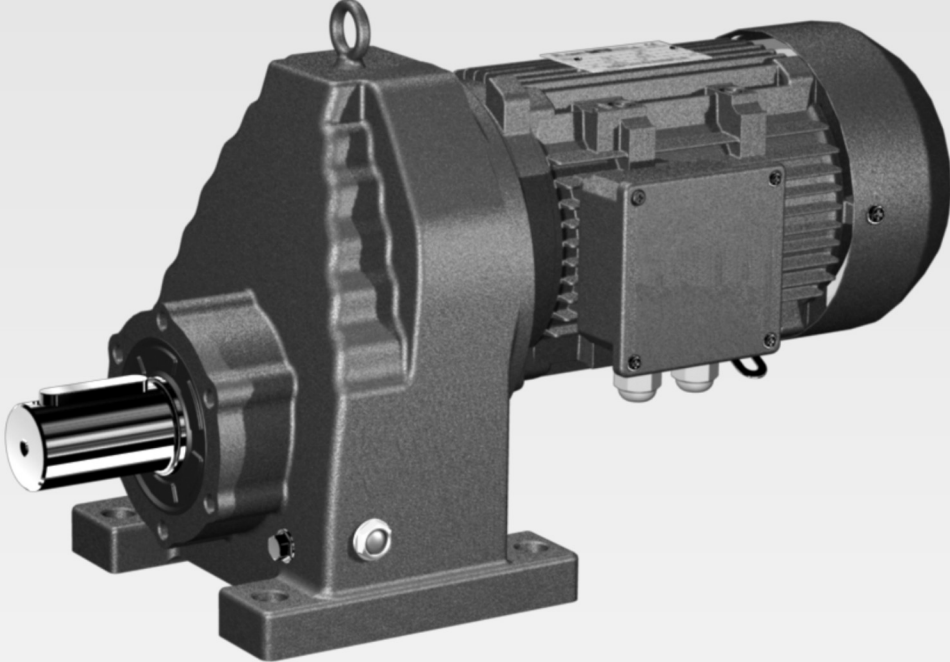


SC 系列齿轮减速机

SC Series of Gear Reducer



▲ 概述 | Introduction

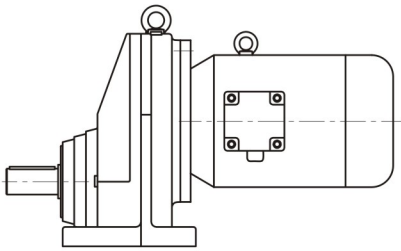
SC 系列减速机由于传动性能可靠、结构合理、高效低噪音等特点，不仅可作为无级变速器的模块组合件，也可以作为单独传动元件。广泛运用于化工、食品、制药、工程、塑料、印刷、电子等行业的机械传动装置上，它的主要性能特点：

- 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。

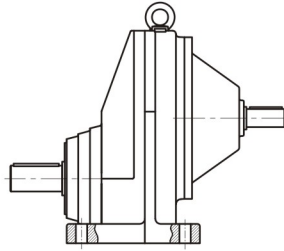
C serie gear reducer is featured by reliable transmission, reasonable structure, high efficiency and low noise. It can be used either as the module unit of stepless speed variator or as an independent transmission unit. C serie gear reducer is now widely used in the transmission equipments in fields 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.

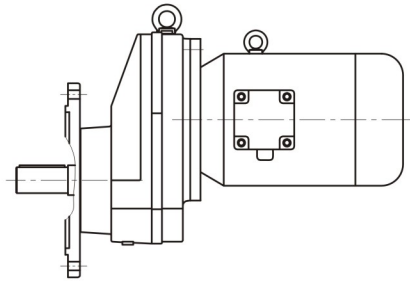
▲ SC(SCF) 系列减速机设计方案 | Design of SC(SCF) Series



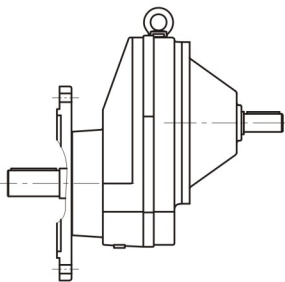
SC...Y...
轴伸式底脚安装斜齿轮减速机
Shaft extended & base-mounted assembled helical gear reducer



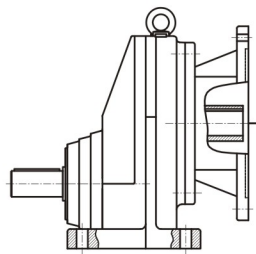
SCS...
轴伸式底脚安装，轴输入斜齿轮减速机
Shaft extended & base-mounted assembled helical gear reducer with input axis



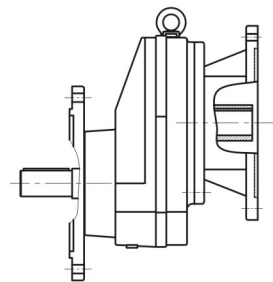
SCF...Y...
轴伸法兰式安装斜齿轮减速机
Shaft extended & flange-mounted helical gear reducer



SCFS...
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



SC...
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.



