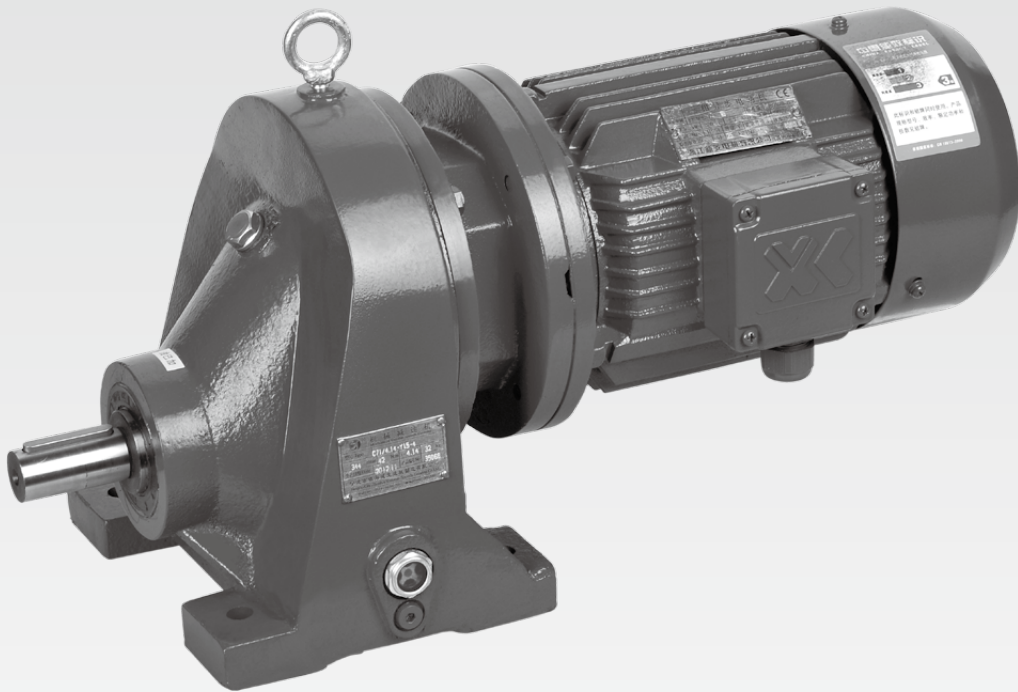


C 系列齿轮减速机

C Series of Gear Reducer



概述 | Introduction

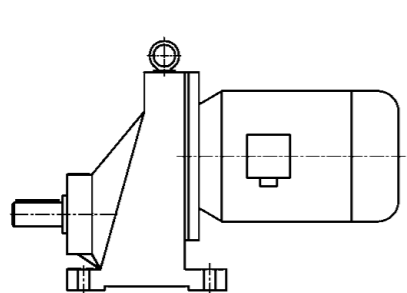
C 系列减速机系我公司新近创新开发的齿轮减速机新产品，由于传动性能可靠、结构合理、高效低噪音等特点，不仅可作为无级变速器的模块组合件，也可以作为单独传动元件。广泛运用于化工、食品、制药、工程、塑料、印刷、电子等行业的机械传动装置上，它的主要性能特点：

- 平行输出、体积小、减速比小、输出转速快、能耗小、噪音低；
- 底座式安装具有低中心高特点，平均效率 98%；
- 输入轴与输出轴旋转方向相反。

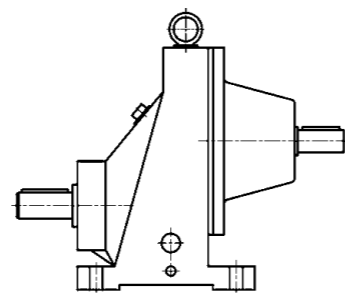
C series gear reducer is a new type gear reducer developed by our company, It is featured by reliable transmission, reasonable structure, high efficiency and low noise. It can be used either as the module unit of stepless speed variator or as an independent transmission unit. C series gear reducer is now widely used in the transmission equipments in fields of chemical engineering, foodstuff, pharmacy, engineering, plastic, printing and electron. Its main characteristics are as follows:

- Parallel output, small in size; low reduction ratio, high output speed, low power consumption and low noise.
- Base-mounted assembly leads to low centre and high efficiency and the average efficiency reaches 98%
- The rotate direction of the input axes and the output axes are opposite.

