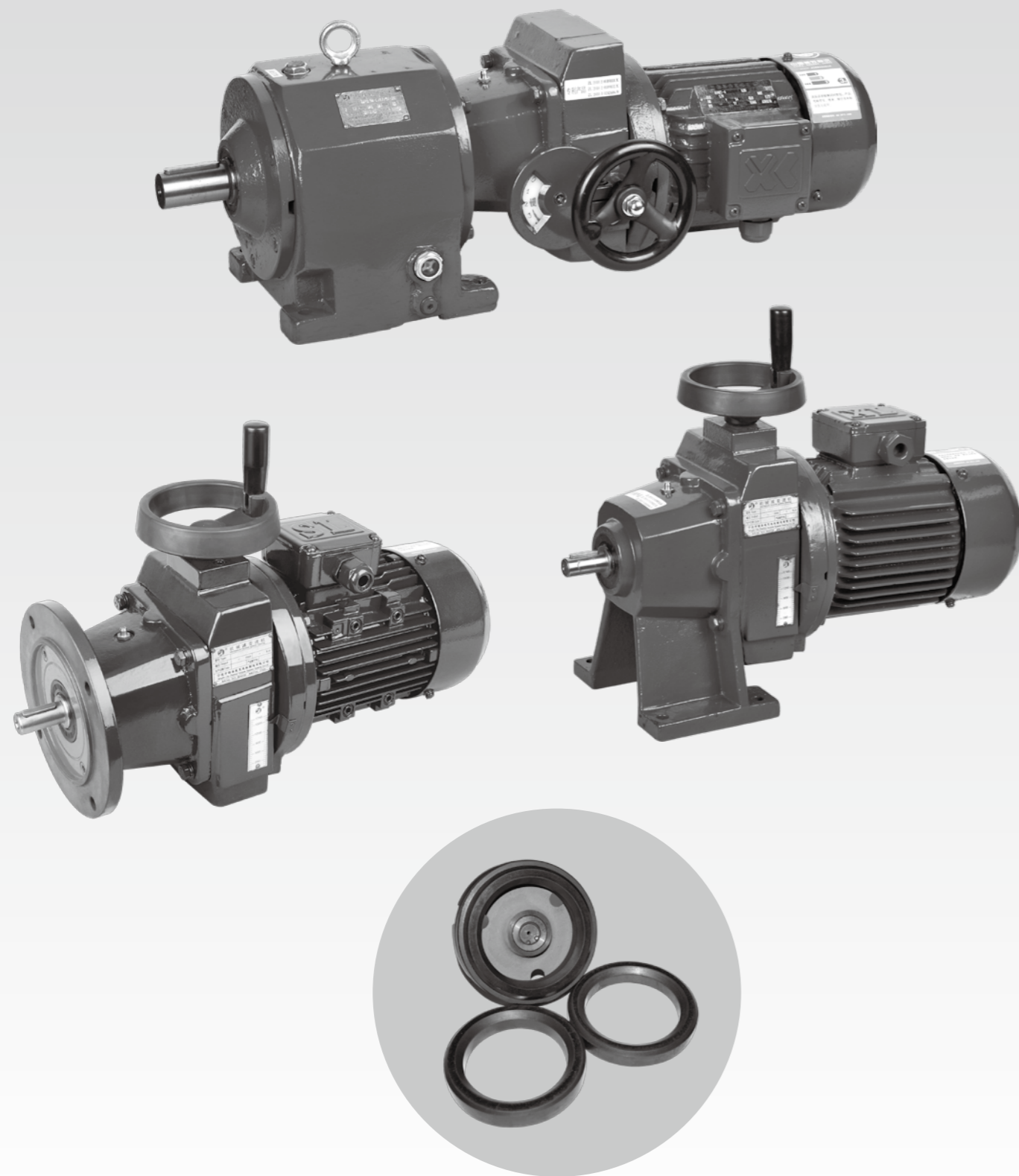


ZH 系列锥盘环盘减变速机

ZH Series of Ring-Cone Disc Reducer & Variator



■ 概述 | Introduction

ZH 系列锥盘环盘减变速机，系我公司结合国际上中小功率机械传动先进技术的基础上创新开发国内首创的新颖机械减变速机专利产品。

- 设计独特、结构合理：通过自动加压机构，使原动机功耗正比于外界负荷变化，节能效果好。
- 运动平稳、低噪音、无需润滑，由于摩擦副采用金属~非金属元件，因而噪音低，而且在干式吸震状态下工作，完全免除了漏油引起的内外部污染。
- 高效耐用：采用我公司研制成功的特种磨擦材料，有特大的磨擦系数和耐用度、输出特征基本呈恒功率特性。中高时效率达 85% 以上。
- 变速范围大：ZH 变速器变速范围 $R_b=6$ ，必要时可从零启动。不论在运转或停车时均可轻便增速或者减速，当原动机反向运转时，输出也可反向运转。
- 组合能力强，结构安装尺寸参照电机安装尺寸，可与各类减速器模块组合，实现低速无级变速，输出转速 0.07~1740r/min，具有良好的适应性。
- 维护保养、操作使用简单方便，性能稳定，可靠性高，外观美观，重量轻。

ZH 系列锥盘环盘减变速机特别适用于食品、制药、化工、电子等行业的机械传动装置上。

ZH series of ring-cone disc reducer & variator is developed initially by the Company patent obtained on the basis of integrating the advanced technology of mechanical transmission devices with medium & small power.

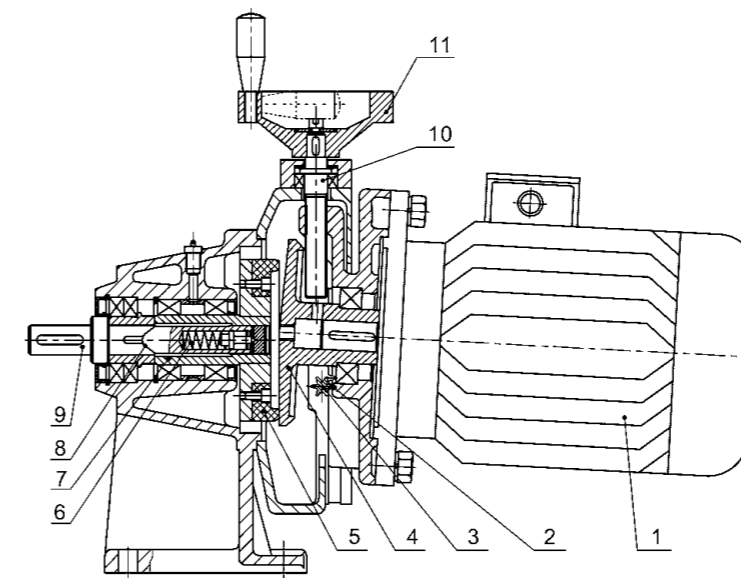
- Unique design and proper structure; it makes the power consumption of the prime motor which is in direct ratio with the external load change correspondingly by means of auto-pressed mechanism, resulting in excellent effect on energy saving.
- Stable operation, low noise, without lubrication needed; as the rubbing pair is made of metal ~ non-metal material, it is featured by low noise and totally free from internal or external pollution caused by oil leakage when working in dry and anti-vibration condition.
- High efficiency and durability; Special friction material developed by our company with extra high friction coefficient, high durability and constant output power is applied. Its efficiency at medium and high speed reaches 85% or above.
- Broad range of speed adjustment: the scope of speed adjustment of ZH gearbox is $R_b=6$. It can be started up from zero if necessary. The speed can be adjusted no matter whether it is working or stops. When the prime motor operates in the reverse direction, output also can work in the reverse direction.
- Multiple combination. Taking TV installation dimension as reference, its installation dimension can be combined with various models of gearboxes so as to achieve stepless change at low speed with output speed of 0.07~1740r/min.
- Easy to maintain and operate with stable performance, high reliability, good appearance and light in weight.

ZH series of ring-cone disc reducer & variator is especially applicable for mechanical transmission equipments used in the industries of food, pharmacy, chemical and electrics.

■ 工作原理 | Principle of Operation

停机时，锥盘 4、环盘 5 在预压弹簧 6 的作用下，产生一定的压紧力。工作时，电动机 1 驱动锥盘 4，依靠摩擦力矩带动环盘 5 转动，而使输出轴 9 运转。当输出轴上的负载发生变化时，通过自动加压凸轮 8，使磨擦副间的压紧力和磨擦力矩正比于负载而变化，因此，输出功率正比于外界负载的变化而变化。调速时，通过调速齿轮、齿条 2、3 或调速丝杆和手轮 10、11，使锥盘 4 相对于环盘 5 作径向移动，改变了锥盘与环盘的接触工作半径，从而实现了平稳的无级变速。

When it stops working, cone disc 4 and ring disc 5 will produce some compressive stress under the effectiveness of preload spring 6. When it is working, electromotor 1 drives cone disc 4 and also drives ring disc 5 to rotate with frictional force and output shaft 9 starts to work. When the load on the output shaft changes, the compressive stress and the friction torque of the rubbing pair which are both in direct ratio with the load will change correspondingly under the effectiveness of the auto pressed cam 8, therefore, power output which is in direct ratio with external load will change correspondingly too. When the speed is adjusted, cone disc 4 shall make radial movement corresponding to ring disc 5 by means of governor gear and rack 2 & 3 or lead screw and handwheel 10 & 11, which changes the contact working radius of the cone disc and the ring disc. The stable stepless speed control is finally achieved.



- | | |
|--------------------------------------|----------------------------------|
| 1 — 电动机 / Electromotor | 7 — 联接套 / Joint sleeve |
| 2、3 — 调速齿条，齿轮
Governor gear, rack | 8 — 加压凸轮 / Pressed cam |
| 4 — 锥盘 / Cone disc | 9 — 输出轴 / Output shaft |
| 5 — 环盘 / Ring disc | 10 — 调速丝杆
Governor lead screw |
| 6 — 预压弹簧
Preload spring | 11 — 手轮 / Handwheel |

ZH 系列选型 | Options of ZH Series

使用条件及选型结果 / Conditions and results

使用条件 / Condition ○

选型结果 / 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=0.55KW
○ 电源电压 / Voltage	380V
○ 电源频率 / Frequency	50Hz
○ 要求转速 / Speed required	2-12r/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 ● 确认启动系数 / 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	平行轴、卧装 B3 查表 P34 Parallel shaft, horizontal installation B3 check the table P34
○ 承载能力计算 / Calculation of bearing capacity ● 确认机型 / Confirmation of machine	$M_{S2}=9550 * P / N_{2max}$ $=437.7N.m$ $M_{2min} \geq M_{S2} * K=547.1N.m$ 根据 N2 及 M2min 查表 P21 得: ZHY1.1-CJ15/91-2 Based on N2 and M2min & table P21: ZHY1.1-CJ15/91-2
○ 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	1.1KW-6、380V、50Hz 无制动器、室内型 / Without brake, for inside OK
● 结束选型 / End of selection	ZHY1.1-CJ15/91-2-B3、380V、50Hz 无制动器、室内型 ZHY1.1-CJ15/91-2-B3 380V, 50Hz Without brake, for inside

ZH 系列型号规格表示方式 | Denotation of Specification & Dimension of ZH Series

ZH Y 0.75 - 290 FR - M - I - S



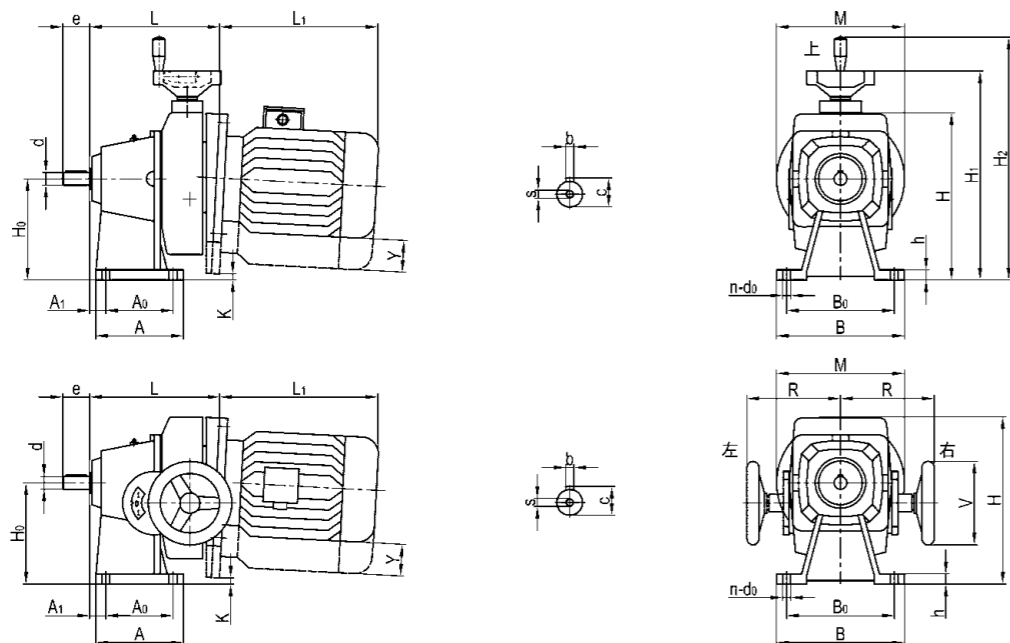
变速器类型 Type of gearbox	电机代号 Electromotor code	电机功率 Electromotor power	最低输出转速 Minimum output speed	结构形式 Structure	手轮方位 Position and direction of handwheel	安装形式 Installation form	接线盒方位 Position and direction of terminal box	数显代号 Digimatic code
锥盘环盘 减变速机 ZH Ring-cone disc reducer & variator ZH	普通 Y2 Normal Y2	见选型 参数表 See selections Parameter list	见选型 参数表 See selections Parameter list	卧式: W (不标注) Horizontal: W (unmarked)	右手轮: R (齿轮齿条调速) Right handwheel R (speed adjustment by gear and rack)	见表 P34 See the table P34	见表 P6 See the table P6	S
	防爆 B Explosion protection B				左手轮: L (齿轮齿条调速) Left handwheel L (speed adjustment by gear and rack)			
	制动 E Brake E				上手轮: T (丝杆调速) Top handwheel T (speed adjustment by lead screw)			
	变频 V Frequency conversion V			立式: F Vertical: F				
	变频制动 VE Brake by frequency conversion VE							
	多速 D Multi-speed D							
分马力 F Fractional horsepower F								

注: 如需自动控制及其它特殊要求, 请另注明。
Note: please specify automatic control or other special requirements if necessary.

