

**CHUELY 丘里**



## **产品选型手册**

**WB系列微型摆线减速机**

**上海丘里机械设备有限公司**

## WB系列微型摆线减速机

### WB series of micro cycloidal speed reducer

#### 前言

#### Preface

WB系列微型摆线针轮减速机，采用高压压铸铝合金外壳，采取新的加工工艺，提高了工件精度，产品内在质量更优，体积更小，重量更轻，外观更美。全部使用润滑脂润滑，不易漏油，用户可根据需要在任何角度，方向安装使用。

The WB series mini-cycloidal reducers, adopt aluminium alloy outside shell and new processing method. So it has better accuracy, greater quality, smaller volume, lighter weight and smarter shape. It is not apt to leak oil, because we use advanced grease, it can be installed at any place.

#### 机型号及型号表示方式

#### Frame size and implication

单级减速机型号有：WB65、WB85、WB100、WB120、WB150。

Single stage cycloidal reducer: WB65、WB85、WB100、WB120、WB150.

减速比有：9、11、17、23、29、35、43、47、59、71。

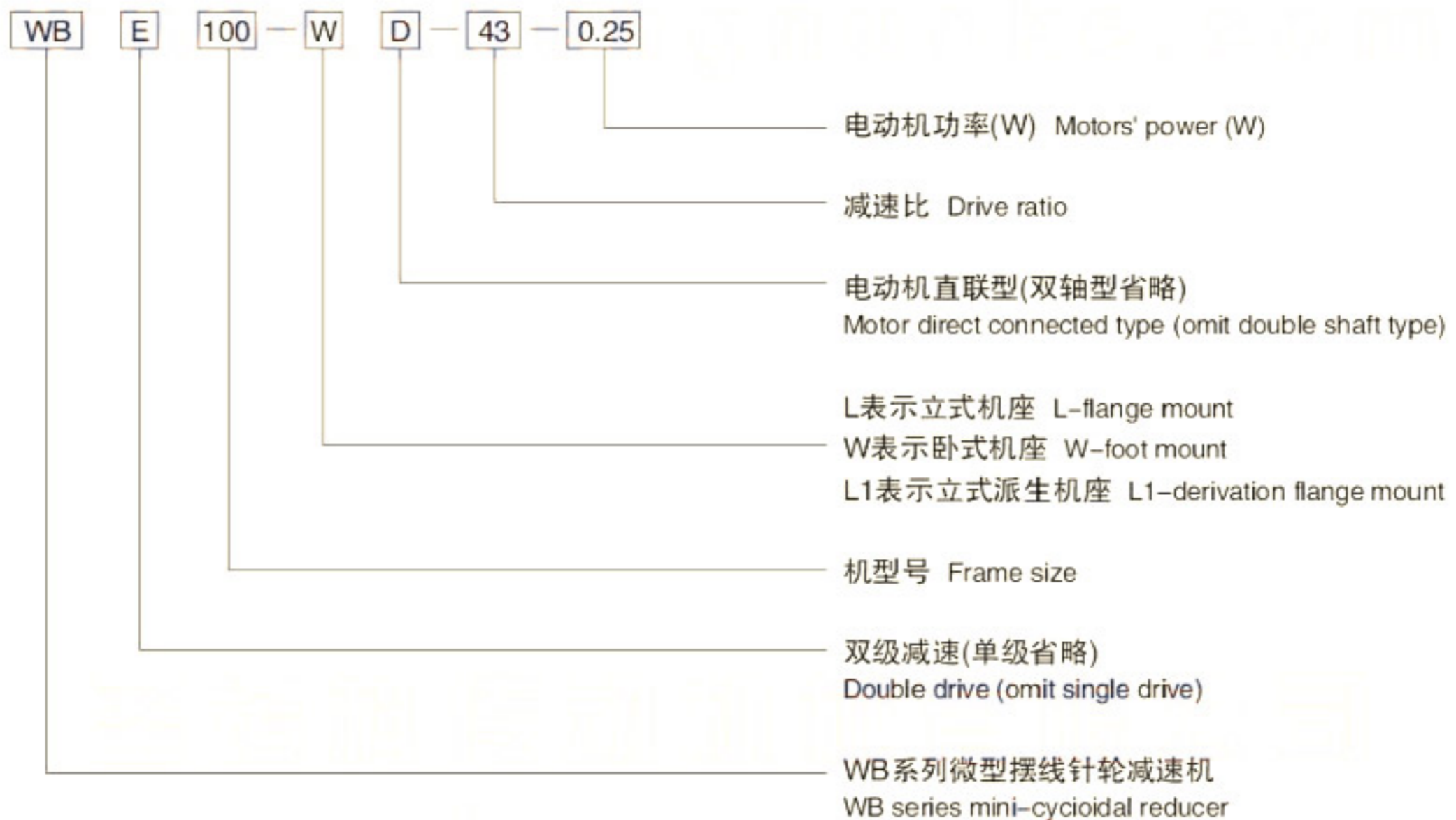
Driver ratio: 9、11、17、23、29、35、43、47、59、71.