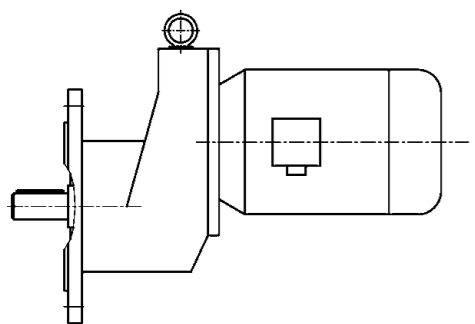
C(CF) 系列减速机设计方案 | Design of C(CF) Series



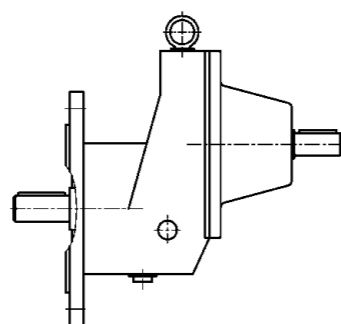
C...Y...
轴伸式底座安装斜齿轮减速机
Shaft extended & base-mounted assembled helical gear reducer



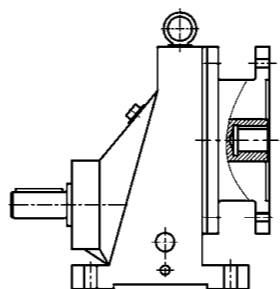
CS...
轴伸式底座安装，轴输入斜齿轮减速机
Shaft extended & base-mounted assembled helical gear reducer with input axis



CF...Y...
轴伸法兰式安装斜齿轮减速机
Shaft extended & flange-mounted helical gear reducer



CFS...
轴伸法兰式安装，轴输入斜齿轮减速机
Shaft extended & flange-mounted helical gear reducer with input axis



C(CF)...
电机用户自配、配特殊电机或大减速比时需加联接法兰
Connecting flanges shall be equipped when special electromotor or high reduction ratio is applied.

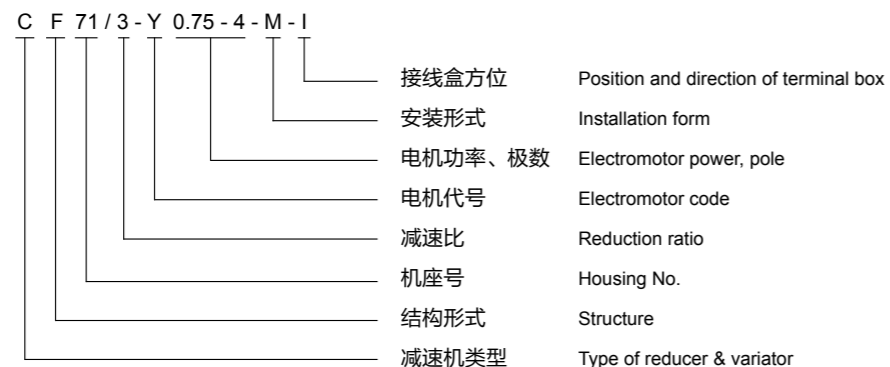
C(CF) 系列选型 | Options of C(CF) Series

使用条件及选型结果 使用条件○ 选型结果●
Conditions and results Condition ○ Result ●

○ 负荷容量 (被驱动设备输入功率或输入转矩) Load capacity (Input power or input torque of the driven equipment)	P=1.1KW
○ 电源电压 / Voltage	380V
○ 电源频率 / Frequency	50Hz
○ 要求转速 / Speed required	305r/min
○ 负荷性质及运转时间 / Load pattern and operation time ● 确认使用系数 / Confirmation of usage coefficient ○ 启动次数 / Number of startups ● 确认启动次数 / Confirmation of startup coefficient ○ 可靠度 / Reliability ● 确认可靠度系数 / Confirmation of reliability coefficient ● 确认运行系数 / Confirmation of performance coefficient	均匀负荷, 14 小时 / 天 KA=1.25 查表 P2 启动次数: 5 次 / 小时 KS=1 查表 P4 可靠度: 一般 KR=1 查表 P4 K=KA * KS * KR=1.25 Uniform load, 14 hours/day KA=1.25 check the table P2 Number of startups: 5 times/hour KS=1 check the table P4 Reliability: normal KR=1 check the table P4
○ 安装形式 / Type of installation ● 确认安装形式 / Confirmation of installation type	轴伸法兰安装 B5 查表 P119 Shaft extended & flange-mounted install B5 check the table P119
○ 承载能力计算 / Calculation of bearing capacity ● 确认机型 / Confirmation of machine	M _{S2} =9550*P/ N ₂ =34.4N.m M _{2min} ≥ M _{S2} * K = 43N.m 根据 N ₂ 及 M ₂ 查表 P116 得: CF71/4.6-Y1.5-4 Based on N ₂ and M ₂ & table P116: CF71/4.6-Y1.5-4
○ 环境条件 / Environmental condition ● 确认环境条件 / Confirmation of environmental condition	室内、环境温度 28℃ OK Inside, ambient temperature 28℃
○ 电机规格 / Electromotor specification ● 确认电机规格 / Confirmation of electromotor specification	1.5-4、380V、50Hz 无制动器、室内型 / Without brake, for inside OK
● 结束选型 / End of selection	CF71/4.6-Y1.5-4-B5、380V、50Hz 无制动器、室内型 / Without brake, for inside