ZH 系列基本型选型参数表 | Parameter List About Selections of ZH Series

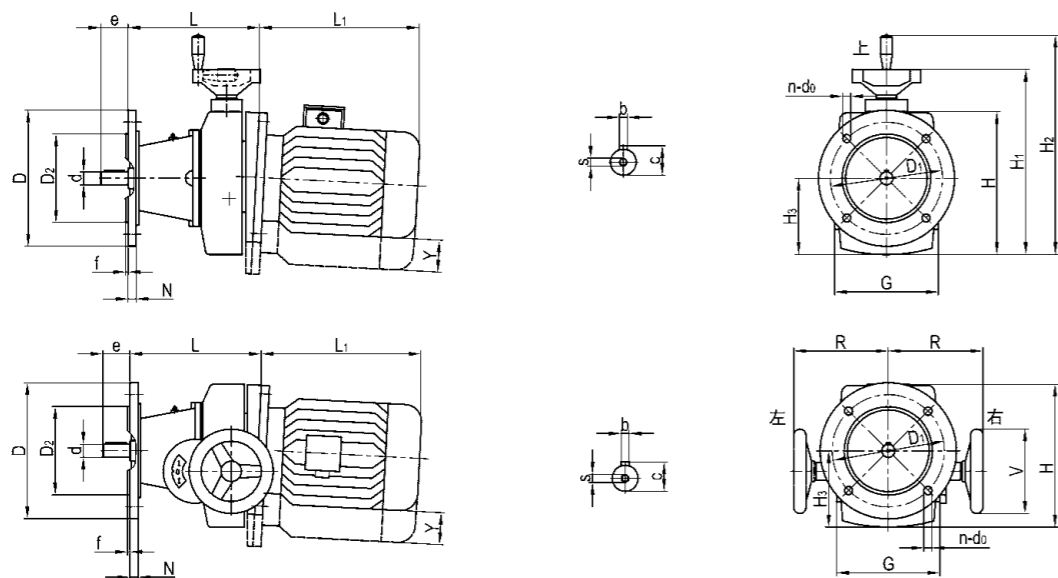
机座号 Housing No.		07				15			
输入功率 (KW) Input power	四极 4-pole	0.37	0.55	0.75	1.1	1.1	1.5	2.2	3
	六极 6-pole		0.37	0.55	0.75	0.75	1.1	1.5	2.2
型号 Model	输出转速 r/min Output torque	许用输出转矩 N.m Permissible output torque							
ZHY-	290-1740	4.2-1.7	6.2-2.5	8.5-3.4	12-5	14.5-5	19-6.8	25-8.8	30-12
	190-1160		6.5-2.6	9.6-3.9	13.2-5.3	15-5.3	22-7.8	26-9.3	32-13.6

ZH 系列基本型外形及安装尺寸 | Overall & Installation Dimension of ZH Series



机座号 Housing No.	安装尺寸 Installation dimension							输出轴尺寸 Output shaft dimension					外形尺寸 Overall dimension											
	H ₀	A ₁	A ₀	B ₀	n	d ₀	K	Y	d	e	b	c	s	A	B	h	M	R	V	H	H ₁	H ₂	L	L ₁
07	150	23	100	160	4	12	9	46	19h6	40	6	21.5	M6	130	190	15	190	142	125	248	306	356	192	参考电机见表 P5 See the table for electric motor P5
15	175	18	120	200	4	12	19	62	24h6	50	8	27	M8	150	230	15	200	166	125	305	363	413	217	

ZH-F 系列基本型外形及安装尺寸 | Overall & Installation Dimension of ZH-F Series



机座号 Housing No.	安装尺寸 Installation dimension							输出轴尺寸 Output shaft dimension					外形尺寸 Overall dimension									
	D ₁	D ₂	f	n	d ₀	Y	d	e	b	c	s	D	N	G	R	V	H	H ₁	H ₂	H ₃	L	L ₁
07	165	130h7	3.5	4	12	46	19h6	40	6	21.5	M6	200	12	152	142	125	210	268	318	112	192	参考电机见表 P5 See the table for electric motor P5
15	165	130h7	3.5	4	12	62	24h6	50	8	27	M8	200	12	200	166	125	275	333	383	145	217	

ZH-C(CF) 系列型号规格表示方式 | Denotation of specification & dimension of ZH-C(CF) Series

ZH Y 0.75 - CF 71 / 3 - 97 R - M - I - S



变速器类型 Type of gearbox	电机代号 Electromotor code	电机功率 Electromotor power	减速机类型 Type of reducer & variator	结构形式 Structure	减速机机座号 Type of reducer Housing No.	减速比 Reduction ratio	最低输出转速 Minimum output speed	手轮方位 Position and direction of handwheel	安装形式 Installation form	接线盒方位 Position and direction of terminal box	数显代号 Digimatic code
锥盘环盘 无级变速器 ZH Cone-ring disc stepless variator ZH	普通 Y ₂ Normal Y ₂	见选型 参数表 See selections Parameter list	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	见选型 参数表 See selections Parameter list	右手轮: R (齿轮齿条调速) Right handwheel R (speed adjustment by gear and rack)	见表 P34 See the table P34	见表 P6 See the table P6	S
	防爆 B Explosion protection B			制动 E Brake E				左手轮: L (齿轮齿条调速) Left handwheel L (speed adjustment by gear and rack)			
变频 V Frequency conversion V	变频制动 VE Brake by frequency conversion VE			上手轮: T (丝杆调速) Top handwheel T (speed adjustment by lead screw)							
多速 D Multi-speed D	分马力 F Fractional horsepower F										

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

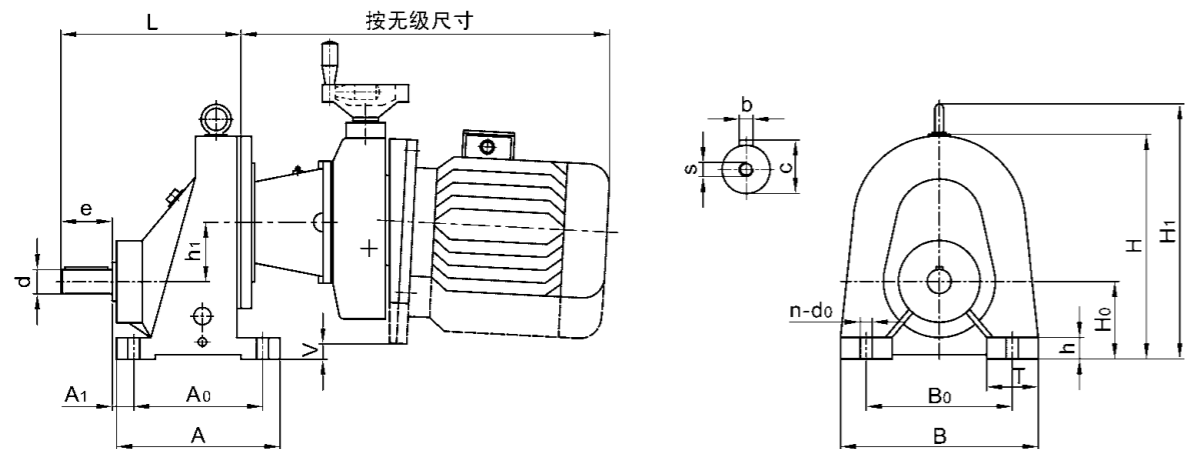
变速器 机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机 机座号 Housing No. of reducer	减速比 Reduction ratio					
			6.4	4.6	3.7	3	2.2	1.7
ZH07	四极 0.37 0.55 0.75 1.1	C61	26-11	19-8	15-6	12-5	9-3.7	7-2.8
			39-16	28-11	22-9	18-7	13-5.4	10-4
			53-21	38-15	31-12	25-10	18-7	14-5.7
			60-31	54-22	44-18	35-15	26-11	20-8
			40-16	29-12	23-9	19-8	14-5.6	11-4.3
			60-24	43-18	35-14	28-11	20-8	16-6.5
	六极 0.37 0.55 0.75	CF61	60-33	60-24	48-19	39-16	28-11	22-9
			45-270	63-378	78-468	97-582	132-792	170-1020
			30-180	42-252	52-312	65-390	88-528	113-678
			输出转速 r/min Output speed					

变速器 机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机 机座号 Housing No. of reducer	减速比 Reduction ratio					
			6.4	4.6	3.7	3	2.2	1.7
ZH07	四极 0.37 0.55 0.75 1.1	C71	26-11					
			39-16	28-11				
			53-21	38-15	31-12			
			60-31	54-22	44-18	35-15		
			40-16	29-12	23-9			
			60-24	43-18	35-14	28-11		
	六极 0.37 0.55 0.75	CF71	83-33	60-24	48-19	39-16	28-11	
			45-270	63-378	78-468	97-582	132-792	170-1020
			30-180	42-252	52-312	65-390	88-528	113-678
			输出转速 r/min Output speed					

变速器 机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机 机座号 Housing No. of reducer	减速比 Reduction ratio					
			6.4	4.6	3.7	3	2.2	1.7
ZH15	四极 1.1 1.5 2.2 3	C71	91-31	65-23	52-18			
			119-42	86-31	69-25	56-20	41-15	32-11
			125-55	112-40	90-32	73-26	54-19	42-15
			125-75	125-54	108-43	88-35	65-26	50-20
			94-33	68-24	54-19	44-16		
			125-49	99-35	80-28	65-23	47-17	37-13
	六极 0.75 1.1 1.5 2.2	CF71	125-58	117-42	94-34	76-27	56-20	43-15
			125-85	125-61	116-49	94-40	69-29	53-23
			45-270	63-378	78-468	97-582	132-792	170-1020
			30-180	42-252	52-312	65-390	88-528	113-678

变速器 机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机 机座号 Housing No. of reducer	减速比 Reduction ratio					
			6.4	4.6	3.7	3	2.2	1.7
ZH15	四极 1.1 1.5 2.2 3	C81	91-31					
			119-42	86-31				
			156-55	112-40	90-32			
			188-75	135-54	108-43			
			94-33	68-24				
			138-49	99-35	80-28			
	六极 0.75 1.1 1.5 2.2	CF81	163-58	117-42	94-34	76-27		
			200-85	144-61	116-49	94-40	69-29	
			45-270	63-378	78-468	97-582	132-792	170-1020
			30-180	42-252	52-312	65-390	88-528	113-678