SCF...
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.



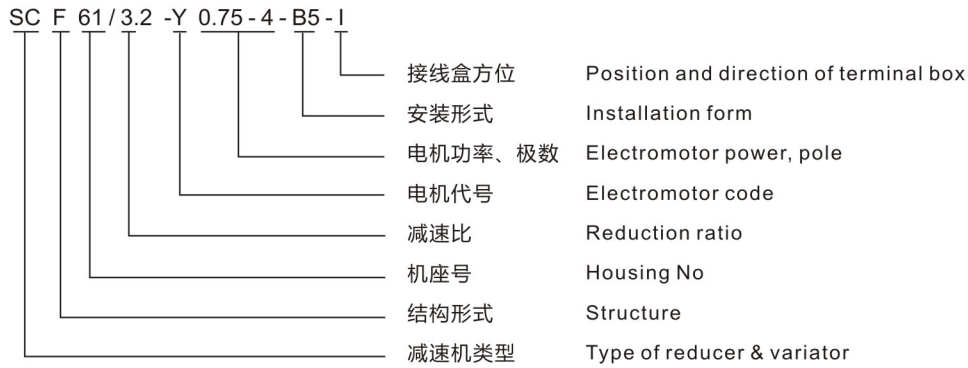
▲ SC(SCF) 系列选型 | Options of SC(SCF) Series

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=1.5KW	
○ 电源电压 / Voltage	380V	
○ 电源频率 / Frequency	50Hz	
○ 要求转速 / Speed required	347r/min	
○ 负荷性质及运转时间 / Load pattern and operation time ● 被驱动设备工况的使用系数 K_A / Usage coefficient of the drive machine K_A ○ 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 $K_A=1.25$ 查表P2 启动次数: 5次 / 小时 $K_s=1$ 查表P4 可靠度: 一般 $K_R=1$ 查表P4 $K=K_A \cdot K_s \cdot K_R=1.25$	Uniform load, 14 hours/day $K_A=1.25$ check the table P2 Number of startups: 5 times/hour $K_s=1$ check the table P4 Reliability: normal $K_R=1$ 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 B3 查表P32	Shaft extended & flange-mounted install B3 check the table P32
○ 承载能力计算 / Calculation of bearing capacity ● 确认机型 / Confirmation of machine	$M_{S2}=9550 \cdot P / N_2$ $=40N \cdot m$ $M_{2min} > M_{S2} \cdot K = 50N \cdot m$ 根据 N_2 及 M_2 查表 P29 得: SC71/4.04-Y2.2-4 Based on N_2 and M_2 & table P29: SC71/4.04-Y2.2-4	
○ 环境条件 / Environmental condition ● 确认环境条件 / Confirmation of environmental condition	室内、环境温度 28°C OK	Inside, ambient temperature 28°C OK
○ 电机规格 / Electromotor specification ● 确认电机规格 / Confirmation of electromotor specification	2.2-4、380V、50Hz 无制动器、室内型 / Without brake, for inside OK	
● 结束选型 / End of selection	SC71/4.04-Y2.2-4 无制动器、室内型 / Without brake, for inside	



▲ SC(SCF) 系列型号规格表示方式
Denotation of Specification & Dimension of SC(SCF) Series



减速机类型 Type of reducer	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 SC (SCF) Helical gear reducer with hard surface SC (SCF)	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 Normal Y	见选型 参数表 See selections Parameter list	见表 P32 See the table P32	见表 P6 See the table P6
	轴伸法兰式 F Shaft-extended & flange-mounted F&			防爆 YB Explosion protection YB			
	普通轴伸式轴输入 S General Shaft- extension inputs			制动 YEJ Brake YEJ			
	轴伸法兰式轴输入 FS Shaft - extended & flange-mounted input FS			变频 YVF Frequency conversion YVF			
				变频制动 YVFEJ Brake by frequency conversion YVFEJ			
				多速 YD Multi-speed YD			
				分马力 F Fractional horsepower F			