双级减速机型号有：WBE1065、WBE1285、WBE1510。

Double stage cycloidal reducer: WBE1065、WBE1285、WBE1510.

减速比有：121、187、289、385、473、595、731、989、1225、1849。

Driver ratio: 121、187、289、385、473、595、731、989、1225、1849.



示例1：WB100-WD-43-0.25 表示微型摆线减速机，机型号100型，单级减速，卧式安装，带三相四极交流电机，减速比1:43，电机输入功率0.25KW。

Example 1: WB100-WD-43-0.25 means micro cycloidal speed reducer, model 100, single stage speed reduction, horizontal installation, with three-phase four-pole AC motor, reduction ratio 1:43, and motor power 0.25KW.

WB 系列单级减速机型号规格及选型参数

Model specification and selection reference for WB series of single-stage speed reducer

表1 ( Table 1 )

机型号 Type	配置电机功率 Power of motor disposed (KW)	减速比 Reduction ratio								
		9	11	17	23	29	35	43	59	71
		输出转矩n.m output torque								
WB 65	0.06-4p	3.30	4.00	6.30	8.55	10.50	12.80	15.80		
	0.09-4p	4.95	6.05	9.35	12.70	15.90	19.20	23.70		
	0.12-4p	6.60	8.00	12.50	16.70	21.30	25.70			
4p 输入时, 其输出转数 (r/min) Output revolution (r/min) when 4p input		155	127	82	60	48	40	32		

表2 ( Table 2 )

机型号 Type	配置电机功率 Power of motor disposed (KW)	减速比 Reduction ratio								
		9	11	17	23	29	35	43	59	71
		输出转矩n.m output torque								
WB 85	0.09-4p	5.00	6.05	9.35	12.7	15.9	19.2	23.7	32.5	
	0.12-4p	6.60	8	12.5	16.7	21.3	25.7	31.7	43.4	
	0.18-4p	9.90	12.1	18.7	25.4	31.2	38.6	47.4		
	0.25-4p	13.80	16.9	26.1	35.4	44.5	53.7			
	0.37-4p	20.40	24.9	38.5	52.1					
4p 输入时, 其输出转数 (r/min) Output revolution (r/min) when 4p input		155	127	82	60	48	40	32	24	

表3 ( Table 3 )

机型号 Type	配置电机功率 Power of motor disposed (KW)		减速比 Reduction ratio								
			9	11	17	23	29	35	43	59	71
			输出转矩n.m output torque								
WB 100	0.18	4p	9.30	12.10	18.70	25.40	31.20	38.60	47.40	65.00	
		6p	14.50	17.70	27.40	37.00	46.70	56.40	69.30	95.00	
	0.25	4p	13.80	16.90	26.10	35.40	44.50	53.70	66.00	90.00	
		6p	20.00	24.50	37.90	51.30	64.60	78.00	95.80	130.00	
	0.37	4p	20.40	24.90	38.50	52.10	65.70	79.30	97.20	133.0	
		6p	29.80	36.40	56.20	76.10	96.00	116.0			
	0.55	4p	30.30	37.10	57.40	77.60	97.20	117.0			
		6p	44.30	54.10	83.60	113.0					
	0.75	4p	41.40	50.50	78.30	106.0	133.0				
		6p	60.40	73.80	114.0						
	4p 输入时, 其输出转数 (r/min) Output revolution (r/min) when 4p input			155	127	82	60	48	40	32	24
	6p 输入时, 其输出转数 (r/min) Output revolution (r/min) when 6p input			105	86	56	41	33	27	22	16

## WB 系列单级减速机型号规格及选型参数

## Model specification and selection reference for WB series of single-stage speed reducer

表4 ( Table 4 )

机型号 Type	配置电机功率 Power of motor disposed (KW)		减速比 Reduction ratio								
			9	11	17	23	29	35	43	59	71
			输出转矩n.m      output torque								
WB 120	0.37	4p	20.40	24.90	38.50	52.10	65.70	79.30	97.20	133.0	161.0
		6p	29.80	36.40	56.20	76.10	96.00	116.0	142.0	195.0	
	0.55	4p	30.30	37.10	57.40	77.60	97.20	117.0	145.0		
		6p	44.30	54.10	83.60	113.0	142.00	172.0			
	0.75	4p	41.40	50.50	78.30	106.0	133.0	161.0			
		6p	60.40	73.80	114.0	154.0	194.0				
	1.1	4p	60.50	74.00	114.0	155.0	195.0				
		6p	88.50	108.0	167.0						
	1.5-4p			82.9	100	156					
	4p 输入时, 其输出转数 (r/min) Output revolution (r/min) when 4p input			155	127	82	60	48	40	32	24
6p 输入时, 其输出转数 (r/min) Output revolution (r/min) when 6p input			105	86	56	41	33	27	22	16	13