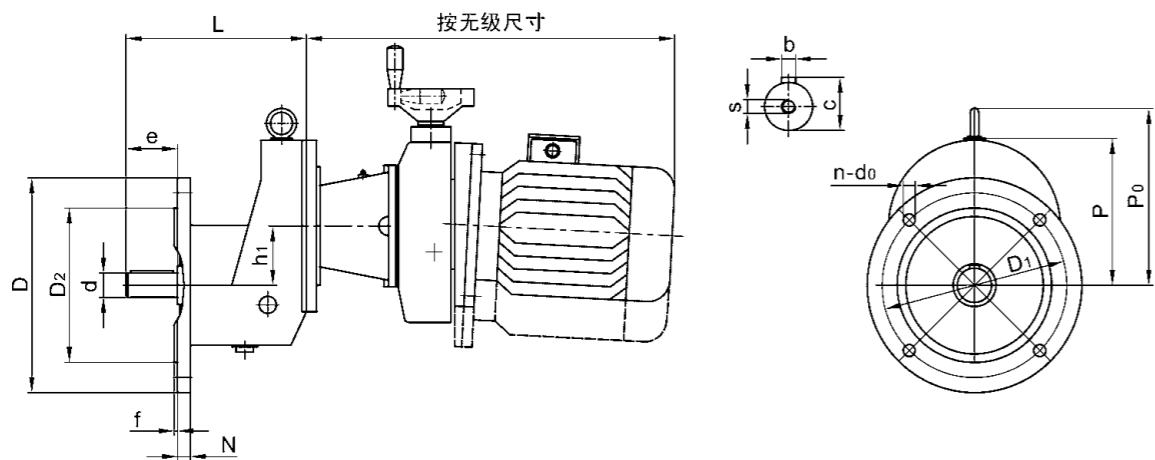
ZH-C 系列外形及安装尺寸 | Overall & Installation Dimension of ZH-C Series



机座号 Housing No.	安装尺寸 Installation dimension								输出轴尺寸 Output shaft dimension					外形尺寸 Overall dimension							配置无级 机座号 Installed stepless housing no.
	H0	A1	A0	B0	n	d0	h1	V	d	e	b	c	s	A	B	T	h	H	H1	L	
61	80	25	120	135	4	12	60	-20	25js6	50	8	28	M8	155	180	45	20	220	255	170	ZH07
71	90	25	150	170	4	14	69	18/3	40k6	80	12	43	M10	190	230	60	25	263	307	230	ZH07 ZH15
81	100	30	160	215	4	18	95	39	45k6	90	14	48.5	M12	210	290	70	35	320	365	250	ZH15

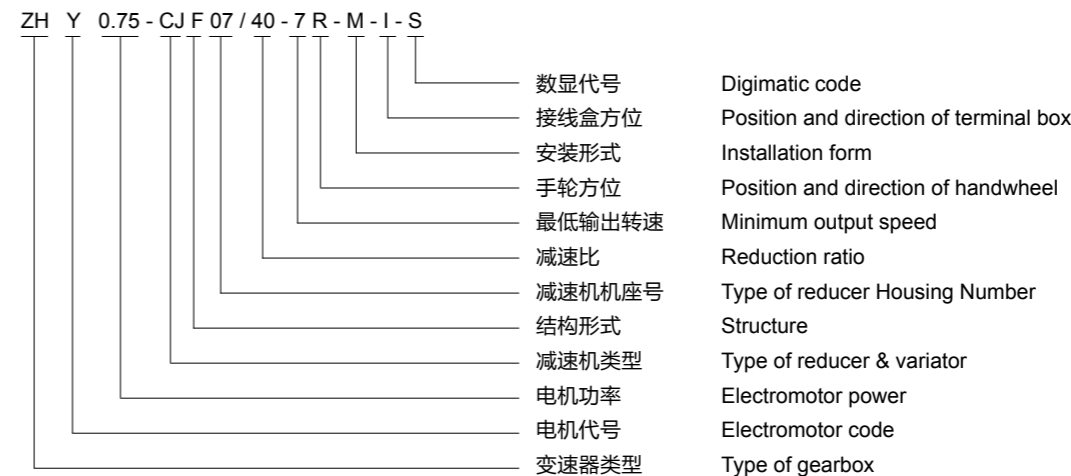
注: V 为负值表示电机低于安装底面; 相反为高于安装底面。
Note: If V is negative, it means that the electromotor is lower than the bottom of the housing;
While if V is positive, it means that the electromotor is higher than the bottom of the housing.

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



机座号 Housing No.	安装尺寸 Installation dimension						输出轴尺寸 Output shaft dimension					外形尺寸 Overall dimension					配置无级 机座号 Installed stepless housing no.
	D1	D2	f	n	d0	h1	d	e	b	c	s	D	N	P	P0	L	
61	165	130h7	3.5	4	12	60	25js6	50	8	28	M8	200	12	138	175	170	ZH07
71	215	180h7	4	4	15	69	40k6	80	12	43	M10	250	15	173	217	230	ZH07 ZH15
81	265	230h7	5	4	15	95	45k6	90	14	48.5	M12	300	18	220	267	250	ZH15

ZH-CJ 系列型号规格表示方式 | Denotation of specification & dimension of ZH-CJ Series



变速器类型 Type of gearbox	电机代号 Electromotor code	电机功率 Electromotor power	减速机类型 Type of reducer & variator	结构形式 Structure	减速机机座号 Type of reducer Housing No.	减速比 Reduction ratio	最低输出转速 Minimum output speed	手轮方位 Position and direction of handwheel	安装形式 Installation form	接线盒方位 Position and direction of terminal box	数显代号 Digimatic code
锥盘环盘 无级变速器 ZH Cone-ring disc stepless variator ZH	普通 Y ₂ Normal Y ₂	见选型 参数表 See selections Parameter list	斜齿轮硬齿 面减速机 CJ (CJF) helical gear reducer with hard surface CJ(CJF)	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	见选型 参数表 See selections Parameter list	右手轮: R (齿轮齿条调速) Right handwheel R (speed adjustment by gear and rack)	见表 P34 See the table P34	见表 P6 See the table P6	S
	制动 E Brake E			轴伸法兰式 F Shaft extended & flange-mounted F				左手轮: L (齿轮齿条调速) Left handwheel L (speed adjustment by gear and rack)			
	变频 V Frequency conversion V			多速 D Multi-speed D				上手轮: T (丝杆调速) Top handwheel T (speed adjustment by lead screw)			
	变频制动 VE Brake by frequency conversion VE			分马力 F Fractional horsepower F							

ZH-CJ(CJF) 系列选型参数表 | Parameter List Selections of ZH-CJ(CJF) Series

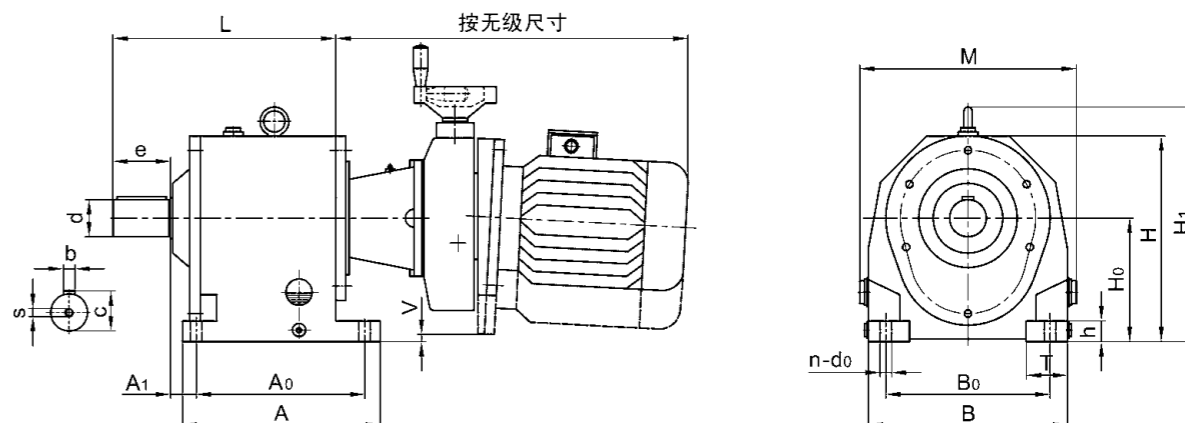
变速器机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机机座号 Housing No. of reducer	减速比 Reduction ratio												
			139	109	91	69	46	40	25	20	16.8	10	7.5	6	
ZH07	四极 4-pole	CJ07	0.37	500-222	430-174	359-145	272-110	182-74	158-64	98-40	79-32	66-27	39-16	30-12	24-10
			0.55	500-327	500-256	500-214	402-162	268-108	233-94	145-58	116-47	98-39	58-24	43-18	35-14
			0.75	500-444	500-348	500-291	500-220	367-147	320-128	200-80	160-64	134-54	80-32	60-24	48-19
	六极 6-pole	CJF07	1.1			500-427	500-324	500-216	451-188	282-118	225-94	190-79	113-47	85-35	67-28
			0.37	500-340	500-266	500-222	421-168	281-112	244-98	152-61	122-49	102-41	61-24	46-18	37-15
			0.55		500-400	500-333	500-253	415-168	360-146	225-92	180-73	151-62	90-37	67-27	54-22
			500-453	500-343	500-229	496-199	310-125	248-100	208-84	124-50	93-37	74-30			
四极 4-pole	输出转速 r/min Output speed		2-12	2.6-16	3-18	4.2-25	6-36	7-42	11-66	14-84	17-102	29-174	38-228	48-288	
六极 6-pole	输出转速 r/min Output speed		1.3-7.8	1.7-10	2-12	2.8-17	4-24	4.5-27	7-42	9-54	11-66	19-114	25-150	32-192	

变速器 机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机 机座号 Housing No. of reducer	减速比 Reduction ratio																							
			131	109	91	66	48	40	25	20.7	15.7	10	7.5	5.7												
			许用输出转矩 N.m Permissible output torque																							
ZH07	四极 4-pole	CJ15	0.37	517-209	430-174																					
			0.55	763-308	635-256	530-214	385-155																			
			0.75	1000-418	870-348	727-291	527-111	367-147																		
	六极 6-pole	CJF15	1.1	1000-615	1000-512	1000-427	744-310	518-216	451-188																	
			0.37	800-320	666-266	556-222	403-161																			
			0.55	1000-480	983-400	821-333	595-242	415-168																		
0.75	1000-652	1000-543	1000-453	819-328	570-229	496-199																				
四极 4-pole	输出转速 r/min Output speed		2.2-13	2.6-16	3-18	4.4-26	6-36	7-42	11-66	14-84	18-108	29-174	38-228	50-300												
六极 6-pole	输出转速 r/min Output speed		1.5-9	1.7-10	2-12	2.9-18	4-24	4.5-27	7-42	9-54	12-72	19-114	25-150	33-198												

变速器 机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机 机座号 Housing No. of reducer	减速比 Reduction ratio																								
			131	109	91	66	48	40	25	20.7	15.7	10	7.5	5.7													
			许用输出转矩 N.m Permissible output torque																								
ZH15	四极 4-pole	CJ15	1.1	1000-615	1000-512	1000-428	900-310	654-225	545-188	340-118	282-97	214-74	136-47	102-35	78-27												
			1.5	1000-837	1000-696	1000-581	1000-422	857-306	714-255	446-160	370-132	280-100	178-64	134-48	102-36												
			2.2		1000-901	1000-752	1000-546	1000-397	940-330	587-206	488-171	369-130	235-83	176-62	134-47												
	六极 6-pole	CJF15	3				1000-744	1000-541	1000-451	705-282	583-233	442-177	282-113	211-85	160-64												
			0.75	1000-652	1000-543	1000-453	930-328	676-239	564-199	352-124	292-103	221-78	141-50	106-37	80-28												
			1.1	1000-960	1000-800	1000-667	1000-484	992-352	827-293	517-183	428-152	325-115	207-73	155-55	118-42												
1.5		1000-952	1000-795	1000-577	1000-420	978-350	611-218	506-181	383-137	244-87	183-65	139-50															
2.2				1000-843	1000-613	1000-511	752-320	622-264	472-200	300-128	225-96	171-73															
四极 4-pole	输出转速 r/min Output speed		2.2-13	2.6-16	3-18	4.4-26	6-36	7-42	11-66	14-84	18-108	29-174	38-228	50-300													
六极 6-pole	输出转速 r/min Output speed		1.5-9	1.7-10	2-12	2.9-18	4-24	4.5-27	7-42	9-54	12-72	19-114	25-150	33-198													