C(CF) 系列型号规格表示方式

Denotation of Specification & Dimension of C(CF) Series



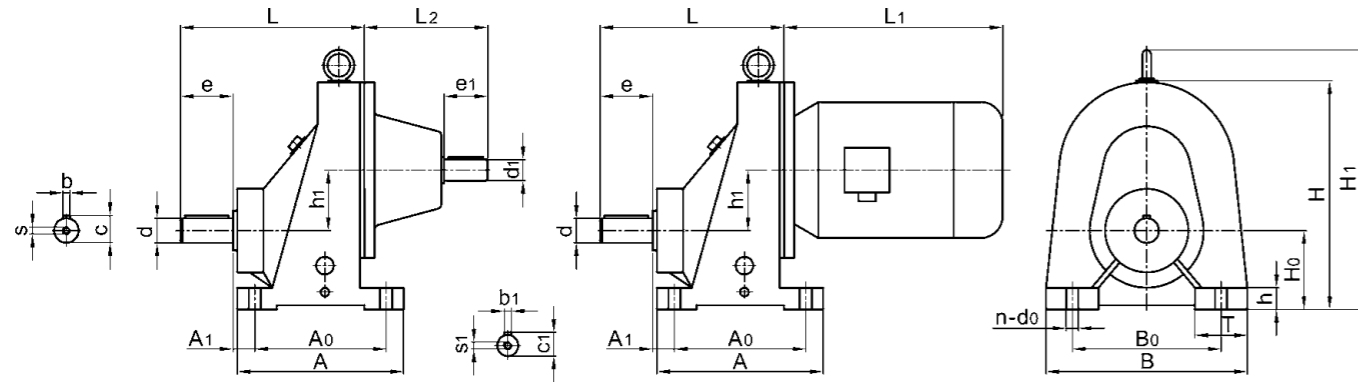
减速机类型 Type of gearbox	结构形式 Structure	机座号 Housing No.	减速比 Reduction ratio	电机代号 Electromotor code	电机功率、极数 Electromotor power, pole	安装形式 Installation form	接线盒方位 Position and direction of terminal box
斜齿轮硬齿面 减速机 C (CF) Helical gear reducer with hard surface C (CF)	普通轴伸式 (省略) General Shaft- extension (omitted)	见选型 参数表 See selections Parameter list	见选型 参数表 See selections Parameter list	普通 Y ₂ Normal Y ₂	见选型 参数表 See selections Parameter list	见表 P119 See the table P119	见表 P6 See the table P6
	轴伸法兰式 F Shaft-extended & flange-mounted F			防爆 B Explosion protection B			
	普通轴伸式轴输入 S General Shaft- extension input S			制动 E Brake E			
	轴伸法兰式轴输入 FS Shaft-extended & flange-mounted input FS			变频 V Frequency conversion V			
				变频制动 VE Brake by frequency conversion VE			
				多速 D Multi-speed D			
				分马力 F Fractional horsepower F			

C(CF) 系列选型参数表 | Parameter List Selections of C(CF) Series

机座号 Housing No.	输入功率 (KW) Input power	减速比 Reduction ratio						许用转矩 N.m Permissible torque	
		6.4	4.6	3.7	3	2.2	1.7		
		许用输出转矩 N.m Permissible output torque							
C61	四极	0.25	10.7	7.7	6.2	5	3.7	2.8	60
		0.37	15.8	11.4	9.2	7.4	5.5	4	
		0.55	23	17	13.6	11	8	6.2	
		0.75	32	23	18.6	15	11	8.5	
		1.1	47	34	27	22	16	12	
		1.5		46	37	30	22	17	
		2.2			54	44	32	24	
		3				60	44	34	
	六极	0.25	16	12	9.3	7.5	5.5	4.2	
		0.37	24	17	14	11	8	6	
		0.55	35	26	20	16.5	12	9	
		0.75	48	34	28	22	16.5	12.5	