表5 ( Table 5 )

机型号 Type	配置电机功率 Power of motor disposed (KW)		减速比 Reduction ratio								
			9	11	17	23	29	35	43	59	71
			输出转矩n.m      output torque								
WB 150	0.55	4p	30.30	37.10	57.40	77.60	97.20	117.0	145.0	199.0	239.0
		6p	44.30	54.10	83.60	113.0	142.00	172.0	211.0		
	0.75	4p	41.40	50.50	78.30	106.0	133.0	161.0	198.0	271.0	
		6p	60.40	73.80	114.0	154.0	194.0	234.0			
	1.1	4p	60.50	74.00	114.0	155.0	195.0	236.0			
		6p	88.50	108.0	167.0	226.0					
	1.5	4p	82.9	100	156	211.0	266.0				
		6p	120.0	147.0	227.0						
	2.2	4p	121.0	148	229.0						
		6p	177	216							
4p 输入时, 其输出转数 (r/min) Output revolution (r/min) when 4p input			155	127	82	60	48	40	32	24	20
6p 输入时, 其输出转数 (r/min) Output revolution (r/min) when 6p input			105	86	56	41	33	27	22	16	13

WB 系列双级减速机型号规格及选型参数

Model specification and selection reference for WB series of double-stage speed reducer

表6 ( Table 6 )

机型号 Type	配置电机功率 Power of motor disposed (KW)	减速比 Reduction ratio												
		121 11*11	187 11*17	289 17*17	385 11*35	473 11*43	595 17*35	731 17*43	989 23*43	1255 35*35	1849 43*43	2537 43*59		
		输出转矩n.m						output torque						
WBE 1065	0.06-4p	40	61	94.4	125	154	194	239	323	400	604	837		
	0.09-4p	59.4	92	143	198	232	292	358	485	601	908	1243		
	0.12-4p	79.2	121	186	254	309	388	478	647	801	1209	1649		
4p 输入时, 其输出转数 (r/min) Output revolution (r/min) when 4p input		11.5	7.5	4.8	3.6	3	2.3	1.9	1.4	1.1	0.7	0.55		

表7 ( Table 7 )

机型号 Type	配置电机功率 Power of motor disposed (KW)	减速比 Reduction ratio													
		121 11*11	187 11*17	289 17*17	385 11*35	473 11*43	595 17*35	731 17*43	989 23*43	1255 35*35	1849 43*43	2537 43*59	3481 59*59	4189 59*71	
		输出转矩n.m							output torque						
WBE 1285	0.09-4p	59.4	92	143	198	232	292	358	485	601	908	1243	1705	2100	
	0.12-4p	79.2	121	186	254	309	388	478	647	801	1209	1649	2262	2801	
	0.18-4p	108	183	283	377	464	583	716	969	1201	1815	2486	3411	4200	
	0.25-4p	164	255	394	525	645	812	997	1350	1672	2524	3424	4699	5835	
	0.37-4p	244	376	583	776	953	1200	1473	1978	2470	3728	5074	6962	8635	
4p 输入时, 其输出转数 (r/min) Output revolution (r/min) when 4p input		11.5	7.5	4.8	3.6	3	2.3	1.9	1.4	1.1	0.7	0.55	0.4	0.33	

表8 ( Table 8 )

机型号 Type	配置电机功率 Power of motor disposed (KW)	减速比 Reduction ratio														
		121 11*11	187 11*17	289 17*17	385 11*35	473 11*43	595 17*35	731 17*43	989 23*43	1255 35*35	1849 43*43	2537 43*59	3481 59*59	4189 59*71	5041 71*71	
		输出转矩n.m							output torque							
WBE 1510	0.18-4p	108	183	283	377	464	583	716	969	1201	1815	2486	3411	5030	5839	
	0.25-4p	164	255	394	525	645	812	997	1350	1672	2524	3424	4699	6929	8044	
	0.37-4p	244	376	583	776	953	1200	1473	1978	2470	3728	5074	6962	10266	11918	
4p 输入时, 其输出转数 (r/min) Output revolution (r/min) when 4p input		11.5	7.5	4.8	3.6	3	2.3	1.9	1.4	1.1	0.7	0.55	0.4	0.33	0.27	