变速器 机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机 机座号 Housing No. of reducer	减速比 Reduction ratio																								
			112	93	72	64	48	40	25	20	17	10	7.5	6													
			许用输出转矩 N.m Permissible output torque																								
ZH15	四极 4-pole	CJ40	1.1	1526-526	1267-437																						
			1.5	2000-716	1660-594	1286-460	1143-409																				
			2.2	2000-926	2000-769	1962-596	1504-529	1128-397																			
	六极 6-pole	CJF40	3	2000-1263	2000-1049	2000-812	1804-722	1353-541	1128-451																		
			0.75	1579-558	1311-463	1015-358	902-319																				
			1.1	2000-821	1923-682	1488-528	1323-469	992-352																			
1.5	2000-979	2000-813	1760-629	1564-560	1173-420	978-350																					
2.2	2000-1432	2000-1189	2000-920	1925-818	1443-613	1203-511																					
四极 4-pole	输出转速 r/min Output speed		2.5-15	3-18	4-24	4.5-27	6-36	7-42	11-66	14.5-87	17-102	29-174	38-228	48-288													
六极 6-pole	输出转速 r/min Output speed		1.7-10	2-12	2.7-16	3-18	4-24	4.5-27	7-42	9.5-57	11-66	19-114	25-150	32-192													

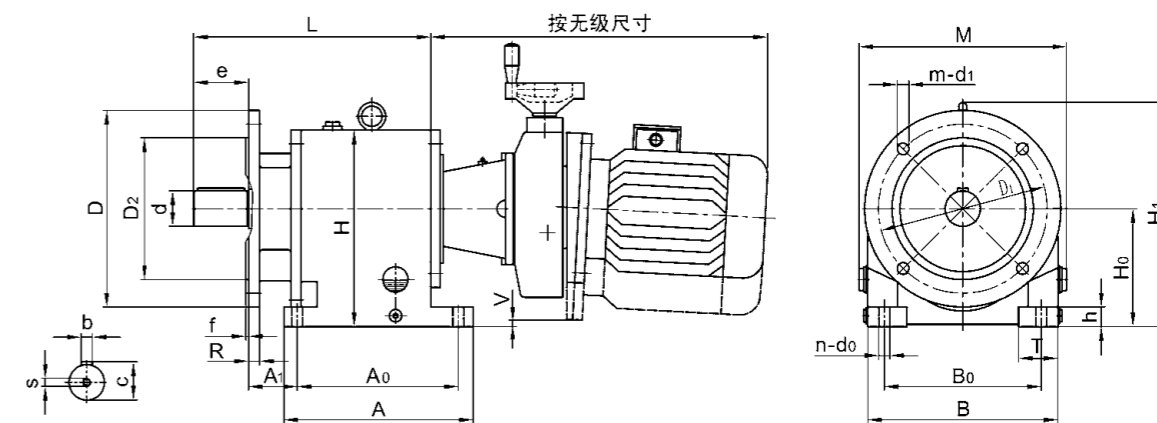
ZH-CJ 系列外形及安装尺寸 | Overall & Installation Dimension of ZH-CJ Series



机座号 Housing No.	安装尺寸 Installation dimension						输出轴尺寸 Output shaft dimension						外形尺寸 Overall dimension						配置无级 机座号 Installed stepless housing no.		
	H ₀	A ₁	A ₀	B ₀	n	d ₀	V	d	e	b	c	s	A	B	T	h	M	H		H ₁	L
07	120	40	160	170	4	12	-21	30js6	60	8	33	M8	190	200	40	20	220	210	253	240	ZH07
15	150	32	205	200	4	14	$\frac{9}{-6}$	40k6	70	12	43	M10	241	242	50	25	262	250	293	290	ZH07
																					ZH15
40	180	30	270	230	4	18	24	50k6	90	14	53.5	M12	316	300	65	30	320	305	350	367	ZH15

注: V 为负值表示电机低于安装底面; 相反为高于安装底面。
Note: If V is negative, it means that the electromotor is lower than the bottom of the housing;
While if V is positive, it means that the electromotor is higher than the bottom of the housing.

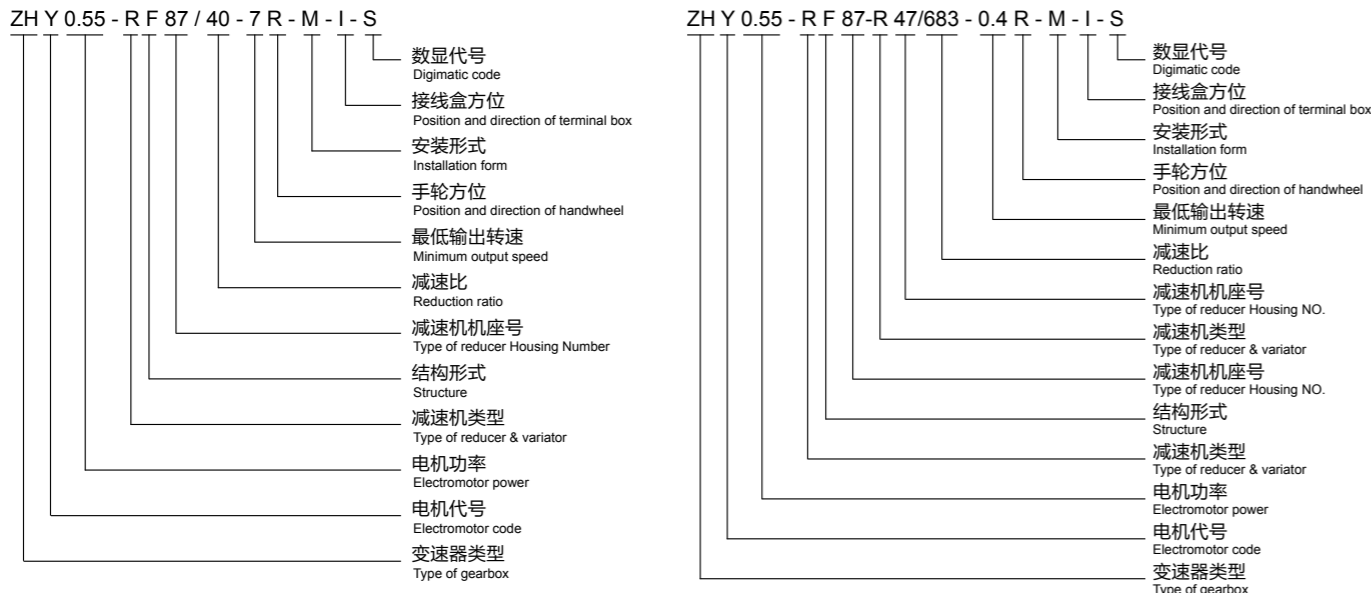
ZH-CJF 系列外形及安装尺寸 | Overall & Installation Dimension of ZH-CJF Series



机座号 Housing No.	安装尺寸 Installation dimension													输出轴尺寸 Output shaft dimension						外形尺寸 Overall dimension						配置无级 机座号 Installed stepless housing no.		
	H ₀	A ₁	A ₀	B ₀	n	D ₀	D ₂	D ₁	f	m	d ₁	V	d	e	b	c	s	A	B	T	D	R	h	M	H		H ₁	L
07	120	60	160	170	4	12	130h7	165	3.5	4	12	-21	30js6	60	10	33	M8	190	200	40	200	14	20	220	210	253	261	ZH07
15	150	62	205	200	4	14	180h7	215	4	4	15	$\frac{9}{-6}$	40k6	70	12	43	M10	241	242	50	250	15	25	262	250	293	320	ZH07
																												ZH15
40	180	55	270	230	4	18	230h7	265	5	4	15	24	50k6	90	14	53.5	M12	316	300	65	300	20	30	320	305	350	392	ZH15

注: V 为负值表示电机低于安装底面; 相反为高于安装底面。
Note: If V is negative, it means that the electromotor is lower than the bottom of the housing;
While if V is positive, it means that the electromotor is higher than the bottom of the housing.

ZH-R 系列型号规格表示方式 | Denotation of specification & dimension of ZH-R Series



变速器类型 Type of gearbox	电机代号 Electromotor code	电机功率 Electromotor power	减速机类型 Type of reducer & variator	结构形式 Structure	减速机机座号 Type of reducer Housing No.	减速比 Reduction ratio	最低输出转速 Minimum output speed	手轮方位 Position and direction of handwheel	安装形式 Installation form	接线盒方位 Position and direction of terminal box	数显代号 Digimatic code
锥盘环盘 无级变速器 ZH Cone-ring disc stepless variator ZH	普通 Y ₂ Normal Y ₂	见选型 参数表 See selections Parameter list	斜齿轮硬齿 面减速机 R(RF) Helical gear reducer with hard surface R(RF)	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	见选型 参数表 See selections Parameter list	右手轮: R (齿轮齿条调速) Right handwheel R (speed adjustment by gear and rack)	见表 P34 See the table P34	见表 P6 See the table P6	S
	防爆 B Explosion protection B										
	制动 E Brake E										
	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										
			轴伸 法兰式 F Shaft extended & flange-mounted F				上手轮: T (丝杆调速) Top handwheel T (speed adjustment by lead screw)				

ZH-R(RF) 系列选型参数表 | Parameter List Selections of ZH-R(RF) Series

变速器机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机机座号 Housing No. of reducer	减速比 Reduction ratio												
			149	133	92	66	50	40	25	20	16.8	10	7.5	6	
ZH07	四极 4-pole	R67	0.37	587-238	524-212	363-147	260-105	197-80	158-64	98-40	79-32	66-27	39-16	30-12	24-9
			0.55	600-350	600-312	535-216	384-155	291-118	233-94	146-59	116-47	98-39	58-24	44-18	35-14
			0.75	600-476	600-425	600-294	528-210	400-160	320-128	200-80	160-64	134-53	80-32	60-24	48-19
	六极 6-pole	RF67	1.1			600-432	600-310	563-235	451-188	282-117	225-94	190-79	113-47	85-35	68-28
			0.37	600-364	600-325	561-225	403-161	305-122	244-98	152-61	122-49	102-41	61-24	46-18	37-15
			0.55		600-487	600-337	595-242	451-183	360-146	225-92	180-73	151-61	90-37	68-27	54-22
			0.75			600-458	600-328	600-249	496-199	310-124	248-99	208-83	124-50	93-37	74-30
四极 4-pole	输出转速 r/min Output speed		1.9-11.4	2.1-12.6	3-18	4.4-26	5.6-34	7-42	11-66	14-84	17-102	29-174	38-228	48-288	
六极 6-pole	输出转速 r/min Output speed		1.2-7.2	1.4-8.4	2-12	2.9-18	3.7-22	4.5-27	7-42	9-54	11-66	19-114	25-150	32-192	

变速器机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机机座号 Housing No. of reducer	减速比 Reduction ratio													
			136	110	92	66	50	40	25	20	16.8	10	7.5	6		
ZH07	四极	R77	0.37	536-217												
			0.55	700-320	641-258	536-216										
			0.75	820-434	820-351	734-294	527-210									
	六极		1.1	820-639	820-517	820-432	744-310	564-235								
			0.37	820-332	672-268	562-225										
			0.55	820-498	820-403	820-337	595-242									
ZH15	四极	RF77	1.1	820-677	820-548	820-458	818-328	620-249								
			1.5	820-639	820-517	820-432	820-310	681-235	545-188	340-118	272-94	228-78	136-47	102-35	81-28	
			2.2			820-588	820-421	820-320	713-255	446-160	357-128	300-107	178-64	134-48	107-38	
	六极		3				820-546	820-413	820-330	587-206	470-165	395-139	235-83	176-62	141-50	
			0.75	820-677	820-548	820-458	820-329	705-249	564-199	352-125	282-100	236-84	141-50	105-37	85-30	
			1.1			820-674	820-484	820-366	820-293	517-183	413-146	347-123	206-73	155-55	124-44	
			1.5			820-577	820-437	820-350	611-218	488-175	410-146	244-87	183-65	146-52		
			2.2			820-639	820-511	751-320	601-255	505-215	300-128	225-96	180-76			
四极 4-pole	输出转速 r/min Output speed		2-12	2.6-16	3-18	4.4-26	5.6-34	7-42	11-66	14-84	17-102	29-174	38-228	48-288		
六极 6-pole	输出转速 r/min Output speed		1.3-7.5	1.7-10	2-12	2.9-18	3.7-22	4.5-27	7-42	9-54	11-66	19-114	25-150	32-192		

变速器机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机机座号 Housing No. of reducer	减速比 Reduction ratio												
			137	108	92	66	50	40	25	20	16.8	10	7.5	6	
ZH07	四极	R87	0.55	792-32											
			0.75	1086-434	878-351	735-294									
			1.1	1550-639	1240-517	1037-432	744-310								
	六极		0.37	830-332											
			0.55	1227-498	992-403	830-337									
			0.75	1550-677	1339-548	1141-458	818-328								
ZH15	四极	RF87	1.1	1550-639	1472-517	1254-432	900-310	681-235							
			1.5	1550-869	1550-703	1550-588	1178-421	893-320	714-255						
			2.2	1550-1125	1550-910	1550-761	1550-546	1175-413	940-330						
	六极		3		1550-1240	1550-1038	1550-744	1410-564	1128-451	705-282					
			0.75	1550-677	1521-548	1296-458	930-329	705-249							
			1.1	1550-997	1550-806	1550-674	1364-484	1034-366	827-293						
			1.5	1550-1189	1550-961	1550-804	1550-577	1222-437	977-350						
			2.2			1550-1176	1550-843	1503-639	1203-511	752-320					
四极 4-pole	输出转速 r/min Output speed		2-12	2.6-16	3-18	4.4-26	5.6-34	7-42	11-66	14-84	17-102	29-174	38-228	48-288	
六极 6-pole	输出转速 r/min Output speed		1.3-7.5	1.7-10	2-12	2.9-18	3.7-22	4.5-27	7-42	9-54	11-66	19-114	25-150	32-192	