▲ SC(SCF) 系列选型参数表 | Parameter List Selections of SC(SCF) 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		
		1.4	1.61	1.86	2.04	2.4	2.54	2.89	3.2	3.77	4.25	4.53	5.18		6.07	
		许用输出转矩 N. m Permissible output torque														
SC61 SCF61	四极 4-pole	0.12										3.4	3.6	4.1	4.9	134
		0.18				2.5	2.9	3.1	3.5	3.8	4.5	5.1	5.4	6.2	7.3	
		0.25				3.4	4	4.2	4.8	5.3	6.3	7.1	7.5	8.6	10	
		0.37				5	5.9	6.3	7.1	7.9	9.3	10.5	11.2	12.8	15	
		0.55		5.9	6.8	7.5	8.8	9.3	10.6	11.8	13.8	15.6	16.6	19		
		0.75		8	9.3	10.2	12	12.7	14.5	16	19	21	22	26		
		1.1	10	11.8	13.7	15	17.6	18.7	21	23.5	28	31	33			
		1.5	14	16	18.6	20.4	24	25	29	32	37	42	45			
		2.2	20	23.6	27	30	35	37	42	47	55					
		3	28	32	37	40	48	51	58	64	72					
		4	37	43	50	54	64	68	77	85						
		5.5	51	59	68	74	88	93								
7.5	70	80	93	102	120	127										
输出转速 r/min 四极 n=1400 Output speed 4-pole n=1400		1000	870	753	687	584	552	485	438	372	330	310	271	231		
SC61 SCF61	六极 6-pole	0.18									7.7	8.2	9.4	10.9		
		0.25									10.7	11.4	13	15.2		
		0.37									14	15.8	16.8	19		
		0.55									20.8	23	25	28		
		0.75								24	28	32	35			
		1.1								41	47	50				
输出转速 r/min 六极 n=930 Output speed 6-pole n=930								291	247	219	206	180	154			



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		
		1.42	1.67	1.88	2.13	2.43	2.7	3.08	3.25	3.67	4.04	4.73	5.3		5.63	
		许用输出转矩 N. m Permissible output torque														
SC71 SCF71	四极 4-pole	1.1											35	39	41	215
		1.5					24	27	31	32	37	40	47	53	56	
		2.2	21	24.5	27	31	35	40	45	48	54	59	70			
		3							61	65	73	81	95			
		4	38	44	50	57	65	72	82	87	98	108				
		5.5	52	61	69	78	89	99	113	119						
		7.5	71	84	94	106	121	135	154	163						
11	104	122	138.2	156	178											
输出转速 r/min 四极n=1400 Output speed 4-pole n=1400		985	839	745	658	577	519	455	431	382	347	296	265	249		

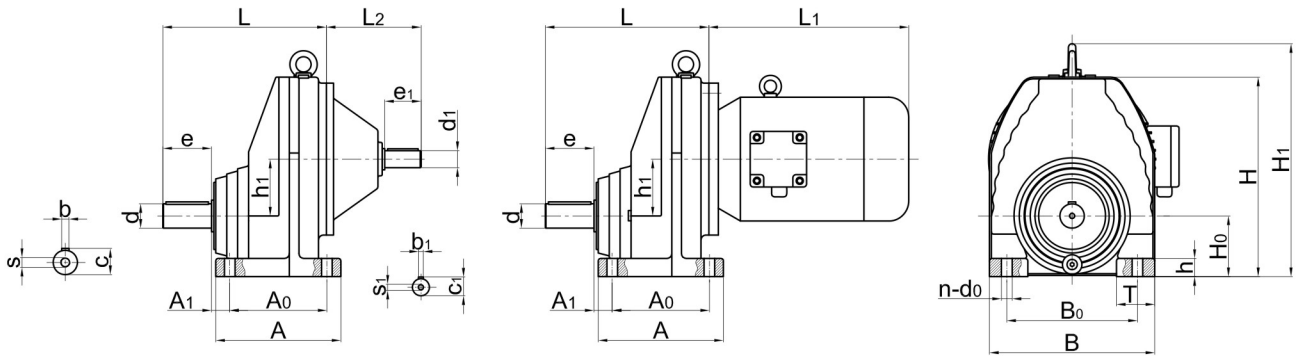
机座号 Housing No.	输入功率 (KW) Input power	减速比 Reduction ratio												许用转矩 N. m Permissible torque		
		1.39	1.6	1.93	2.15	2.48	2.76	3.09	3.48	3.78	4.5	5.07	5.56		6.45	
		许用输出转矩 N. m Permissible output torque														
SC81 SCF81	四极 4-pole	3									75.7	90	101	111	129	405
		4									101	120	135	149		
		5.5				79	91	101	113	128	139	165				
		7.5	70	80	97	108	124	138	155	174	189	225				
		11	102	118	142	158	182	202	227	255						
		15	139	160	193	215	248	276	309	348						
		18.5	172	198	238	265	306	341								
22	204	235	284	316	364	405										
输出转速 r/min 四极n=1400 Output speed 4-pole n=1400		1008	875	726	652	565	508	454	403	371	312	277	252	218		

