	B1	C1	H1
100	M10	25	35	80	120	24	110	145	M8	40	5	50	55	4	54	99	60	8	120	8	M10	28

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

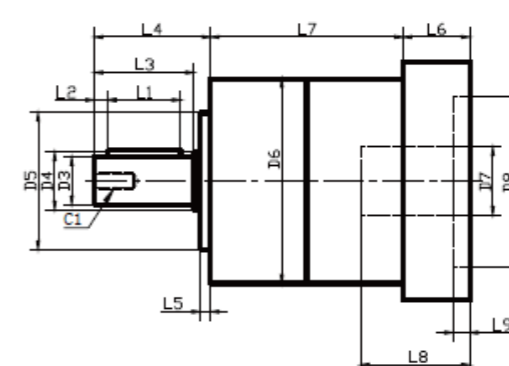
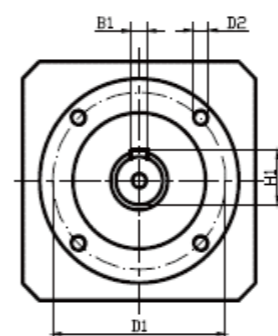
輸出端output



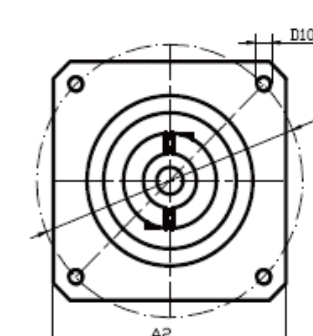
輸入端input



輸出端output



輸入端input



BRL90-L2

D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A2	B1	C1	H1
80	M6	22	25	68	90	19	70	90	M6	25	4	40	46	5	31	144	42	6.5	80	6	M6	24.5

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

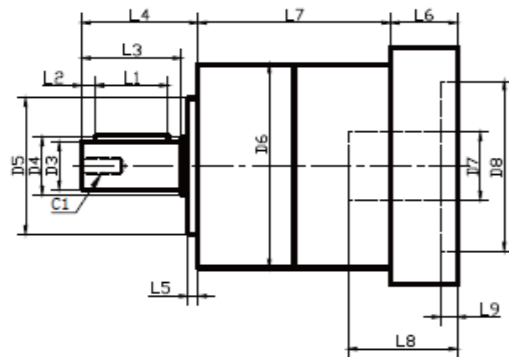
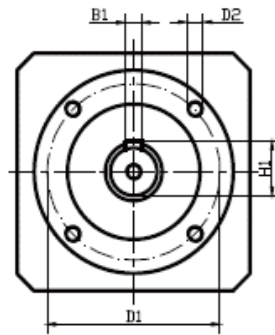
BRL120-L2

D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A2	B1	C1	H1
100	M10	25	35	80	120	24	110	145	M8	40	5	50	55	4	54	133	60	8	120	8	M10	28

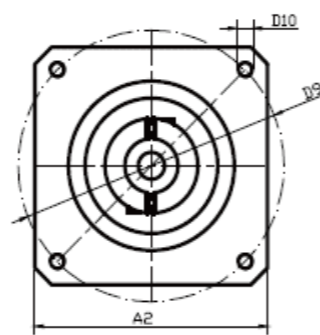
填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

● BRL系列行星減速機標準尺寸  
BRL series planetary reducer standard size

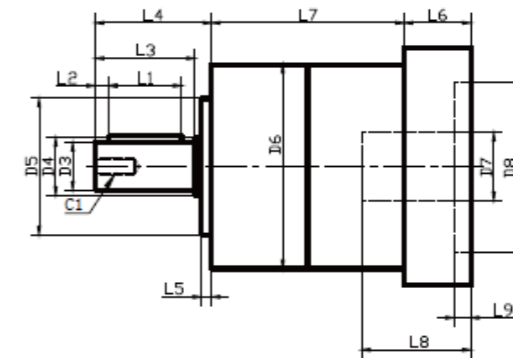
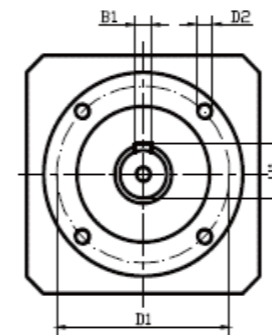
輸出端output