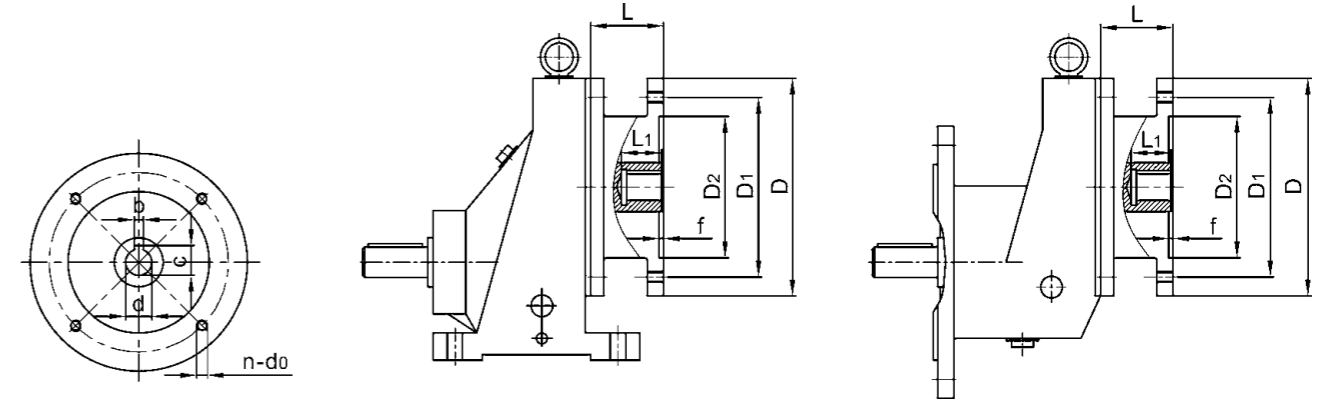
机座号 Housing No.	输入功率 (KW) Input power	减速比 Reduction ratio						许用转矩 N.m Permissible torque	
		6.4	4.6	3.7	3	2.2	1.7		
		许用输出转矩 N.m Permissible output torque							
C71	四极	0.75	32	23				125	
		1.1	47	34	27				
		1.5	64	46	37	30			
		2.2	94	68	54	44	32		
		3		92	75	60	44		34
		4		123	99	80	59		45
		5.5				110	81		62
	7.5					111	84		
	六极	0.55	35	26					
		0.75	48	34	28				
1.1		70	52	40	33	24	18		
	1.5	96	68	56	44	33	25		
C81	四极	1.5	64					220	
		2.2	94	68	54				
		3	128	92	74	60			
		4	171	123	99	80	59		
		5.5		170	136	110	81		62
		7.5		220	186	150	111		84
	六极	11				220	162		123
		15					220		168
		1.1	70	52					
		1.5	96	68	56				
	2.2	140	100	82	64	48	36		
C91	四极	2.2	94					400	
		3	128						
		4	171						
		5.5	235	170					
		7.5	320	232	186				
		11		340	270	220			
		15			368	300	220		208
		18.5				370	272		208
	六极	22					324		248
		1.5	96						
	2.2	140	100	82					
	3	191	136	112	87	65	49		
C101	四极	5.5	235					660	
		7.5	320	232					
		11	470	340	270				
		15	641	463	368	300			
		18.5			458	370			
		22			545	440	324		
		30				600	440		337
		37					542		416
	六极	45					660		506
		3	191	136					
	4	255	181	149	116	87	65		
	5.5	350	250	205	160	120	90		
四极 4-pole	输出转速 r/min Output speed	219	305	378	467	636	824		
六极 6-pole	输出转速 r/min Output speed	146	203	252	311	424	550		