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	
		1.42	1.64	1.96	2.24	2.64	2.92	3.3	3.64	4.04	4.52	4.91	5.79		
		许用输出转矩 N. m Permissible output torque													
SC91 SCF91	四极 4-pole	5.5	52	60	72	82	97	107	121	133	148	166	180	212	595
		7.5						146	165	182	202	226	245	290	
		11	104	120	144	165	194	214	242	267	297	332			
		15	142	164	196	225	264	292	330	364	404	453			
		18.5	175	203	242	277	326.4	360	407	450					
		22	209	241	288	329	388	429	484	535					
		30	285	329	393	449	529	585							
输出转速 r/min 四极n=1400 Output speed 4-pole n=1400		986	854	715	625	531	480	425	385	347	310	286	242		

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		
		1.41	1.71	1.95	2.3	2.64	3.07	3.38	3.81	4.2	4.65	5.19	5.61		6.63	
		许用输出转矩 N. m Permissible output torque														
SC101 SCF101	四极 4-pole	5.5										170	190	206	243	830
		7.5									210	232	260	281	331	
		11					194	225	248	288	308	341	381			
		15	142	171	195	230	264	307	338	381	420	465	520			
		18	175	211	241	284	326	379	417	470	518					
		22	208	251	287	338	388	40	496	559	616					
		30	283	343	391	461	529	614	676							
		37	349	423	482	568	652	757	834							
45	425	514	586	691	793	921	1014									
输出转速 r/min 四极n=1400 Output speed 4-pole n=1400		993	819	718	609	531	457	415	368	334	302	270	250	212		