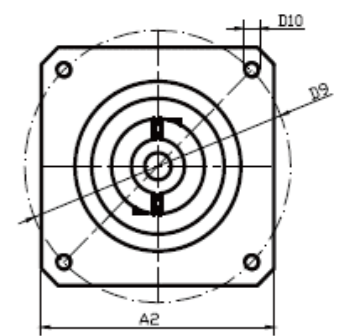
輸入端input



輸出端output



輸入端input



BRL140-L1

D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A2	B1	C1	H1
120	M10	32	40	100	142	28	110	145	M8	55	6	70	75	4	54	120	60	8	142	8	M12	35

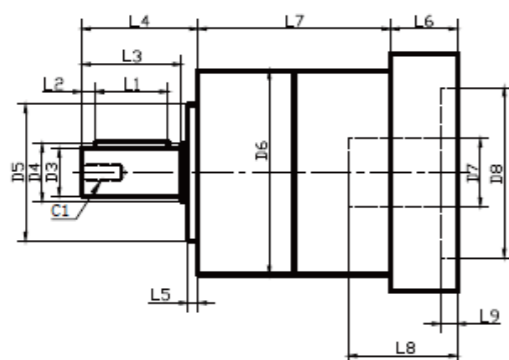
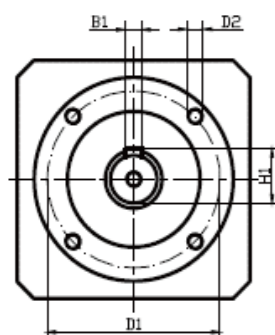
填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

BRL160-L1

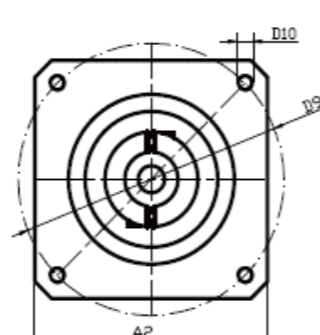
D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A2	B1	C1	H1
145	M12	40	55	130	160	35	114.3	200	M12	75	5	80	87	5	62	125	85	8	176	12	M12	43

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

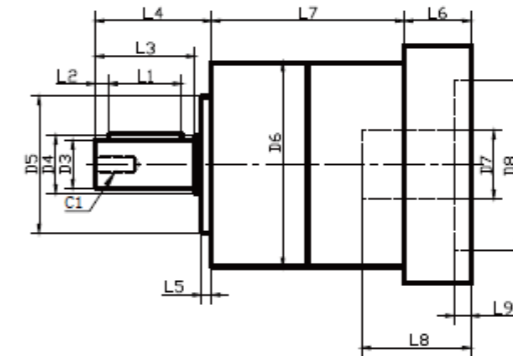
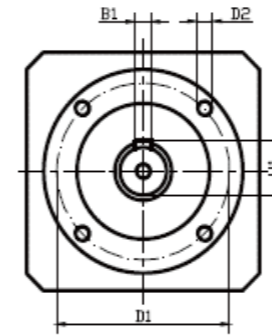
輸出端output



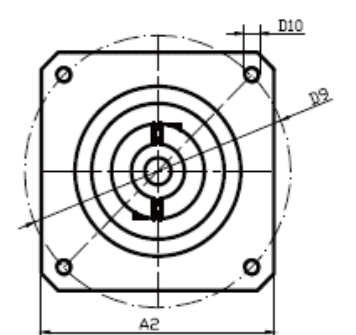
輸入端input



輸出端output



輸入端input



BRL140-L2

D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A2	B1	C1	H1
120	M10	32	40	100	142	28	110	145	M8	55	6	70	75	4	54	166	60	8	142	8	M12	35

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

BRL160-L2

D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A2	B1	C1	H1
145	M12	40	55	130	160	35	114.3	200	M12	75	5	80	87	5	62	171	85	8	176	12	M12	43