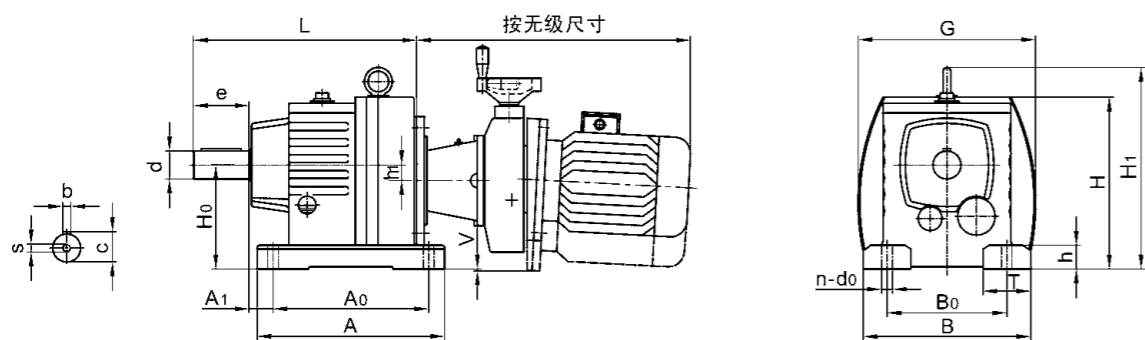
变速器机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机机座号 Housing No. of reducer	减速比 Reduction ratio												
			137	108	92	66	50	40	25	20	16.8	10	7.5	6	
ZH07	四极	R97	1.1	1534-639											
			0.75	1687-677	1364-548										
			1.1	1853-639	1499-517										
	六极		1.5	2491-869	1964-703	1643-588									
			2.2	3000-1125	2538-910	2162-761	1551-546								
			3	3000-1534	3000-1240	2594-1038	1861-744	1410-564							
ZH15	四极	RF97	0.75	1917-677	1551-548	1297-458									
			1.1	2884-997	2274-806	1902-674	1365-484								
			1.5	3000-1189	2638-961	2248-804	1613-577								
	六极		2.2	3000-1738	3000-1406	2766-1176	1985-843	1504-639							
			0.75												
			1.1												
四极 4-pole	输出转速 r/min Output speed		2-12	2.6-16	3-18	4.4-26	5.6-34	7-42	11-66	14-84	17-102	29-174	38-228	48-288	
六极 6-pole	输出转速 r/min Output speed		1.3-7.5	1.7-10	2-12	2.9-18	3.7-22	4.5-27	7-42	9-54	11-66	19-114	25-150	32-192	

ZH-R(RF)-R 系列选型参数表 | Parameter List Selections of ZH-R(RF)-R Series

变速器 机座号 Housing No. of gearbox	输入 功率 (KW) Input power	减速机 机座号 Housing No. of reducer	减速比 Reduction ratio								
			2129	1524	1306	1037	883	683	472	351	256
			许用输出转矩 N.m Permissible output torque								
ZH07	0.37	R87-R47					1550-1091	1550-754	1384-560	1010-409	
	0.55						1550-1109	1550-824	1500-601		
	0.75	RF87-R47	1550						1550-1121	1550-818	
	1.1								1550-1203		
输出转速 r/min Output speed			0.13-0.78	0.19-1.14	0.22-1.32	0.28-1.68	0.32-1.92	0.4-2.4	0.6-3.6	0.8-4.8	1.1-6.6

变速器 机座号 Housing No. of gearbox	输入 功率 (KW) input power	减速机 机座号 Housing No. of reducer	减速比 Reduction ratio									
			4304	3016	2016	1434	937	755	484	336	227	
			许用输出转矩 N.m Permissible output torque									
ZH07	0.37	R97-R67					3000-2291	3000-1497	2979-1206	1910-773	1326-537	896-362
	0.55						3000-2202	3000-1774	2820-1137	1958-790	1323-533	
	0.75	RF97-R67	3000						3000-1546	2683-1073	1813-725	
	1.1						3000-2275	3000-1579	2659-1067			
ZH15	1.1					3000-2275	3000-1579	2659-1067				
	1.5							3000-2148	3000-1450			
输出转速 r/min Output speed			0.07-4.2	0.1-0.6	0.14-0.84	0.2-1.2	0.3-1.8	0.38-2.28	0.6-3.6	0.86-5.2	1.28-7.7	

ZH-R 系列外形及安装尺寸 | Overall & Installation Dimension of ZH-R Series



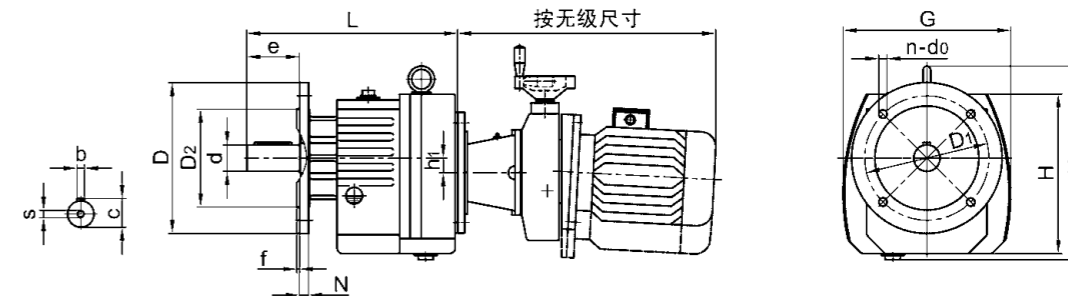
机座号 Housing No.	安装尺寸 Installation dimension								输出轴尺寸 Output shaft dimension					外形尺寸 Overall dimension							配置无级 机座号 Installed stepless housing no.	
	H0	A1	A0	B0	n	d0	h1	V	d	e	b	c	s	A	B	T	h	H	H1	G		L
67	130	30	195	150	4	13.5	19.5	31	35js6	70	10	38	M10	235	210	60	30	215	252	220	280	ZH07
77	140	35	205	170	4	17.5	10	11	40k6	80	12	43	M12	245	230	60	30	235	277	240	300	ZH07
								26														ZH15
87	180	40	260	215	4	17.5	17	-22	50k6	100	14	53.5	M12	310	290	75	45	300	342	306	372	ZH07
								-7														ZH15
97	225	40	310	250	4	22	11	-73	60k6	120	18	64	M16	365	340	90	55	370	415	356	440	ZH07
								-58														ZH15

注: V 为负值表示电机高于安装底面; 相反为低于安装底面。

Note: If V is negative, it means that the electromotor is higher than the bottom of the housing;

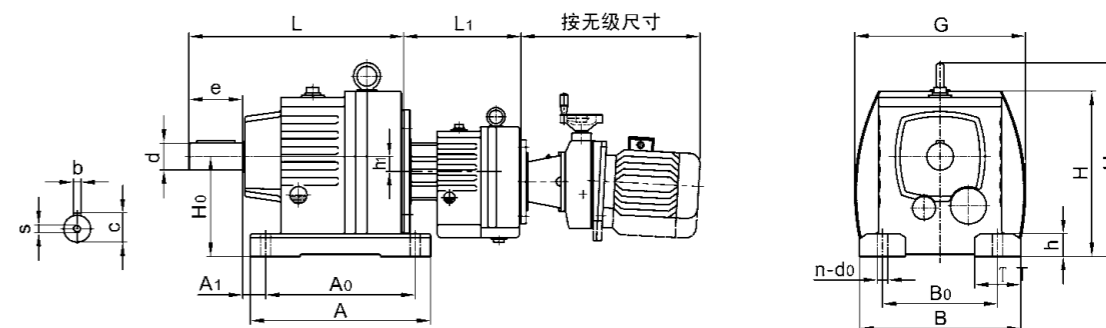
While if V is positive, it means that the electromotor is higher than the bottom of the housing.

ZH-RF 系列外形及安装尺寸 | Overall & Installation Dimension of ZH-RF Series



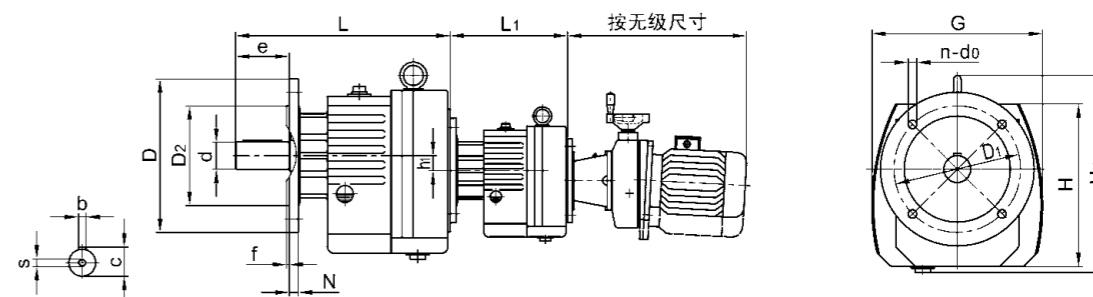
机座号 Housing No.	安装尺寸 Installation dimension					输出轴尺寸 Output shaft dimension					外形尺寸 Overall dimension						配置无级 机座号 Installed stepless housing no.	
	D1	D2	f	n	D0	h1	d	e	b	c	s	D	N	H	H1	G		L
67	165	130h7	3.5	4	11	19.5	35js6	70	10	38	M10	200	12	214	256	220	280	ZH07
77	215	180h7	4	4	13.5	10	40k6	80	12	43	M12	250	15	231	278	240	300	ZH07 ZH15
87	265	230h7	5	4	13.5	17	50k6	100	14	53.5	M12	300	16	296	353	306	372	ZH07 ZH15
97	300	250h7	5	4	17.5	11	60k6	120	18	64	M16	350	18	365	415	356	440	ZH07 ZH15

ZH-R-R 系列外形及安装尺寸 | Overall & Installation Dimension of ZH-R-R Series



机座号 Housing No.	安装尺寸 Installation dimension								输出轴尺寸 Output shaft dimension					外形尺寸 Overall dimension							配置无级 机座号 Installed stepless housing no.		
	H0	A1	A0	B0	n	d0	h1	V	d	e	b	c	s	A	B	T	h	H	H1	G		L	L1
R87-R47	180	40	260	215	4	17.5	17	31	50k6	100	14	53.5	M12	310	290	75	45	300	342	306	372	175	ZH07
R97-R67	225	40	310	250	4	22	17	31	60k6	120	18	64	M16	365	340	90	55	370	415	356	440	210	ZH07 ZH15

ZH-RF-R 系列外形及安装尺寸 | Overall & Installation Dimension of ZH-RF-R Series

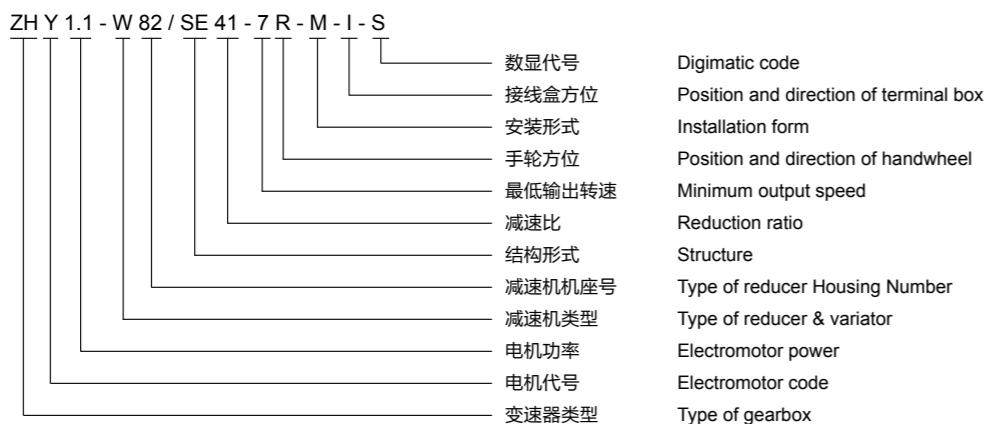


机座号 Housing No.	安装尺寸 Installation dimension					输出轴尺寸 Output shaft dimension					外形尺寸 Overall dimension						配置无级 机座号 Installed stepless housing no.		
	D1	D2	f	n	d0	h1	d	e	b	c	s	D	N	H	H1	G		L	L1
RF87-RF47	265	230h7	5	4	13.5	17	50k6	100	14	53.5	M12	300	16	296	353	306	372	175	ZH07
RF97-RF67	300	250h7	5	4	17.5	11	60k6	120	18	64	M16	350	18	365	415	356	440	210	ZH07 ZH15