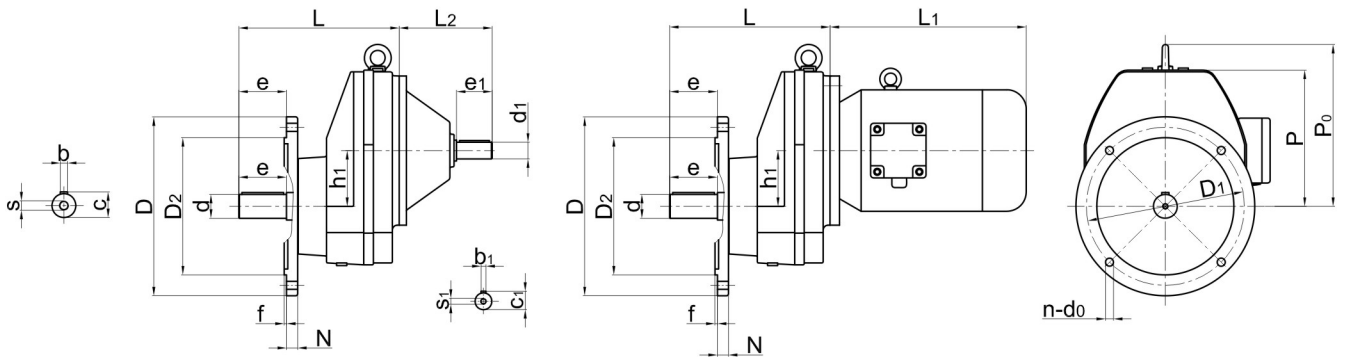


▲ SC 系列外形及安装尺寸 | Options & Installation Dimension of SC Series



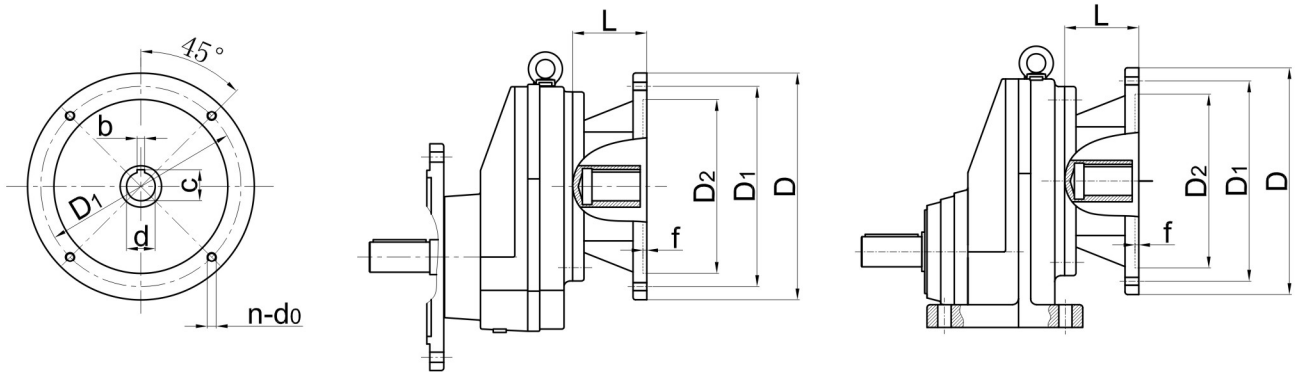
机座号 Housing No.	安装尺寸 Installation dimension							输出轴尺寸 Output shaft dimension					输入轴尺寸 Input shaft dimension					外形尺寸 Overall dimension								
	H ₀	A ₁	A ₀	B ₀	n	d ₀	h ₁	d	e	b	c	s	d ₁	e ₁	b ₁	c ₁	s ₁	A	B	T	h	H	H ₁	L	L ₂	L ₁
61	80	25	120	135	4	13.5	60	25k6	50	8	28	M10	19k6	40	6	21.5	M6	150	170	35	20	226	263	201	123	See the table for electromotor P5
71	90	25	150	170	4	17.5	72	30k6	60	8	33	M10	24k6	50	8	27	M8	190	204	50	25	271	315	227	151	
81	100	30	160	215	4	17.5	93.5	40k6	80	12	43	M16	28k6	60	8	31	M10	206	266	60	30	332	377	269	156	
91	112	40	185	250	4	22	116	50k6	100	14	53.5	M16	38k6	80	10	41	M12	240	320	70	35	393	438	316	214	
101	140	32	210	310	4	22	130	60k6	120	18	64	M20	42k6	110	12	45	M16	260	360	80	45	459	504	364	281	

▲ SCF 系列外形及安装尺寸 | Options & Installation Dimension of SCF Series



机座号 Housing No.	安装尺寸 Installation dimension						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	11	60	25k6	50	8	28	M8	19k6	40	6	21.5	M6	200	12	147	184	201	123	See the table for electromotor P5
71	215	180h7	4	4	13.5	72	30k6	60	8	33	M10	24k6	50	8	27	M8	250	15	181	225	227	151	
81	265	230h7	4	4	13.5	93.5	40k6	80	12	43	M16	28k6	60	8	31	M8	300	16	232	279	269	156	
91	300	250h7	5	4	17.5	116	50k6	100	14	53.5	M16	38k6	80	10	41	M10	350	18	281	326	316	214	
101	400	350h7	5	8	17.5	130	60k6	120	18	64	M20	42k6	110	12	45	M16	450	22	319	364	364	281	