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor

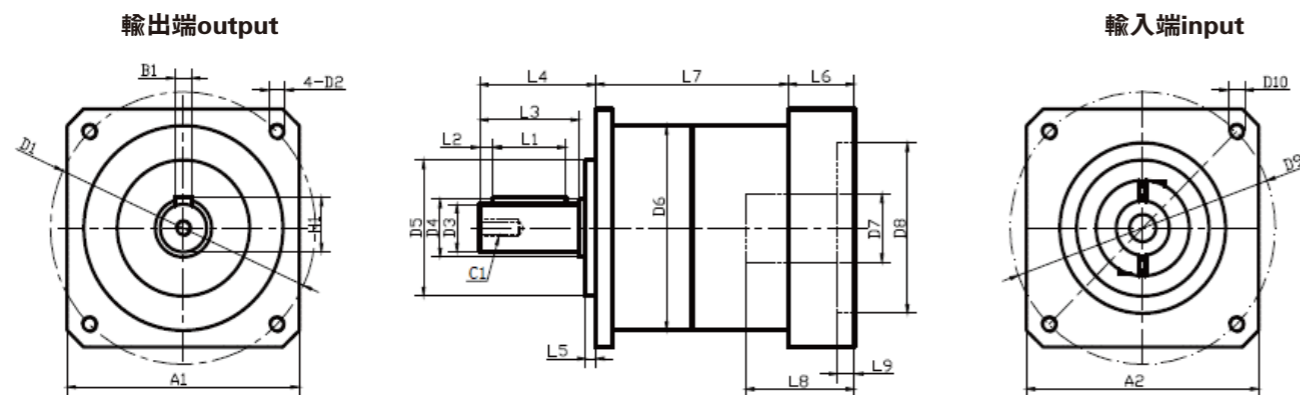
● BRF系列行星減速機技術參數  
BRF series planetary reducer technical parameters

技術參數 Technical parameters		規格 specifications		BRF60	BRF80	BRF90	BRF120	BRF142
最大扭矩 The maximum torque		Nm	1.5倍額定扭矩 rated torque					
緊急製動扭矩 braking torque		Nm	2倍額定扭矩 rated torque					
最大容許徑向力 maximum permissible radial force		N	240	400	450	1240	4800	
最大容許軸向力 the maximum allowable axial force		N	220	420	430	1000	4500	
扭矩剛性 torque rigidity		Nm/arcmin	1.8	4.7	4.85	11	55	
最大輸入轉速 maximum input speed		rpm	8000	6000	6000	6000	4000	
額定輸入轉速 rated input speed		rpm	4000	3500	3500	3500	2500	
噪音 noise		dB	<58	<60	<60	<65	<70	
平均壽命 life expectancy		h	20000					
滿載效率 full load efficiency		%	L1 ≥ 96% L2 ≥ 94%					
回程 間隙 Backhaul gap	P0	L1	arcmin	<3	<3	<3	<3	<3
		L2	arcmin	<5	<5	<5	<6	<6
	P1	L1	arcmin	<6	<6	<6	<8	<8
		L2	arcmin	<10	<10	<10	<10	<10
轉動 慣量 Turn Inertia	L1	3	Kg. cm <sup>2</sup>	0.135	0.77	0.77	2.63	12.14
		4	Kg. cm <sup>2</sup>	0.093	0.52	0.52	1.79	7.78
		5	Kg. cm <sup>2</sup>	0.078	0.45	0.45	1.53	6.07
		7	Kg. cm <sup>2</sup>	0.06	0.40	0.39	1.32	4.63
		10	Kg. cm <sup>2</sup>	0.063	0.39	0.39	1.28	4.60
	L2	12	Kg. cm <sup>2</sup>	0.127	0.72	0.72	2.56	12.37
		15	Kg. cm <sup>2</sup>	0.039	0.72	0.72	2.40	7.47
		20	Kg. cm <sup>2</sup>	0.049	0.35	0.35	1.60	6.95
		25	Kg. cm <sup>2</sup>	0.039	0.25	0.25	1.40	6.65
		28	Kg. cm <sup>2</sup>	0.038	0.18	0.18	1.40	5.81
		40	Kg. cm <sup>2</sup>	0.027	0.18	0.18	1.30	5.81
		50	Kg. cm <sup>2</sup>	0.039	0.28	0.20	1.57	6.83
		100	Kg. cm <sup>2</sup>	0.075	0.50	0.50	1.50	7.50