■ C 系列外形及安装尺寸 | Overall & Installation Dimension of C Series



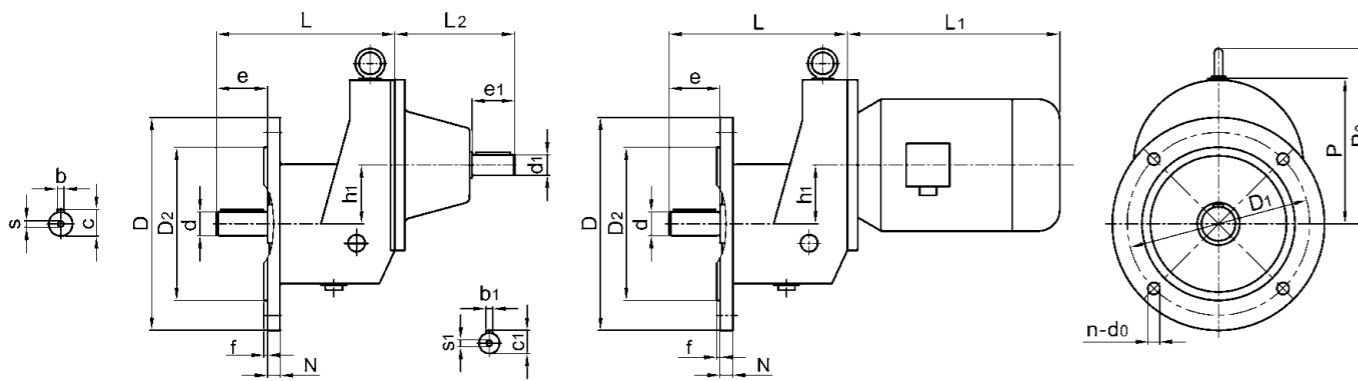
机座号 Housing No.	安装尺寸 (W) Installation dimension (W)						输出轴尺寸 Output shaft dimension						输入轴尺寸 Input shaft dimension					外形尺寸 Overall dimension										
	H ₀	A ₁	A ₀	B ₀	n	d ₀	d	e	b	c	s	d ₁	e ₁	b ₁	c ₁	s ₁	A	B	T	h	H	H ₁	L	L ₂	L ₁			
61	80	25	120	135	4	12	60	25js6	50	8	28	M8	19js6	40	6	21.5	M6	155	180	45	20	220	255	170	120			
71	90	25	150	170	4	14	69	40k6	80	12	43	M10	24js6	50	8	27	M8	190	230	60	25	263	307	230	140			
81	100	30	160	215	4	18	95	45k6	90	14	48.5	M12	28js6	60	8	31	M8	210	290	70	30	320	365	250	180			
91	120	33	180	260	4	20	115	50k6	100	14	53.5	M16	38k6	80	10	41	M10	240	340	75	35	385	430	295	220			
101	140	32	210	310	4	22	130	60k6	120	18	64	M16	42k6	110	12	45	M12	270	400	80	45	445	490	340	270			