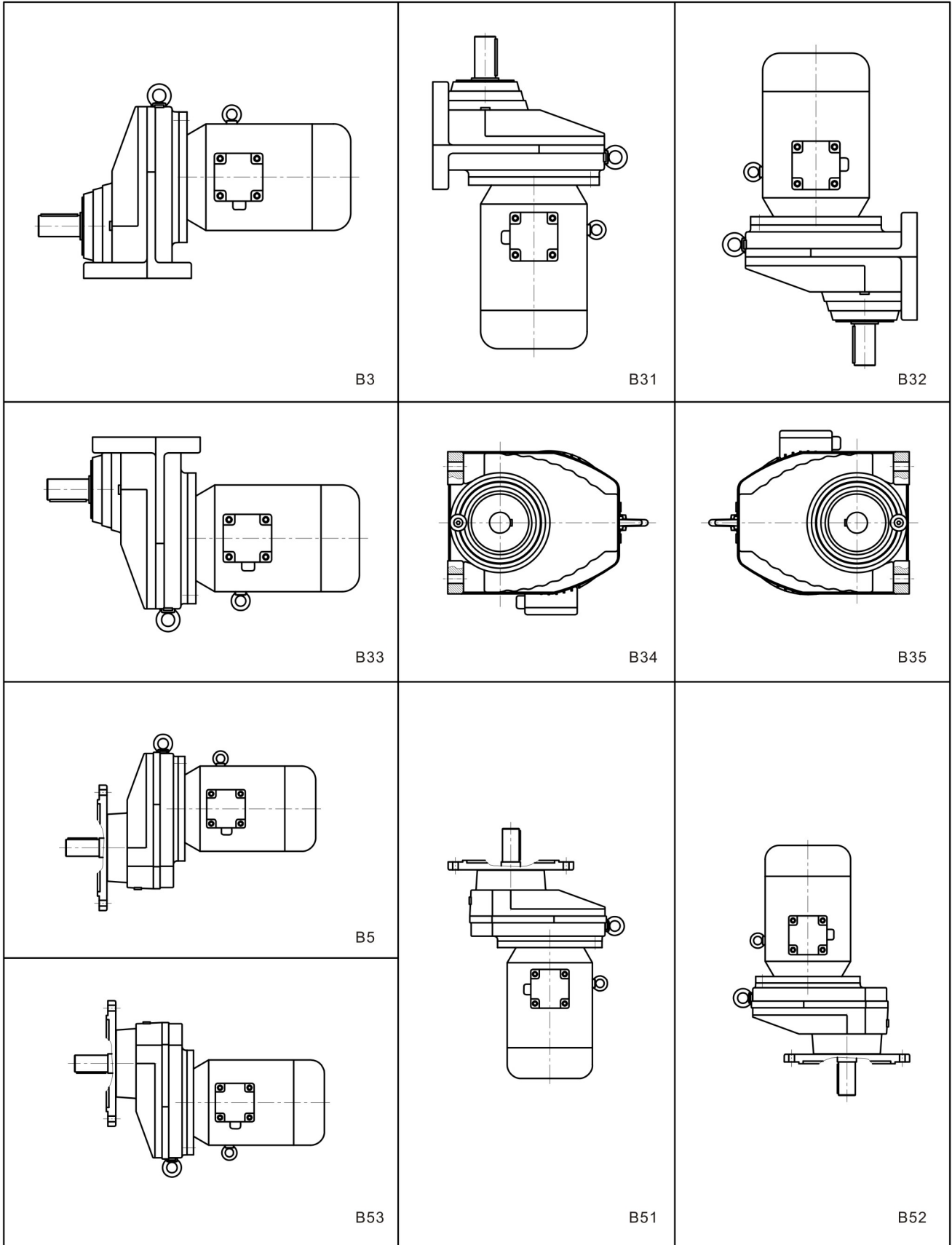
▲ SC(SCF) 系列输入联接法兰尺寸 | Input Dimension of Flange Connected with SC(SCF) Series



机座号 Housing No.	电机机座号 Motor frame size	D	D ₁	D ₂	f	L	d	b	c	n	d ₀
61	63	140	115	95H7	4	56	11F8	4	12.8	4	M8
	71	160	130	110H7	4	57	14F8	5	16.3	4	M8
	80 90	200	165	130H7	4	72	19F8	6	21.8	4	M10
							24F8	8	27.3		
	100/112	250	215	180H7	5	68	28F8	8	31.3	4	M12
132	300	265	230H7	5	105	38F8	10	41.3	4	M12	
71	80 90	200	165	130H7	4	72	19F8	6	21.8	4	M10
							24F8	8	27.3		
	100/112	250	215	180H7	5	68	28F8	8	31.3	4	M12
	132	300	265	230H7	5	105	38F8	10	41.3	4	M12
81	100/112	250	215	180H7	5	74	28F8	8	31.3	4	M12
	132	300	265	230H7	5	98	38F8	10	41.3	4	M12
	160 180	350	300	250H7	6	119	42F8	12	45.3	4	M16
							48F8	14	51.5		
91	132	300	265	230H7	5	92	38F8	10	41.3	4	M12
	160 180	350	300	250H7	6	113	42F8	12	45.3	4	M16
							48F8	14	51.8		
	200	400	350	300H7	6	123	55F8	16	59.3	4	M16
101	132	300	265	230H7	5	76	38F8	10	41.3	4	M12
	160 180	350	300	250H7	6	112	42F8	12	45.3	4	M16
							48F8	14	51.8		
	200	400	350	300H7	6	130	55F8	16	59.3	4	M16
	225	450	400	350H7	6	151	60F8	18	64.4	8	M16



▲ SC(SCF) 系列安装形式 | Installation Type of SC(SCF) Series





▲ SC系列润滑油量表 | Lubricating Oil Capacity Sheet of SC Series

安装形式 Installation form	B3	B31	B32	B33	B34	B35	B5	B51	B52
机座号 Housing No.	润滑油量 (升) Lubricating Oil Capacity (L)								
SC61/SCF61	0.5	0.8	1.6	1.6	1.0	1.0	0.5	0.8	1.6
SC71/SCF71	0.7	0.9	2.5	2.5	1.5	1.5	0.7	0.9	2.5
SC81/SCF81	1.0	1.5	4.3	4.3	2.7	2.7	1.0	1.5	4.3
SC91/SCF91	2.1	3.2	6.8	6.8	4.2	4.2	2.1	3.2	6.8
SC101/SCF101	3.1	5.0	9	9	6.5	6.5	3.1	5.0	9