技術參數 Technical parameters		規格 specifications		BRF60	BRF80	BRF90	BRF120	BRF142
		級數 series	速比 speed ratio					
額定 扭矩 (Nm) $T_N$ rated torque	L1	3		18	40	50	125	400
		4		40	110	125	260	800
		5		36	90	110	230	700
		7		20	40	50	90	340
		10		12	22	32	70	210
	L2	9		18	40	50	125	400
		12		40	110	125	260	800
		15		36	90	110	230	700
		16		40	110	125	260	800
		20		40	110	125	260	800
		25		36	90	110	230	700
		28		35	100	110	235	800
		30		36	80	110	230	700
		35		22	66	65	125	550
		40		36	90	110	230	700
		50		20	50	67	120	450
		70		40	110	125	200	800
		100		40	110	125	260	800
		重量(Kg) weight	L1		1.7	2.35	4.4	12.0
L2			1.9	2.70	5.0	14.0	29.6	

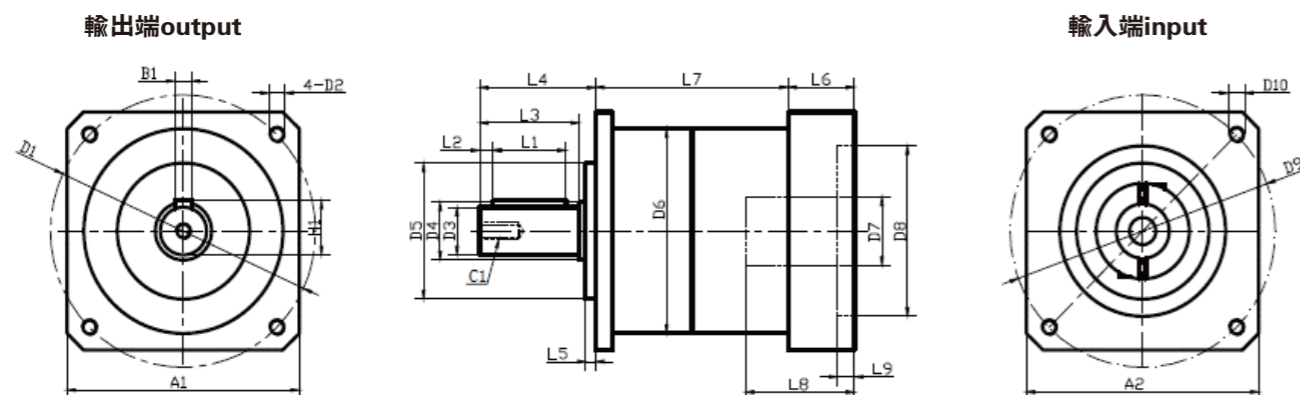
## ● BRF系列行星減速機標準尺寸

BRF series planetary reducer standard size



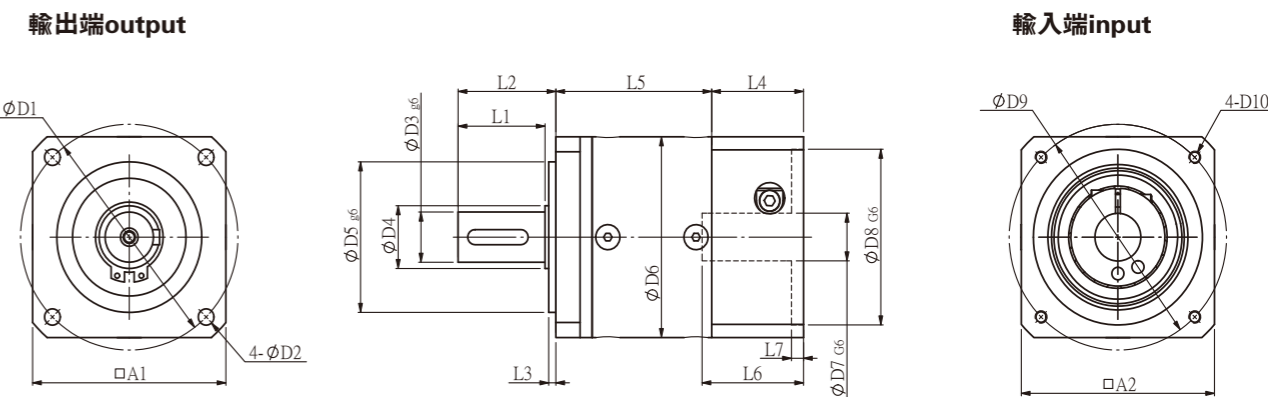
BRF60-L1																							
D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A1	A2	B1	C1	H1
70	5.5	14	17	50	60	14	50	70	M5	22	4	30	35	3	26	61	32	6.5	60	60	5	M5	16