WB 系列减速机低速轴许用转矩极限值T<sub>2</sub>与最大许用径向力极限值Pr<sub>2</sub>

Allowable torque's limit value T<sub>2</sub> of low speed shaft of WB series of speed reducer and max. allowable radial force's limit value Pr<sub>2</sub>

表9 ( Table 9 )

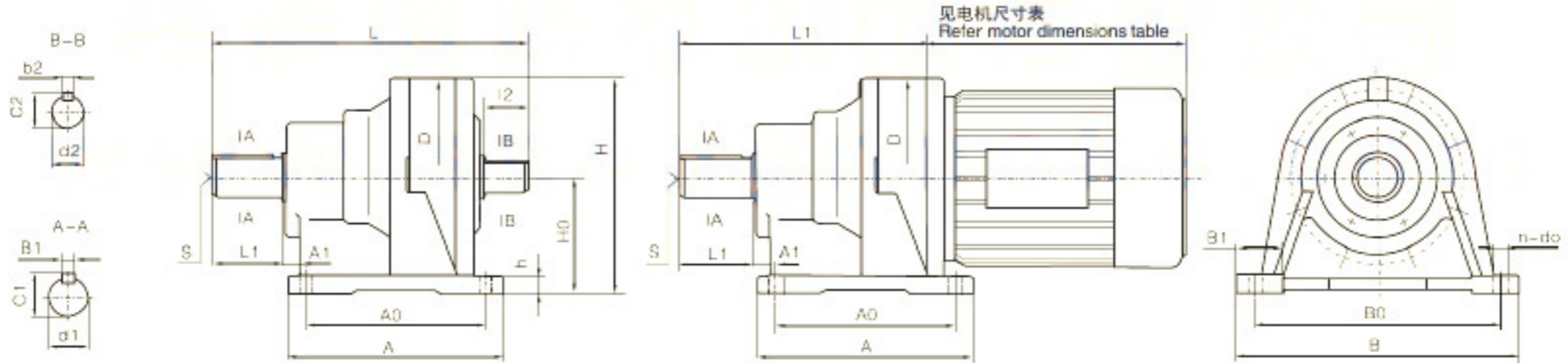
机型号 Type	WB65	WB85	WB100	WB120	WB150	WBE1065	WBE1285	WBE1510
许用转矩极限值(N.m) Allowable torque's limit value (N.m)	25	60	120	180	250	120	180	250
许用径向力极限值(N) Allowable radial force's limit value (N)	600	1150	1800	3500	4600	1800	3500	4600

表内许用力Pr<sub>2</sub>(N)值是指在低速轴轴伸中点上的计算值。

Allowable radial force value Pr<sub>2</sub>(N) in the table indicates the value calculated at the midpoint of shaft extension of low-speed shaft.