ZH-W(WS) 系列型号规格表示方式

Denotation of Specification & Dimension of ZH-W(WS) Series

ZH Y 1.1 - W 82 / SE 41 - 7 R - M - I - S



变速器类型 Type of gearbox	电机代号 Electromotor code	电机功率 Electromotor power	减速机类型 Type of reducer & variator	减速机机座号 Type of reducer Housing No.	结构形式 Structure	减速比 Reduction ratio	最低输出转速 Minimum output speed	手轮方位 Position and direction of handwheel	安装形式 Installation form	接线盒方位 Position and direction of terminal box	数显代号 Digimatic code	
锥盘环盘无级变速器 ZH Cone-ring disc stepless variator ZH	普通 Y ₂ Normal Y ₂	见选型参数表 See selections Parameter list	W 斜齿 - 蜗轮蜗杆减速机 W helical gear of gear worm gear reducer	见选型参数表 See selections Parameter list	轴装式 SE Shaft-mounted SE	见选型参数表 See selections Parameter list	见选型参数表 See selections Parameter list	右手轮: R (齿轮齿条调速) Right handwheel R (speed adjustment by gear and rack)	见表 P34 See the table P34	见表 P6 See the table P6	S	
	防爆 B Explosion protection B											
	制动 E Brake E											
	变频 V Frequency conversion V				WS 斜齿 - 蜗轮蜗杆减速机 WS helical gear of gear worm gear reducer			轴伸法兰式 SK shaft extended & flange-mounted SK				左手轮: L (齿轮齿条调速) Left handwheel L (speed adjustment by gear and rack)
	变频制动 VE Brake by frequency conversion VE											
	多速 D Multi-speed D											
	分马力 F Fractional horsepower F				轴装法兰式 SF Shaft & flange mounted SF			上手轮: T (丝杆调速) Top handwheel T (speed adjustment by lead screw)				

注: WS 系列型号无结构形式一档。
Note: WS series type has no grade one structure.

ZH-W(WS) 系列选型参数表 | Parameter list Selections of ZH-W(WS) Series

变速器机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机机座号 Housing No. of reducer	减速比 Reduction ratio												
			118	96	71	67	50	41	30	20	17	14	12	10	
			许用输出转矩 N.m Permissible output torque												
ZH07	四极	W52 WS52	0.37	264-110	233-96	202-82	197-80	147-60	122-50	92-37	63-26	54-22	47-19	41-17	35-14
			0.55	264-162	264-139	264-120	264-117	217-88	180-72	135-55	93-38	80-32	69-28	61-25	51-21
			0.75	264-220	264-189	264-164	264-159	264-119	247-99	186-74	128-51	110-44	95-38	83-33	70-28
	1.1				264-241	264-234	264-175	264-146	262-110	180-75	155-65	134-56	118-49	100-42	
	0.37		264-168	264-145	264-125	264-122	227-91	189-76	142-57	98-39	84-34	73-29	64-26	54-22	
	0.55		264-253	264-217	264-188	264-183	264-136	264-113	210-85	144-59	124-50	108-44	94-38	80-32	
六极	0.75			264-255	264-248	264-185	264-154	264-116	198-80	170-68	148-59	130-52	110-44		
四极 4-pole	输出转速 r/min Output speed		2.4-14	3-18	4-24	4.3-26	5.6-34	7-42	9.5-57	14.5-87	17-102	20-120	24-144	29-174	
六极 6-pole	输出转速 r/min Output speed		1.6-9.6	2-12	2.6-16	2.8-17	3.7-22	4.5-27	6-36	9.5-57	11-66	13-78	16-96	19-114	

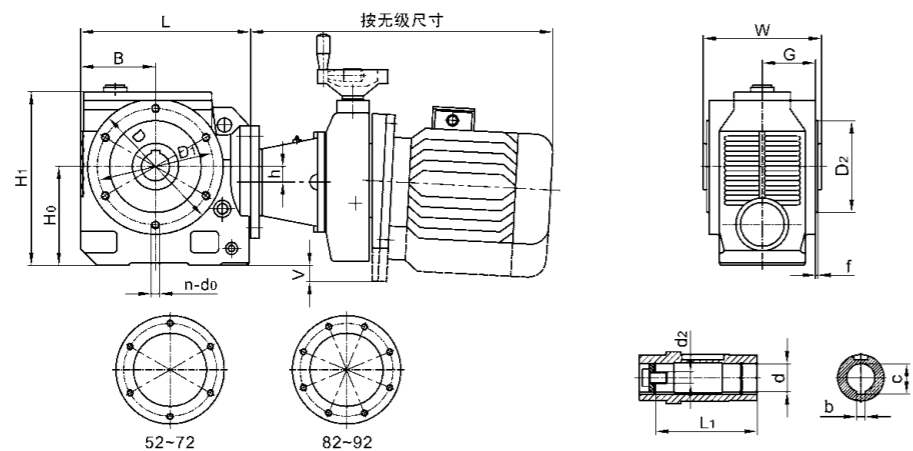
变速器机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机机座号 Housing No. of reducer	减速比 Reduction ratio												
			129	115	93	67	50	41	25	20	17.5	14.5	12	10	
			许用输出转矩 N.m Permissible output torque												
ZH07	四极	W62	0.37	308-125	285-115										
			0.55	455-183	420-170	357-144	257-104								
			0.75	517-250	517-230	490-196	353-141	298-119							
	1.1		517-368	517-340	517-288	498-208	420-175	349-146							
	六极		0.37	478-191	441-176	375-150	270-108								
			0.55	517-287	517-265	517-226	399-162	336-136	280-113						
0.75		517-390	517-360	517-305	517-220	462-186	384-154	250-100							
ZH15	四极	WS62	1.1	517-368	517-340	517-288	517-208	507-175	422-146	275-95	232-80	203-70	172-59	142-49	120-42
			1.5	517-500	517-461	517-392	517-282	517-238	517-198	361-129	304-108	266-95	226-81	186-67	158-56
			2.2			517-507	517-365	517-308	517-256	475-167	400-140	350-123	297-105	246-86	207-73
	3					517-498	517-420	517-350	517-228	480-192	420-168	356-142	295-118	249-100	
	0.75		517-390	517-360	517-305	517-220	517-186	436-154	285-100	240-85	210-74	178-63	147-52	124-44	
	1.1				517-450	517-324	517-273	517-227	418-148	352-125	308-109	261-93	216-77	182-65	
六极	1.5				517-386	517-326	517-270	494-177	416-148	364-130	309-110	255-92	215-77		
	2.2						517-476	517-396	517-258	512-218	448-190	380-161	315-134	265-113	
四极 4-pole	输出转速 r/min Output speed		2.2-13	2.5-15	3-18	4.3-26	5.6-34	7-42	11-66	14.5-87	16.5-99	20-120	24-144	29-174	
六极 6-pole	输出转速 r/min Output speed		1.5-9	1.7-10	2-12	2.8-17	3.7-22	4.5-27	7-42	9.5-57	11-66	13-78	16-96	19-114	

变速器机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机机座号 Housing No. of reducer	减速比 Reduction ratio												
			122	114	97	65	50	40	28	20	17.5	14	12	10	
			许用输出转矩 N.m Permissible output torque												
ZH07	四极	W72	0.75	622-248	581-232	519-207									
			1.1	878-366	820-342	733-305	538-224								
			0.55	702-285	656-266	586-238									
ZH15	四极	WS72	1.1	966-388	902-362	806-324	592-238								
			1.5	1061-366	991-342	886-305	650-224	522-180							
			2.2	1072-498	1072-465	1072-415	852-305	684-245	570-204						
	3		1072-644	1072-602	1072-538	1072-395	900-317	750-264	539-190						
	六极		0.75	1072-878	1072-820	1072-733	1072-538	1072-432	900-360	646-258					
			1.1	1072-388	1026-362	916-324	672-238	540-190							
1.5		1072-570	1072-533	1072-476	986-350	792-280	660-234								
2.2	1072-680	1072-636	1072-568	1072-417	936-334	780-279	560-200								
1072-995	1072-930	1072-831	1072-610	1072-490	960-408	690-293	518-220								
四极 4-pole	输出转速 r/min Output speed		2.3-14	2.5-15	3-18	4.5-27	5.6-34	7-42	10-60	14.5-87	16.5-99	20-120	24-144	29-174	
六极 6-pole	输出转速 r/min Output speed		1.5-9	1.7-10	2-12	3-18	3.7-22	4.5-27	6.6-40	9.5-57	11-66	13-78	16-96	19-114	

变速器机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机机座号 Housing No. of reducer	减速比 Reduction ratio												
			127	108	93	70	50	41	28	22	18	15	12	10	
			许用输出转矩 N.m Permissible output torque												
ZH15	四极	W82	1.1	1196-412											
			1.5	1568-561	1333-477	1183-424									
			2.2	1752-726	1752-618	1557-548	1277-450								
	3		1752-990	1752-842	1752-748	1533-613	1170-468								
	六极		0.75	1238-437											
			1.1	1752-644	1544-548	1370-486	1124-398								
1.5		1752-768	1752-652	1620-580	1328-475										
2.2	1752-1122	1752-955	1752-847	1635-695	1248-530										
四极 4-pole	输出转速 r/min Output speed		2.2-13	2.6-16	3-18	4-24	5.6-34	7-42	10-60	13-78	16-96	19-114	24-114	29-174	
六极 6-pole	输出转速 r/min Output speed		1.5-9	1.7-10	2-12	2.6-16	3.7-22	4.5-27	6.6-40	8.5-51	10-60	12-72	16-96	19-114	

变速器机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机机座号 Housing No. of reducer	减速比 Reduction ratio											
			127	108	93	70	50	41	28	22	18	15	12	10
			许用输出转矩 N.m Permissible output torque											
ZH15	四极	W92	2.2	2063-726	1755-618									
			3	2476-990	2106-842	1869-748								
	1.1		1816-644											
	1.5		2146-768	1825-652	1620-580									
六极	2.2	2641-1122	2246-955	1993-847	1635-695									
四极 4-pole	输出转速 r/min Output speed		2.2-13	2.6-16	3-18	4-24	5.6-34	7-42	10-60	13-78	16-96	19-114	24-114	29-174
六极 6-pole	输出转速 r/min Output speed		1.5-9	1.7-10	2-12	2.6-16	3.7-22	4.5-27	6.6-40	8.5-51	10-60	12-72	16-96	19-114

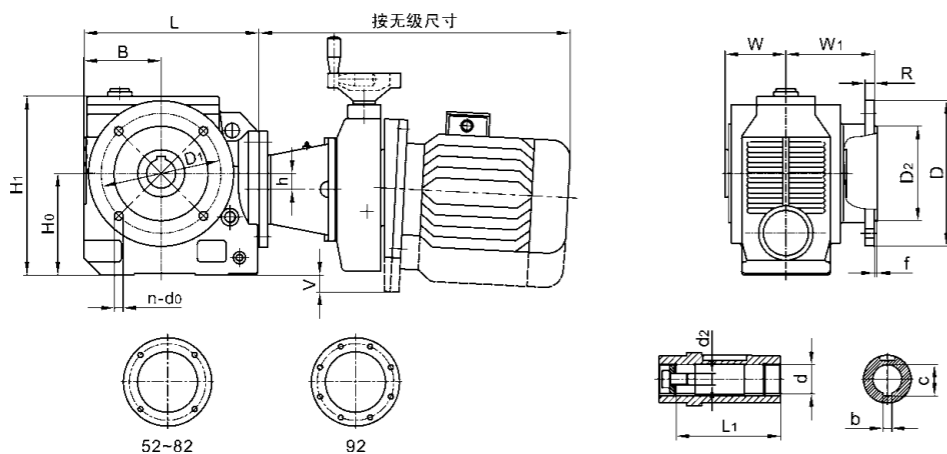
ZH-W/SE 系列外形及安装尺寸 | Overall & Installation Dimension of ZH-W/SE Series



机座号 Housing No.	安装尺寸 Installation dimension									输出轴尺寸 Output shaft dimension				外形尺寸 Overall dimension						配置无极机座号 Installed stepless housing no.
	H ₀	D ₁	D ₂	h	f	n	d ₀	V	d	b	c	L ₁	d ₂	D	G	W	B	H ₁	L	
52	112	130	110h7	24	3.5	6	M8	53	35H7	10	38.3	132	M12	150	70	150	80	197	187	ZH07
62	140	165	130h7	24	3.5	6	M10	25	40H7	12	43.3	144	M16	190	75	168	106	246	241	ZH07
								40												ZH15
72	180	215	180h7	33	4	6	M12	-6	50H7	14	53.8	180	M20	240	97	210	125	315	287	ZH07
								9												ZH15
82	225	265	230h7	40	4	8	M12	-44	60H7	18	64.4	220	M20	292	120	250	150	385	340	ZH07
								-29												ZH15
92	280	350	300h7	53	5	8	M16	-86	70H7	20	74.9	260	M24	384	140	290	180	490	420	ZH07
								-71												ZH15

注: V 为负值表示电机高于安装底面, 相反为低于安装底面。
Note: If V is negative, it means that the electromotor is lower than the bottom of the housing; while if V is positive it means that the electromotor is higher than the bottom of the housing.