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor



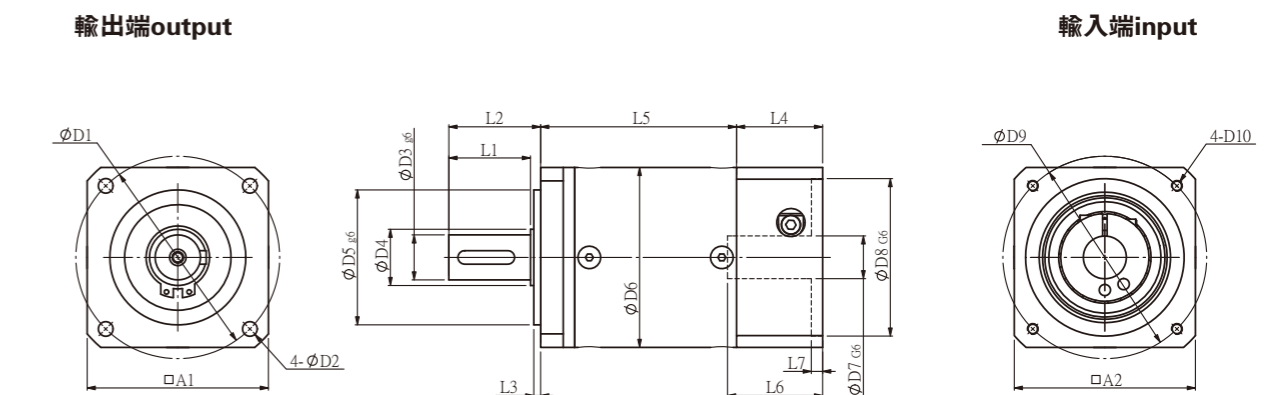
BRF60-L2																							
D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	L8	L9	A1	A2	B1	C1	H1
70	5.5	14	17	50	60	14	50	70	M5	22	4	30	35	3	26	83	32	6.5	60	60	5	M5	16

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor



PRF80-L1																									
D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	A1	A2	S1	S2	S3	S4	B	H	C
90	6.5	20	25	60	80	19	70	90	M5	36	40.5	3	38	64.5	42	5	80	80	4	25	5	18	6	22.5	M5
90	6.5	20	25	60	80	14	73	98.4	M6	36	40.5	3	38	64.5	42	5	80	80	4	25	5	18	6	22.5	M5
90	6.5	20	25	60	80	19	95	115	M8	36	40.5	3	53	64.5	57	10	80	100	4	25	5	18	6	22.5	M5

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor



PRF80-L2																									
D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	A1	A2	S1	S2	S3	S4	B	H	C
90	6.5	20	25	60	80	19	70	90	M5	36	40.5	3	38	86.5	42	5	80	80	4	25	5	18	6	22.5	M5
90	6.5	20	25	60	80	14	73	98.4	M6	36	40.5	3	38	86.5	42	5	80	80	4	25	5	18	6	22.5	M5
90	6.5	20	25	60	80	19	95	115	M8	36	40.5	3	53	86.5	57	10	80	100	4	25	5	18	6	22.5	M5

填充顏色的數據與選配電機相關，可以根據實際情況改變  
Fill the color of the data associated with the optional motor