WB-W、WB-WD 单级卧式减速机外形及安装尺寸

WB-W、WB-WD Single stage foot mount reducer contour and mounting dimension

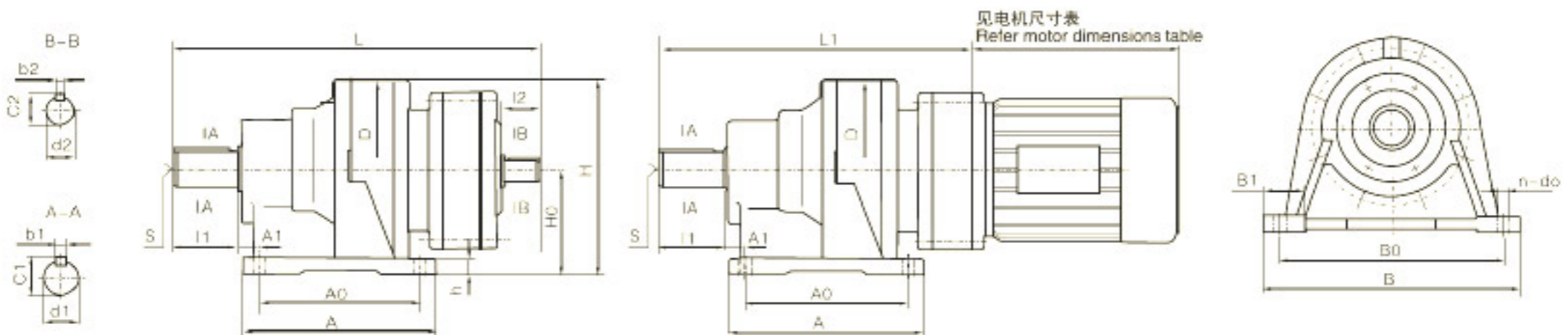


机型号 model	安装尺寸 mounting dimensions								轴伸尺寸 shaft dimensions								外形尺寸 external dimensions					重量 weight kg		
	H <sub>0</sub>	A <sub>1</sub>	A <sub>0</sub>	B <sub>1</sub>	B <sub>0</sub>	h	s	n	d <sub>0</sub>	d <sub>1</sub> (h6)	b <sub>1</sub>	c <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub> (h6)	b <sub>2</sub>	c <sub>2</sub>	l <sub>2</sub>	A	B	H	D		L	L1
65	60	25	25	25	130	8	M4	4	7	12	4	13.5	20	10	3	11	16	90	150	120	110	135	95	2.5
85	7	30	30	30	150	10	M5		9	14	5	16	23	12	3	13	16	100	175	140	127	148	110	3.5
100	80	38	38	32	160	12	M6		9	18	6	20.5	25	14	4	16.5	20	110	185	155	145	174	130	7
120	100	58	58	35	150	15	M8		11	30	8	33	35	15	5	17	22	120	185	190	168	215	165	11
150	120	60	60	50	210	18	M8		15	35	10	38.5	55	20	6	22.5	30	160	250	235	210	260	200	28

注：表中重量不包含电机重量  
Note: the weight in sheet divide motor weight

WBE-W、WBE-WD 双级卧式减速机外形及安装尺寸

WBE-W、WBE-WD Double stage foot mount reducer contour and mounting dimension

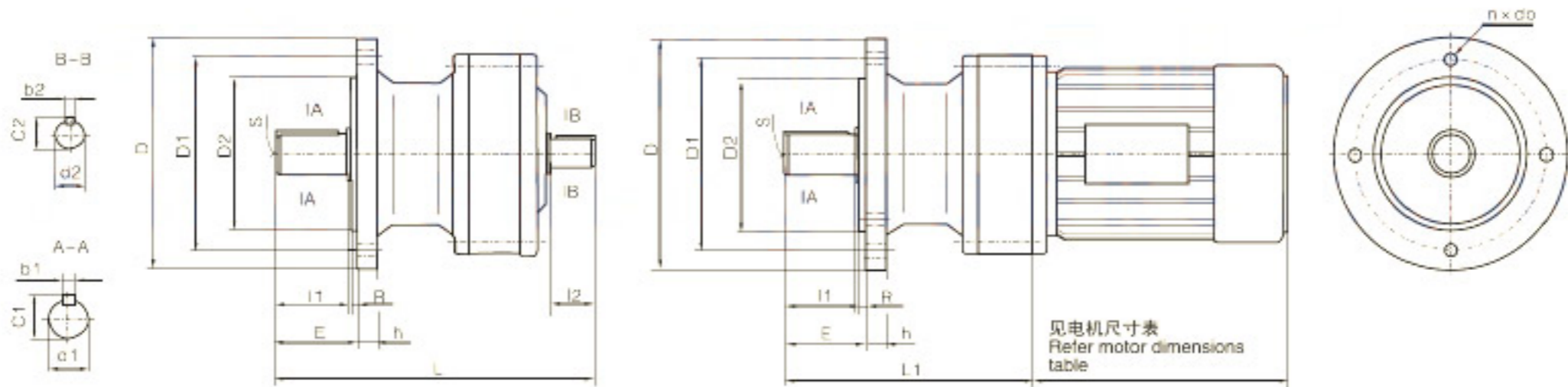


机型号 model	安装尺寸 mounting dimensions								轴伸尺寸 shaft dimensions								外形尺寸 external dimensions					重量 weight kg		
	H <sub>0</sub>	A <sub>1</sub>	A <sub>0</sub>	B <sub>1</sub>	B <sub>0</sub>	h	s	n	d <sub>0</sub>	输出轴 Output shaft				输入轴 Input shaft				A	B	H	D		L	L1
										d <sub>1</sub> (h6)	b <sub>1</sub>	c <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub> (h6)	b <sub>2</sub>	c <sub>2</sub>	l <sub>2</sub>							
1065	80	38	80	32	160	12	M6	4	9	18	6	20.5	25	10	3	11	16	110	185	155	145	225	185	9
1285	100	58	90	35	150	15	M8	4	11	30	8	33	35	12	3	13	16	120	185	190	168	268	230	14
1510	120	60	120	50	210	18	M8	4	15	35	10	38.5	55	14	4	16.5	20	160	250	235	210	325	295	36