▲ SC系列重量表 (不含电机) | Weight Table of SC Series (Without Motor)

机座号 Housing No.	SC61	SC71	SC81	SC91	SC101
重量 Weight (kg)	14	24	41	68	103
机座号 Housing No.	SCF61	SCF71	SCF81	SCF91	SCF101
重量 Weight (kg)	18	27	46	75	118

▲ SC(SCF) 系列减速机联接法兰重量表 (kg)

Coupling flange weight form of SC(SCF) series speed reducer

减速机类型 Reducer type	电机机座号 Motor frame size										
	63	71	80	90	100	112	132	160	180	200	225
SC61/SCF61	3	3	5	5	10	10	17				
SC71/SCF71	5	5	7	7	12	12	19	37			
SC81/SCF81			9	9	14	14	22	38	38		
SC91/SCF91					17	17	22	42	42	58	
SC101/SCF101					23	23	23	43	43	58	65

▲ SC(SCF) 系列减速机输入轴型输入部份重量表 (kg)

Weight form of input part of input shaft type of SC(SCF) series speed reducer (kg)

减速机类型 Reducer type	SC61/SCF61	SC71/SCF71	SC81/SCF81	SC91/SCF91	SC101/SCF101
重量 Weight (kg)	4	8	16	17	33



为确保减变速机的正确操作，以延长其使用寿命，请仔细阅读以下事项：

Please read the following instruction carefully for correct operation and extension of the service life of the reducer:

▲ 安装 | Installation

- 安装时要检查减变速器铭牌与电动机铭牌是否附合订货要求。
- 减变速器安装方位应与订货时指定的方位一致，且使加油（透气）螺孔朝上。
- 减变速器安装时配合面要平整，底座要求强度高、刚性好且具有减震性，避免共振。
- 在输出轴上安装联轴器、带轮、链轮、齿轮、制动器、离合器等联接件时，应利用轴端螺孔等将联接件压装（在轴头涂上润滑油），严禁用锤重击。
- 减变速器输出采用联轴器联接时（尽量不要使用刚性联轴器），必需校正轴线使其同心，其安装误差允许大于联轴器的允许偏差。
- 为防止事故的发生，所有的旋转部位应按要求装防护罩或盖板。
- 立卧机型安装时应注意过定位，影响装配精度。
- 电源接线必须符合电机接线要求并安装接地装置，以防触电。
- 电动机要接有 overload 保护装置，以免电机烧坏。
- 安装孔输出的减速机时，与其配合的轴应用木锤轻轻敲击，装配到位（要求在轴上加润滑油）。
- 需要装扭力臂时，应在相互自由状态下安装。
- Checking the nameplates on the products whether meet the ordering requests.
- Installation position should be same as that ordered. And the fuel (air) screw right side up.
- The surface where the products installed on should be smooth, high strength, high rigidity and shock absorption, which can avoid resonance.
- When install couplings, pulleys sprockets, gears, brakes, clutches and other connections on the output shaft, using Screw shaft to press-fit (paint oil in the shaft), hammer is strictly prohibited.
- When connecting with couplings (not use rigid couplings), correcting axis to make them concentric. The installation error must be less than coupling's allowable deviation.
- Avoiding the accidents, all install parts should be covered with protective covers.
- When install vertical or horizontal models, please pay attention to the location, in case of the assemble precision.
- Power wiring must comply with the requirements of electrical wiring and install a grounding device to prevent electric shock.
- Product should be connected with overload protection device to avoid the burning out.
- Mounting hole when output gear-worn gearing, the shaft can be into the hole with gently tap. And add lubricating oil in the shaft at the mean time.
- Install torque arm at the free states.

▲ 使用 | Usage

- 减变速器运转前，应根据负载大小及工作状况来确定是否会引超过载现象，必要时应在输出轴上安装过载保护装置。
- UD系列减变速器运转前应顺时针转动手轮(朝电机方向)，感觉有点紧后方可接通电源启动。
- 减变速器可以连续工作，同时允许正反运转，特别注意：换向时应让机器停止后再反向运转，减少换向冲击。
- 减变速器使用前请旋松透气帽（或拔掉红塑料塞头），以利通气。
- 无级变速器应尽量在中高速范围内使用，避免低速长时间使用，以显示其优良特性。
- UD系列无级变速器在停机时严禁调速，限位螺钉在出厂前已调整好转速范围，切勿任意调整，以免损坏机器。
- 工作环境温度在-15°C~50°C，负载温度如下表：
- Before operation, determining whether would cause overload according to the load size and working conditions, install protective device on the output shaft if needed.
- UD Series Reduction unit before the operation should turn the handwheel clockwise(Toward the direction of the motor), Feel a little only after the power source is switched on to start.
- Variable Speeds Gearing can work continuously, and can work reversely. Attention: The machines have to be stopped before work reversely.
- Loosen the breathable cap or remove the red plastic plug before operation to facilitate ventilation.
- Infinitely variable speeds gearing should be used in high-speed range to show the excellent properties.
- UD Series Infinitely Variable speeds gearing is strictly prohibited adjust speed during shutdown. Limit screw has been adjusted the speed range, do not adjust arbitrarily.
- Work ambient temperature should be -15°C~50°C, and the over loading temperature is listed in the following table.