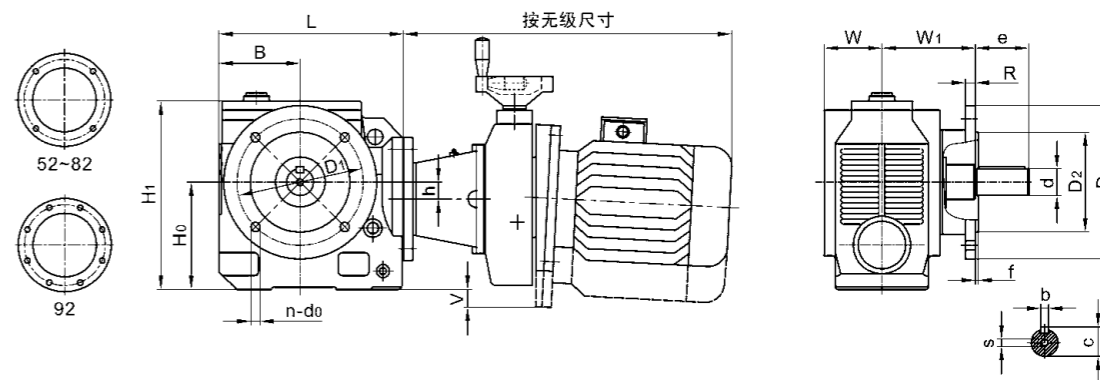
ZH-W/SF 系列外形及安装尺寸 | Overall & Installation Dimension of ZH-W/SF Series



机座号 Housing No.	安装尺寸 Installation dimension									输出轴尺寸 Output shaft dimension				外形尺寸 Overall dimension						配置无极机座号 Installed stepless housing no.	
	H ₀	D ₁	D ₂	h	f	W ₁	n	d ₀	V	d	b	c	L ₁	d ₂	D	R	W	B	H ₁		L
52	112	165	130h7	24	3.5	100	4	12	53	35H7	10	38.3	132	M12	200	12	150	80	197	187	ZH07
62	140	165	130h7	24	3.5	122	4	12	25	40H7	12	43.3	144	M16	200	12	168	106	246	241	ZH07
									40												ZH15
72	180	215	180h7	33	4	140	4	14	-6	50H7	14	53.8	180	M20	250	14	210	125	315	287	ZH07
									9												ZH15
82	225	300	250h7	40	5	170	4	18	-44	60H7	18	64.4	220	M20	350	18	250	150	385	340	ZH07
									-29												ZH15
92	280	400	350h7	53	5	200	8	18	-86	70H7	20	74.9	260	M24	450	20	290	180	490	420	ZH07
									-71												ZH15

注: V 为负值表示电机高于安装底面, 相反为低于安装底面。
Note: If V is negative, it means that the electromotor is lower than the bottom of the housing; while if V is positive it means that the electromotor is higher than the bottom of the housing.

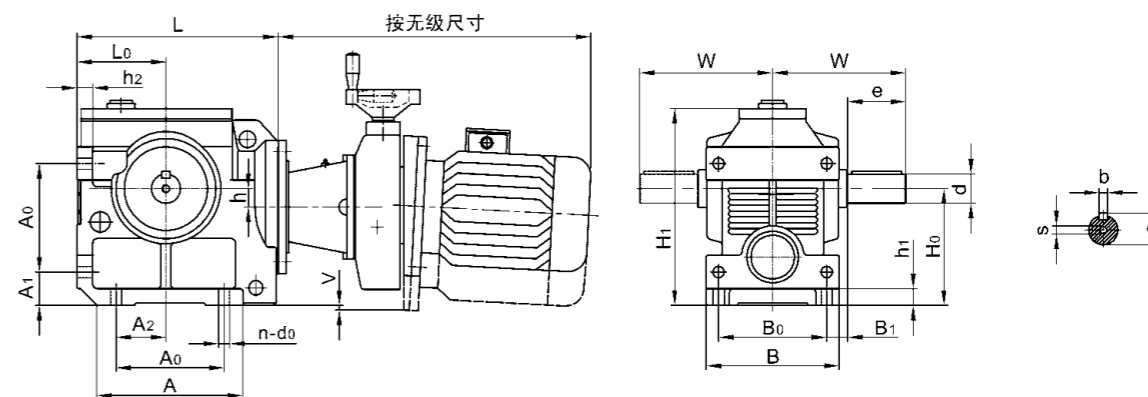
ZH-W/SK 系列外形及安装尺寸 | Overall & Installation Dimension of ZH-W/SK Series



机座号 Housing No.	安装尺寸 Installation dimension									输出轴尺寸 Output shaft dimension					外形尺寸 Overall dimension						配置无极机座号 Installed stepless housing no.
	H ₀	D ₁	D ₂	h	f	W ₁	n	d ₀	V	d	e	b	c	s	D	R	W	B	H ₁	L	
52	112	165	130h7	24	3.5	100	4	12	53	30js6	60	8	33	M10	200	12	150	80	197	187	ZH07
62	140	165	130h7	24	3.5	122	4	12	25	35js6	70	10	38	M12	200	12	168	106	246	241	ZH07
									40												ZH15
72	180	215	180h7	33	4	140	4	14	-6	45js6	90	14	48.5	M16	250	14	210	125	315	287	ZH07
									9												ZH15
82	225	300	250h7	40	5	160	4	18	-44	60k6	120	18	64	M20	350	18	250	150	385	340	ZH07
									-29												ZH15
92	280	400	350h7	53	5	190	8	18	-86	70k6	140	20	74.5	M20	450	20	290	180	490	420	ZH07
									-71												ZH15

注: V 为负值表示电机高于安装底面, 相反为低于安装底面。
Note: If V is negative, it means that the electromotor is lower than the bottom of the housing; while if V is positive it means that the electromotor is higher than the bottom of the housing.

ZH-WS 系列外形及安装尺寸 | Overall & Installation Dimension of ZH-WS Series

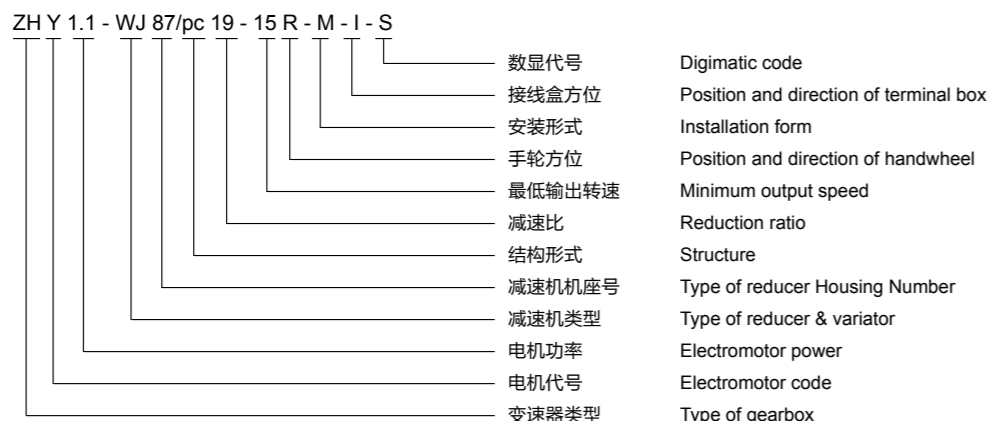


机座号 Housing No.	安装尺寸 Installation dimension									输出轴尺寸 Output shaft dimension					外形尺寸 Overall dimension						配置无极机座号 Installed stepless housing no.			
	H ₀	A ₀	B ₀	A ₁	A ₂	B ₁	L ₀	n	d ₀	h	V	d	e	b	c	s	A	B	w	h ₁		h ₂	H ₁	L
52	112	100	110	35	45	19	80	8	11	24	53	30js6	60	8	33	M10	130	136	134	15	12	189	187	ZH07
62	140	130	130	40	60	25	106	8	14	24	25	35js6	70	10	38	M12	175	160	160	20	15	236	241	ZH07
											40													ZH15
72	180	135	150	70	75	30	125	8	18	33	-6	45js6	90	14	48.5	M16	204	185	195	25	25	301	287	ZH07
											9													ZH15
82	225	180	200	82	92	35	150	8	22	40	-44	60k6	120	18	64	M20	247	250	255	30	30	368	340	ZH07
											-29													ZH15
92	280	235	250	90	115	30	180	8	26	53	-86	70k6	140	20	74.5	M20	320	300	295	35	35	455	420	ZH07
											-71													ZH15

注: V 为负值表示电机高于安装底面, 相反为低于安装底面。
Note: If V is negative, it means that the electromotor is lower than the bottom of the housing; while if V is positive it means that the electromotor is higher than the bottom of the housing.

ZH-WJ 系列型号规格表示方式

Denotation of Specification & Dimension of ZH-WJ Series



变速器类型 Type of gearbox	电机代号 Electromotor code	电机功率 Electromotor power	减速机类型 Type of reducer & variator	减速机机座号 Type of reducer Housing No.	结构形式 Structure	减速比 Reduction ratio	最低输出转速 Minimum output speed	手轮方位 Position and direction of handwheel	安装形式 Installation form	接线盒方位 Position and direction of terminal box	数显代号 Digimatic code
锥盘环盘无级变速器 ZH Cone-ring disc stepless variator ZH	普通 Y ₂ Normal Y ₂	见选型参数表 See selections Parameter list	WJ 蜗轮蜗杆减速机 WJ of gear-worm gear reducer	见选型参数表 See selections Parameter list	X 型: 轴装式 X type: shaft-mounted	见选型参数表 See selections Parameter list	见选型参数表 See selections Parameter list	右手轮: R (齿轮齿条调速) Right handwheel R (speed adjustment by gear and rack)	见表 P34 See the table P34	见表 P6 See the table P6	S
	防爆 B Explosion protection B				S 型: 轴装式 S type: shaft-mounted			左手轮: L (齿轮齿条调速) Left Handwheel L (speed adjustment by gear and rack)			
	制动 E Brake E				sh 型: 轴装轴 Sh type: shaft-mounted shaft			上手轮: T (丝杆调速) Top handwheel T (speed adjustment by lead screw)			
	变频 V Frequency conversion V				F 型: 轴装轴 F type: shaft-mounted shaft						
	变频制动 VE Brake by frequency conversion VE				pc 型: 轴装法兰式 pc type: shaft & flange-mounted						
	多速 D Multi-speed D				pd 型: 轴装法兰式 pd type: shaft & flange-mounted						

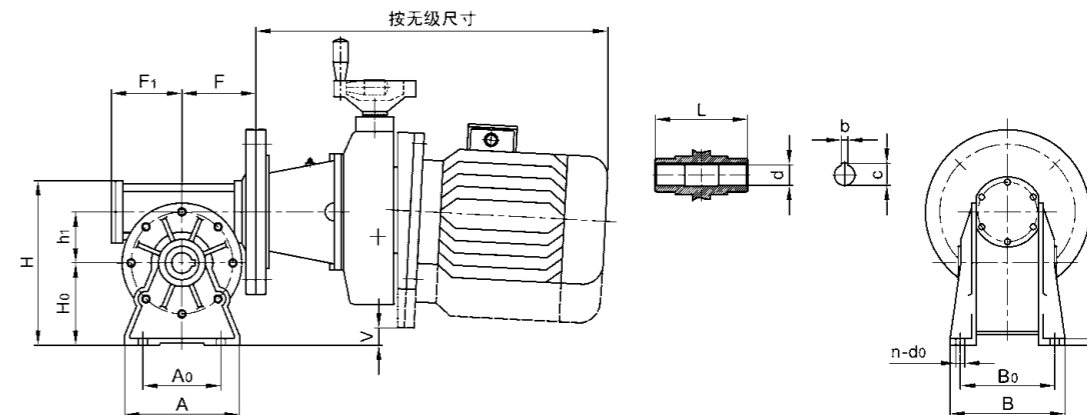
ZH-WJ 系列选型参数表 | Parameter List Selections of ZH-WJ Series