■ C(CF) 系列输入联接法兰尺寸 | Input Dimension of Flange Connected with C(CF) Series



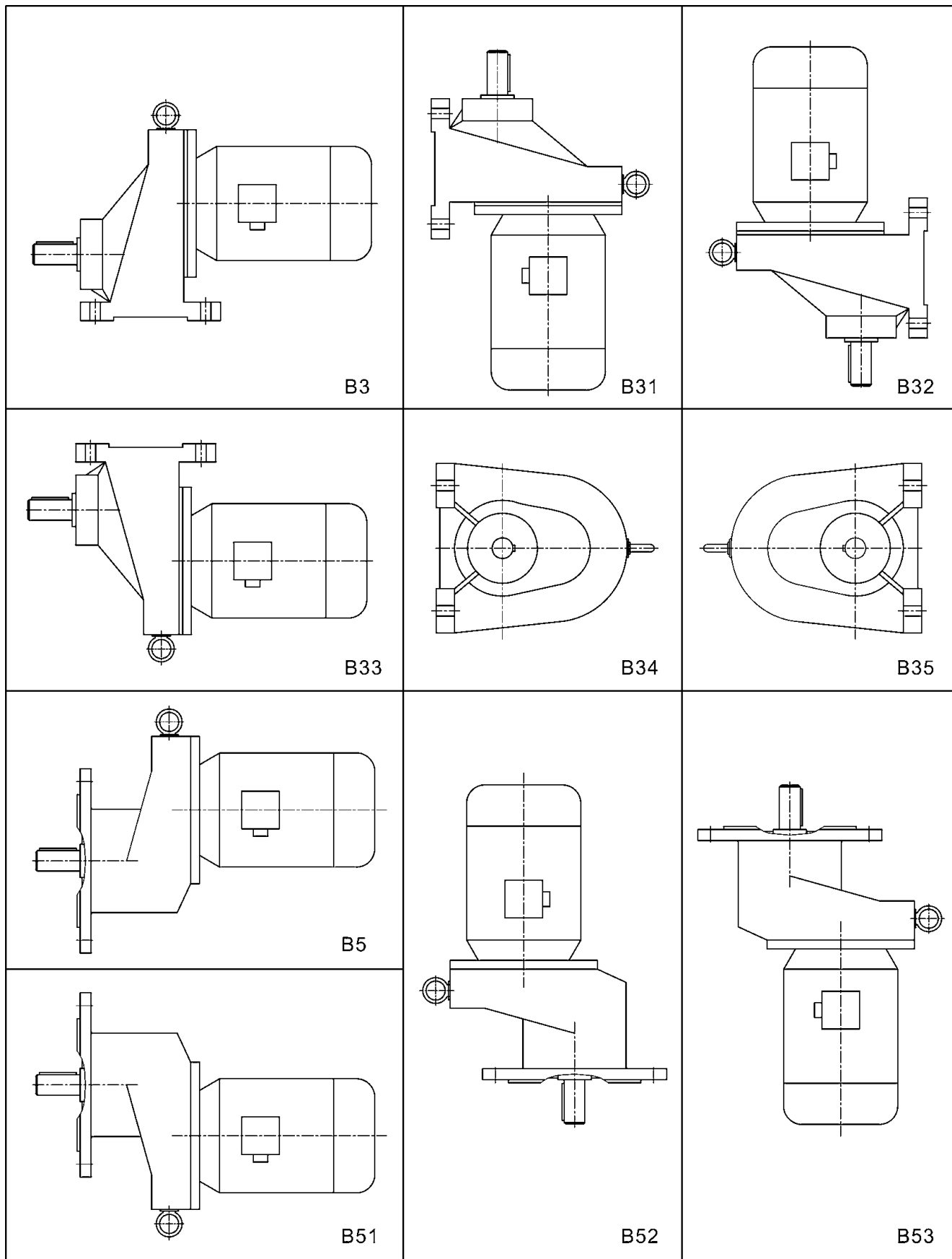
机座号 Housing No.	D	D ₁	D ₂	f	L	d	b	c	n	d ₀	L ₁
61	140	115	95H7	4	57	11F8	4	12.8	4	M8	26
	160	130	110H7	4	57	14F8	5	16.3	4	M8	33
	200	165	130H7	4	57	19F8	6	21.8	4	M10	43
					67	24F8	8	27.3			53
250	215	180H7	5	70	28F8	8	31.3	4	M12	63	
71	200	165	130H7	4	67	19F8	6	21.8	4	M10	43
						24F8	8	27.3			53
	250	215	180H7	5	70	28F8	8	31.3	4	M12	63
300	265	230H7	5	100	38F8	10	41.3	4	M12	83	
81	200	165	130H7	4	67	24F8	8	27.3	4	M10	53
	250	215	180H7	5	70	28F8	8	31.3	4	M12	63
	300	265	230H7	5	100	38F8	10	41.3	4	M12	83
91	250	215	180H7	5	70	28F8	8	31.3	4	M12	63
	300	265	230H7	5	100	38F8	10	41.3	4	M12	83
						48F8	14	51.8			
101	300	265	230H7	5	100	38F8	10	41.3	4	M12	83
	350	300	250H7	5	140	42F8	12	45.3	4	M16	115
400	350	300H7	5	140	55F8	16	59.3	4	M16	115	

■ CF 系列外形及安装尺寸 | Overall & Installation Dimension of CF Series



机座号 Housing No.	安装尺寸 (W) Installation dimension (W)						输出轴尺寸 Output shaft dimension						输入轴尺寸 Input shaft dimension					外形尺寸 Overall dimension										
	D ₁	D ₂	f	n	d ₀	h ₁	d	e	b	c	s	d ₁	e ₁	b ₁	c ₁	s ₁	D	N	P	P ₀	L	L ₂	L ₁					
61	165	130h7	3.5	4	12	60	25js6	50	8	28	M8	19js6	40	6	21.5	M6	200	12	138	175	170	120						
71	215	180h7	4	4	15	69	40k6	80	12	43	M10	24js6	50	8	27	M8	250	15	173	217	230	140						
81	265	230h7	4	4	15	95	45k6	90	14	48.5	M12	28js6	60	8	31	M8	300	18	220	267	250	180						
91	300	250h7	5	4	19	115	50k6	100	14	53.5	M16	38k6	80	10	41	M10	350	20	265	310	295	220						
101	400	350h7	5	8	19	130	60k6	120	18	64	M16	42k6	110	12	45	M12	450	22	305	350	340	270						

■ **C(CF) 系列安装形式** | Installation Type of C(CF) Series



C