注：表中重量不包含电机重量  
Note: the weight in sheet divide motor weight

WB-L、WB-LD 单级立式减速机外形及安装尺寸

WB-L、WB-LD Single stage flang mount reducer contour and mounting dimension



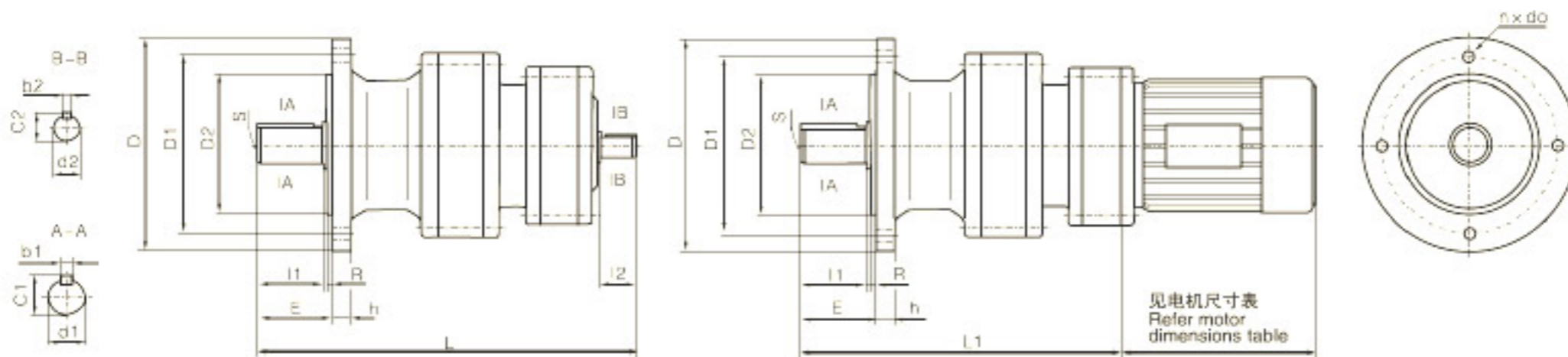
机型号 model	安装尺寸 mounting dimensions								轴伸尺寸 shaft dimensions								外形尺寸 external dimensions			重量 weight
	D1	D1(h8)	E	h	R	s	n	d <sub>0</sub>	输出轴Output shaft				输入轴Input shaft				D	L	L1	kg
									d <sub>1</sub> (h6)	b <sub>1</sub>	c <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub> (h6)	b <sub>2</sub>	c <sub>2</sub>	l <sub>2</sub>				
65	100	65	24	8	2.5	M4	4	7	12	4	13.5	20	10	3	11	16	120	135	95	2.5
85	120	85	27	9	2.5	M5	4	9	14	5	16	23	12	3	13	16	140	148	110	3.5
100	134	100	30	10	3	M6	4	9	18	6	20.5	25	14	4	16.5	20	160	174	130	7
120	160	140	39	10	3	M8	4	11	30	8	33	35	15	5	17	22	190	215	165	11
150	200	170	60	14	4	M8	6	11	35	10	38.5	55	20	6	22.5	30	230	260	200	28

注：表中重量不包含电机重量

Note: the weight in sheet divide motor weight

WBE-L、WBE-LD 双级立式减速机外形及安装尺寸

WBE-L、WBE-LD Double stage flang mount reducer contour and mounting dimension



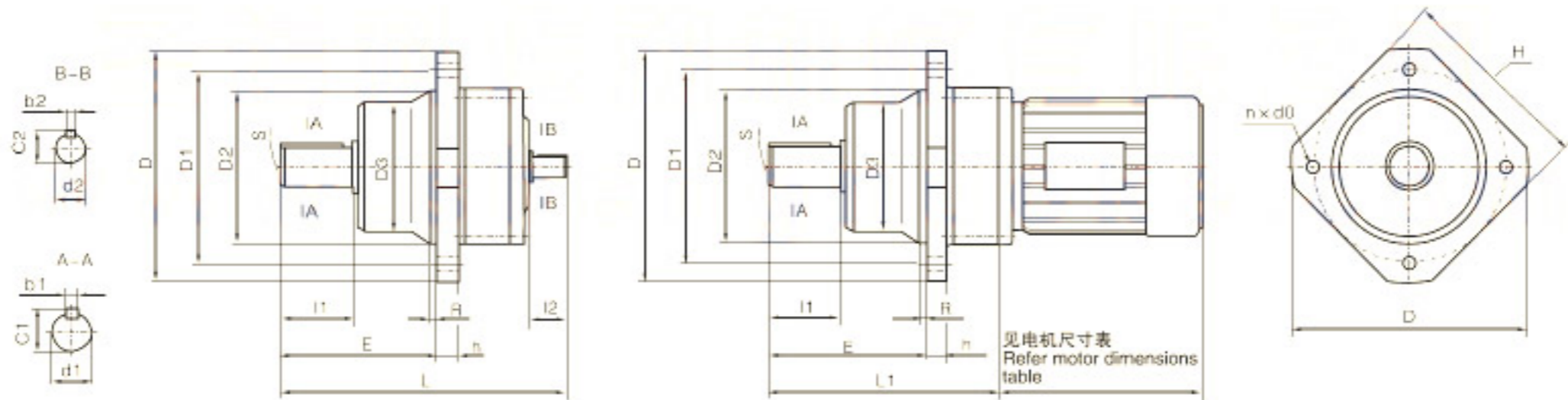
机型号 model	安装尺寸 mounting dimensions								轴伸尺寸 shaft dimensions								外形尺寸 external dimensions			重量 weight
	D1	D1(h8)	E	h	R	s	n	d <sub>0</sub>	输出轴Output shaft				输入轴Input shaft				D	L	L1	kg
									d <sub>1</sub> (h6)	b <sub>1</sub>	c <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub> (h6)	b <sub>2</sub>	c <sub>2</sub>	l <sub>2</sub>				
1065	160	100	93	12	3	M6	4	9	18	6	20.5	25	10	3	11	16	185	225	185	9
1285	185	120	118	12	3	M8	4	11	30	8	33	35	12	3	13	16	210	268	230	14
1510	240	150	140	15	3	M8	6	15	35	10	38.5	55	14	4	16.5	20	270	325	295	36