变速器机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机机座号 Housing No. of reducer	减速比 Reduction ratio					
			36	26	18	13.5	7	
ZH07	四极	WJ49	0.37	76-31	68-27	51-21	40-16	25-10
			0.55	112-45	100-40	76-31	59-24	36-15
			0.75	116-61	116-55	104-42	81-33	50-20
			0.37	116-47	105-42	80-32	62-25	38-15
			0.55	116-70	116-63	116-48	92-37	56-23
四极 4-pole	输出转速 r/min	Output speed	8-48	11-66	16-96	21-126	41-246	
六极 6-pole	输出转速 r/min	Output speed	5-30	7-42	11-66	14-84	27-162	

变速器机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机机座号 Housing No. of reducer	减速比 Reduction ratio				
			40	23	19	8	
ZH15	四极	WJ87	1.1	360-124	233-81	193-67	97-34
			1.5	471-168	306-110	252-90	128-46
			2.2	600-218	402-141	332-117	168-59
			3	600-298	483-193	399-160	201-80
			0.75	372-131	241-85	200-70	100-36
六极	1.1	545-193	354-125	292-104	148-52		
	1.5	600-230	418-150	345-124	174-62		
	四极 4-pole	输出转速 r/min	Output speed	7-42	12.5-75	15-90	36-216
六极 6-pole	输出转速 r/min	Output speed	4.5-27	8-48	10-60	24-144	

变速器机座号 Housing No. of gearbox	输入功率 (KW) Input power	减速机机座号 Housing No. of reducer	减速比 Reduction ratio					
			49	37	19	14.5	7.5	
ZH07	四极	WJ62	0.37	107-43	85-35	56-23	43-17	26-11
			0.55	158-64	126-51	82-33	63-25	39-16
			0.75	216-87	173-69	113-45	86-35	53-21
			1.1	300-127	244-101	160-67	121-51	75-31
			0.37	165-66	132-53	86-35	66-26	41-16
六极	0.55	244-99	195-79	127-52	97-40	60-24		
	0.75	300-135	268-108	175-70	134-54	83-33		
	四极 4-pole	输出转速 r/min	Output speed	6-36	7.5-45	15-90	20-120	38-228
六极 6-pole	输出转速 r/min	Output speed	4-24	5-30	10-60	13-78	25-150	

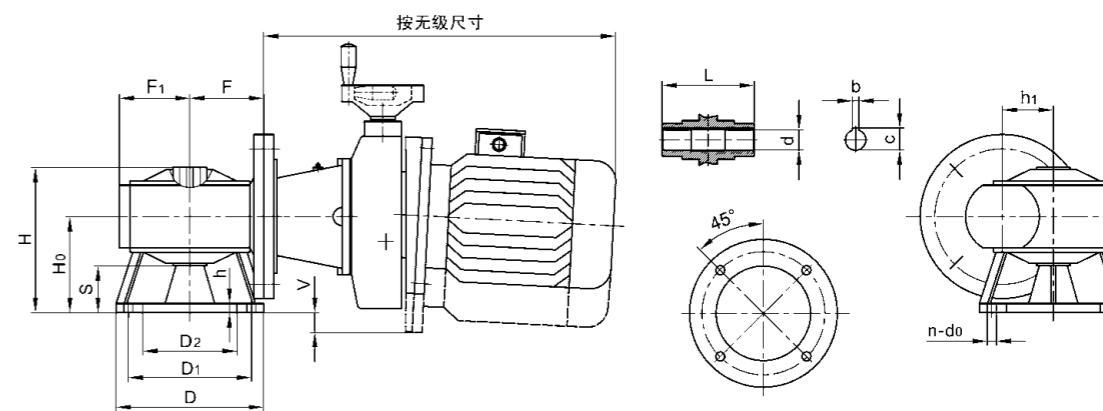
ZH-WJ/S 系列外形及安装尺寸 | Overall & Installation Dimension of ZH-WJ/S Series



机座号 Housing No.	安装尺寸 Installation dimension							输出轴尺寸 Output shaft dimension				外形尺寸 Overall dimension					配置无级机座号 Installed stepless housing No.	
	H ₀	A ₀	B ₀	n	d ₀	h ₁	V	d	L	b	c	A	B	h	H	F		F ₁
49	82	64	98	4	9	49	-10	25H7	82	8	28.3	110	124	12	162	68	64	ZH07
62	100	95	115	4	11	62	21	25H7	120	8	28.3	140	140	12	199	90	86	ZH07
87	142	140	146	4	13	87	73	35H7	140	10	38.3	200	182	14	280	121	116	ZH15

注: V 为负值表示电机高于安装底面, 相反为低于安装底面。
Note: If V is negative, it means that the electromotor is lower than the bottom of the housing; while if V is positive it means that the lelcromotor is higher than the bottom of the housing.

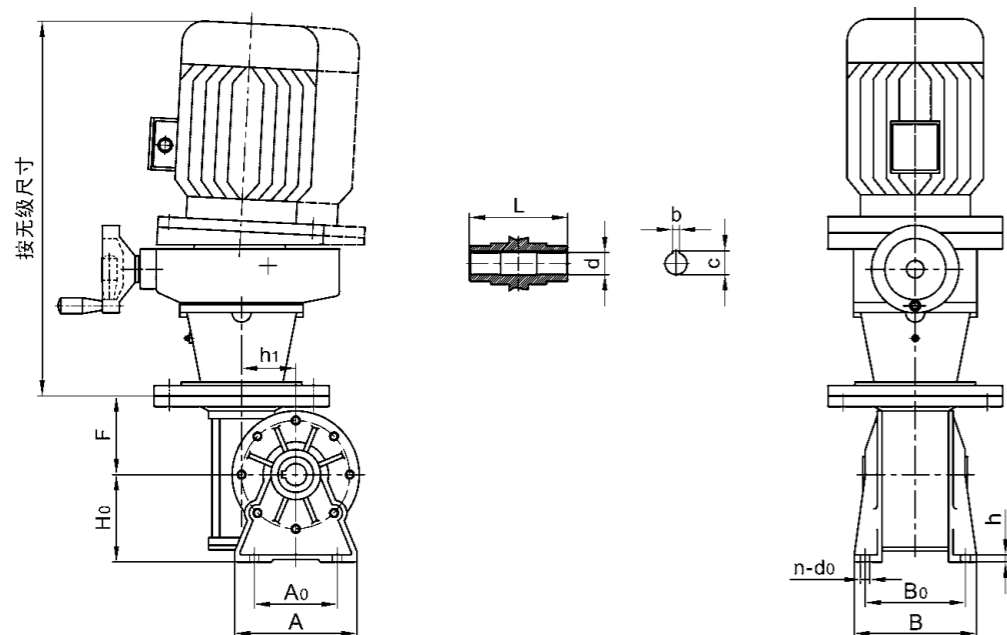
ZH-WJ/pc 系列外形及安装尺寸 | Overall & Installation Dimension of ZH-WJ/pc Series



机座号 Housing No.	安装尺寸 Installation dimension							输出轴尺寸 Output shaft dimension				外形尺寸 Overall dimension					配置无级机座号 Installed stepless housing No.	
	H ₀	D ₁	D ₂	n	d ₀	H ₁	S	V	d	L	b	c	D	h	H	F		F ₁
49	85	105	70H8	4	9	49	44	-56	25H7	82	8	28.3	125	10	126	68	64	ZH07
62	117	150	115H8	4	11	62	57	-24	25H7	120	8	28.3	180	11	177	90	86	ZH07
87	150	180	152H8	4	13	87	80	-6	35H7	140	10	38.3	210	15	220	121	116	ZH15

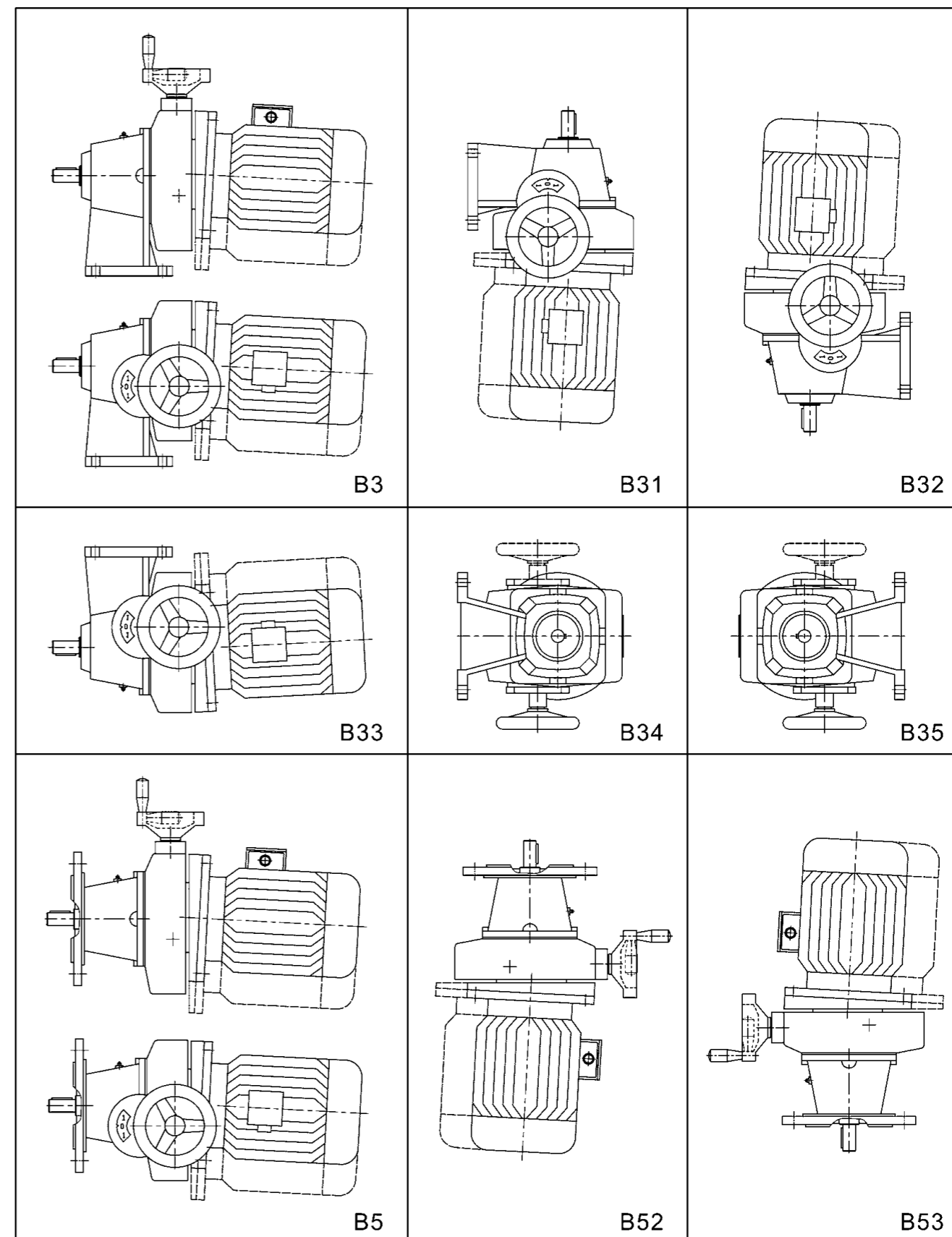
注: V 为负值表示电机高于安装底面, 相反为低于安装底面。
Note: If V is negative, it means that the electromotor is lower than the bottom of the housing; while if V is positive it means that the lelcromotor is higher than the bottom of the housing.

ZH-WJ/Sh 系列外形及安装尺寸 | Overall & Installation Dimension of ZH-WJ/Sh Series



机座号 Housing No.	安装尺寸 Installation dimension				输出轴尺寸 Output shaft dimension				外形尺寸 Overall dimension				配置无级 机座号 Installed stepless housing no.		
	H_0	A_0	B_0	n	d_0	d_1	d	L	b	c	A	B		h	F
49	82	64	98	4	9	49	25H7	82	8	28.3	110	124	12	68	ZH07
62	100	95	115	4	11	62	25H7	120	8	28.3	140	140	12	90	ZH07
87	142	140	146	4	13	87	35H7	140	10	38.3	200	182	14	121	ZH15

ZH 系列安装形式 | Installation Type of ZH Series



注：组合型减变速机安装方位参照所配的减速机。
Note: Please take the assembled reducer as reference for the installation of combined reducers & variators.