规格型号 Type and specification	负载温度 Over loading temperature	机体表面温度 Surface temperature of the reducer
SG0800~SG0805	≤40°C	≤90°C
SG0807	≤50°C	≤100°C
SC,SR37~SR107	≤40°C	≤90°C
SR137~SR167	≤50°C	≤100°C
UD02~UD40	≤40°C	≤90°C
UD75~UD150	≤50°C	≤100°C

▲ 保养 | Maintenance

- 减变速机使用中应保持表面清洁，以利散热。
- 露天使用的机器要加防雨罩。
- 平时应注意机器油位的高低，发现不足应及时补充，严禁无油或缺油运转。
- 减变速机因使用时间长而引起的漏油、渗油时，应及时检查更换密封件。
- 更换润滑油时，不同型号的润滑油绝对不能混合使用。
- 使用中如发现减变速机有异常声音，应及时停机检查，切记不可继续使用，以免质量事故。
- 润滑油应定期更换，一般首次加油运转500小时后更换新油，以后每2000小时更换一次，如遇特殊情况（工况恶劣，连续运转，发现油已浑浊）应提早换油。
- 减变速机要定期保养，一般一年保养一次，必要时可运至我公司全面保养。
- Keep the surface clean during operation to facilitate heat dissipation. Use rain cover when using outdoors.
- Pay attention to the oil level, promptly add oil when need, oil-free operation is strictly prohibited.
- When oil leakage caused by long time using, please check and replace the seals.
- When replacing oil, do not mix different types of oils.
- When hearing unusual sound, stop to check immediately, in case of the accidents.
- Change oil regularly, refueling after first 500 hrs, and every 2000hrs after then. In special circumstances (poor working conditions, continuous operation, oil turbidity, etc.), oil should be changed more frequently.
- Products should be scheduled maintain, generally once a year. You can ship to company to have comprehensive maintenance if necessary.

规格型号 Specification	润滑油牌号 Brand of lubricant	润滑油更换 Replacement of lubricant
UD	变速部分加Ub-3X 变速器专用油；带齿轮部分加CKC220中负荷工业齿轮油 Special lubricant should be applied for the transmission part. CKC220 medium-loading industry gear lubricant should be applied for the parts with gears	首次加油运转500小时后更换新油，以后每2000小时换一次油，油位处于油标中心 The first replacement of lubricant should be carried out after it runs for 500 hours, and after then the replacement shall be carried out every 2000 hours. the oil-level should be maintained in the middle of oil scale
SG080	CKC220 中负荷工业齿轮油 CKC220 medium-loading industry gear lubricant	首次加油运转500小时后更换新油，以后每2000小时换一次油，油位处于油标中心 The first replacement of lubricant should be carried out after it runs for 500 hours, and after then the replacement shall be carried out every 2000 hours. the oil-level should be maintained in the middle of oil scale
SC SR	CKC220 中负荷工业齿轮油 CKC220 medium-loading industry gear lubricant	首次加油运转500小时后更换新油，以后每2000小时换一次油，油位处于油标中心 The first replacement of lubricant should be carried out after it runs for 500 hours, and after then the replacement shall be carried out every 2000 hours. the oil-level should be maintained in the middle of oil scale

▲ 质量服务 | Quality Service

- 凡按本公司《使用说明书》规定安装、正常使用，整机未经私自拆装，确属本公司制造质量问题而引起的故障或损坏，自出厂之日起，一年内实行“三包”。对于使用不当造成故障或损坏，不属于“三包”范围。
- 凡确定为“三包”的零部件或整机，我公司免费修理，“三包”期外的零部件或整机修理，可运至我公司，酌情收取工本费。
- Customers are covered with one year limited warranty if installing and operating according to instruction manual and without disassemble machine. For damage caused by improper use, the products are not covered with the warranty.
- The parts under warranty can be repaired without charge, otherwise can be repaired with appropriate charge when ship to our company