注：表中重量不包含电机重量

Note: the weight in sheet divide motor weight

## WB-L1、WB-L1D 单级立式派生机座外形及安装尺寸

## WB-L1、WB-L1D Single stage derivation flang mount reducer contour and mounting dimension



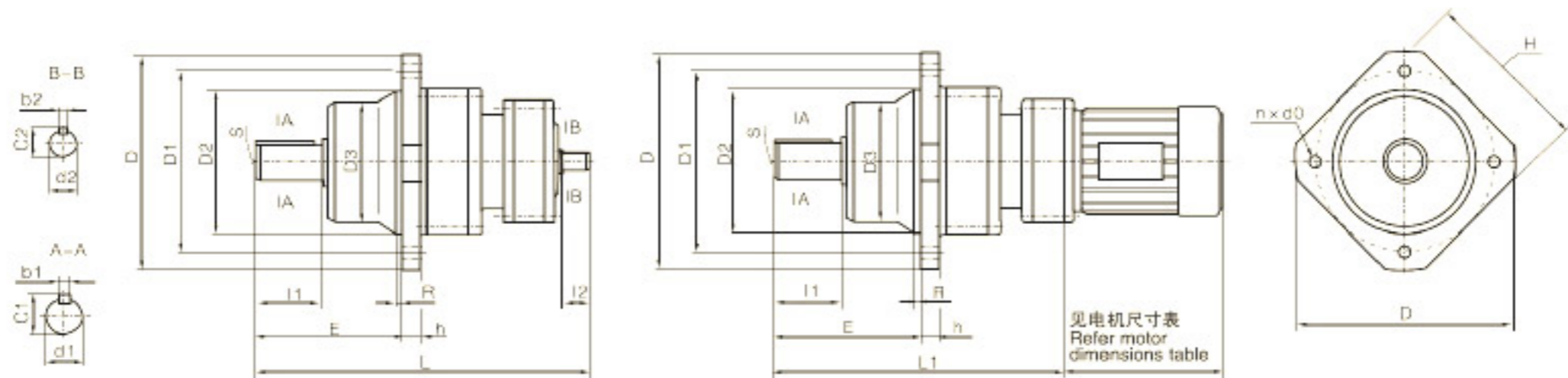
机型号 model	安装尺寸 mounting dimensions							轴伸尺寸 shaft dimensions								外形尺寸 external dimensions				重量 weight kg	
	D <sub>1</sub>	D <sub>2</sub> (h8)	E	h	R	S	n	d <sub>0</sub>	输出轴 Output shaft				输入轴 Input shaft				D	D <sub>3</sub>	L		L1
									d <sub>1</sub> (h6)	b <sub>1</sub>	c <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub> (h6)	b <sub>2</sub>	c <sub>2</sub>	l <sub>2</sub>					
65	125	65	65	9	2.5	M4	4	7	12	4	13.5	20	7	3	11	16	145	50	135	95	2.5
85	140	85	82	10	2.5	M5		9	14	5	16	23	9	3	13	16	165	55	148	110	3.5
100	160	100	93	12	3	M6		9	18	6	20.5	25	9	4	16.5	20	185	65	174	130	7
120	185	120	118	12	3	M8		11	30	8	33	35	11	5	17	22	210	85	215	165	11
150	240	150	140	15	4	M8		15	35	10	38.5	55	15	6	22.5	30	270	115	260	200	28

注：表中重量不包含电机重量

Note: the weight in sheet divide motor weight

## WBE-L1、WBE-L1D 双级立式派生机座外形及安装尺寸

## WBE-L1、WBE-L1D Double stage derivation flang mount reducer contour and mounting dimension



机型号 model	安装尺寸 mounting dimensions							轴伸尺寸 shaft dimensions								外形尺寸 external dimensions				重量 weight kg	
	D <sub>1</sub>	D <sub>2</sub> (h8)	E	h	R	S	n	d <sub>0</sub>	输出轴 Output shaft				输入轴 Input shaft				D	D <sub>3</sub>	L		L1
									d <sub>1</sub> (h6)	b <sub>1</sub>	c <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub> (h6)	b <sub>2</sub>	c <sub>2</sub>	l <sub>2</sub>					
1065	160	100	93	12	3	M6	4	9	18	6	20.5	25	10	3	11	16	185	65	225	185	9
1285	185	120	118	12	3	M8		11	30	8	33	35	12	3	13	16	210	85	268	230	14
1510	240	150	140	15	3	M8		15	35	10	38.5	55	14	4	16.5	20	270	115	325	295	36

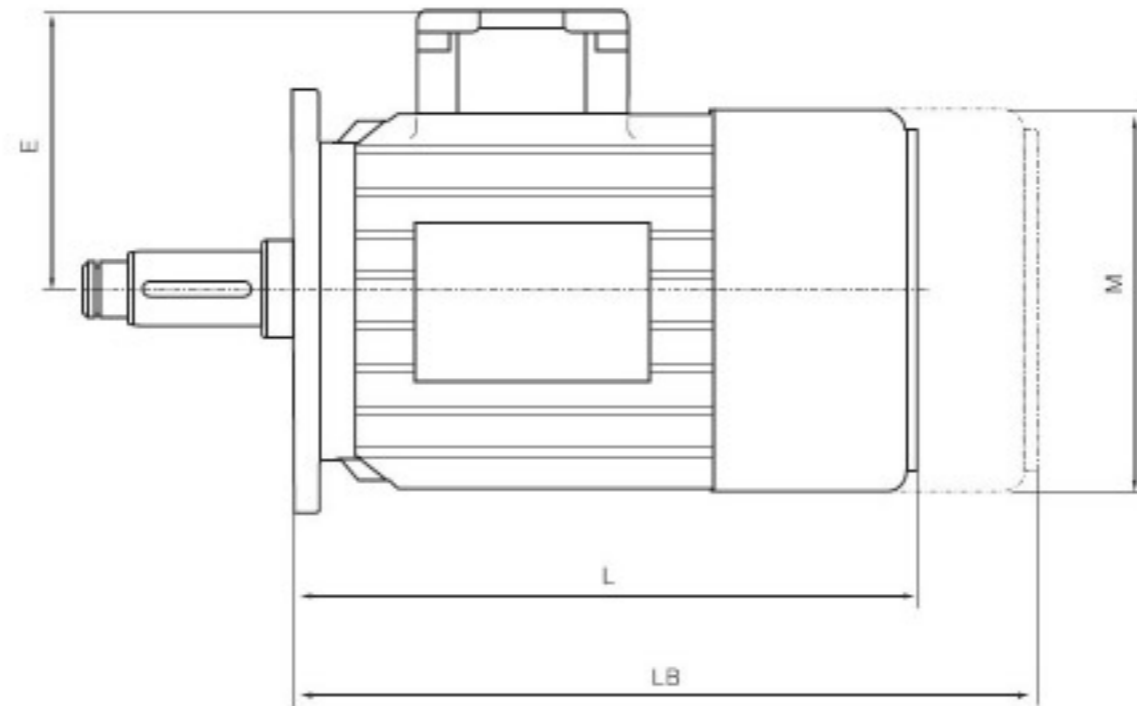
注：表中重量不包含电机重量

Note: the weight in sheet divide motor weight



直联专用电机尺寸

The dimensions of motor designed for WB series geared motor



功率 power	适配机型 adpapte model	电压 (V) volt	L	LB	M	E
40	65 1065	380	130		95	80
60						
90	65 85 1065 1285		170		115	100
120						
180	85 100 1285		190		130	110
250						
370						
550	100 125 1510		225	375	150	120
750						
1100	120 150		260	430	175	155
1500						
2200	150		285	320	205	180

注: L为普通电机尺寸

Lb为制动电机尺寸

Note: L is length code of normal motor LB is the length code of break motor