



DRIVE THE 创新科技 启动未来  
FUTURE



欧特士传动设备有限公司  
**Haitec Transmission Equipment Co.,Ltd**

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# 创新科技 启动未来 DRIVE THE FUTURE

Haitec Transmission Equipment CO., Ltd. is a modernized enterprise:

The company has excellent technological strengths and advanced production facilities and processes. It is capable of undertaking the full range of services from transmission system designs, productions to after-sales Service. The company is also committed to product reliability, durability and efficiency. The transmission package designed by the company is used in the food, leather, textile, glass, pottery, medical, chemical and light industries and other machinery facilities; it is especially suitable for all types of automation line transmission.



We endeavour to earn accolades from our users and agencies through adequate supplies, quality assurances, competitive pricing, and doorstep delivery based on order quantity, and being an agency for overseas shipments. We aim to draw alongside the best in the industry within the country and to import advanced foreign technologies in order to enhance our company's local and overseas competitiveness.

The company's current and future development principles hinges on the best talent, technologies, products, services, remunerations, management and company culture. Better than the best is our goal.

欧特士传动设备有限公司是一家集科、工、贸于一体的新型现代化企业。

公司拥有雄厚的技术实力和先进的生产设备及工艺,累积多年意大利传动机械的制造经验,承接传动设备系统的设计、制造及售后服务全套的优质服 务,保证了产品经久耐用、安全可靠、小型高效的精良品质。公司设计的传动设备配套用于食品、皮革、纺织、玻璃、陶瓷、医疗、化工、轻工等机械设备等行业,尤其用于各类自动线传动。

公司将凭著货源充足、质量保证、价格优惠、批量定货送货上门、外地定货代办托运的原则,争取获得广大用户及经销商好评。将国内的这个行业里的最优秀的企业作为我们追赶的对象,同时引用国外的先进技术,提高我公司的国内及国外市场竞争力。

无论是现在还是将来,公司将向一流的人才、一流的技术、一流的产品、一流的服务、一流的待遇、一流的管理、一流的企业文化为原则而发展。我们的目标是不为最好而为更好。



## 一、General Features

RV series of worm geared motor that our company produce include HMRV and HRV. Their performance features:

- > ZK worm profile > high anti-wear material
- > Excellent performance, simply structure, small cubage and high efficiency;
- > Easy to mount and maintain;
- > Wide output Reduction ratio, large torque and good capability of enduring overloads;
- > Running stably, low noise and wearing well;
- > Wide applicability and enough safe dependability.

Critical applications:

It is also necessary to take in consideration of and carefully assess the following applications by calling our Technical Service:

- > Applications with especially high inertia,
- > Applications with high dynamic strain on the case of the reduction unit,
- > In places with T° under -10°C or over 60°C,
- > Use in environments pressures other than atmospheric pressure,
- > Avoid applications where even partial immersion of the reduction unit is required,

## 简介

我公司生产的RV系列的蜗轮蜗杆减速器包括HMRV和HRV两大类，这种产品的特点是：

- > 采用ZK型锥面包络传动原理
- > 先进的耐磨材料
- > 性能优越、结构紧凑、体积小、效率高；
- > 安装简易、易于维护检修；
- > 传动比范围大、扭矩大、承受过载能力高；
- > 运行平稳、噪音低、经久耐用；
- > 适用性强、安全可靠性能大。

应用范围:

在您选购本公司产品之前，请认真参考如下的使用范围：

- > 可以在高惯性条件下运转；
- > 可以用在高动态张力的情况下；
- > 适用的环境温度范围-10°~60°；
- > 用在环境压力超过大气压的环境中；
- > 本减速器避免用于液体环境中。



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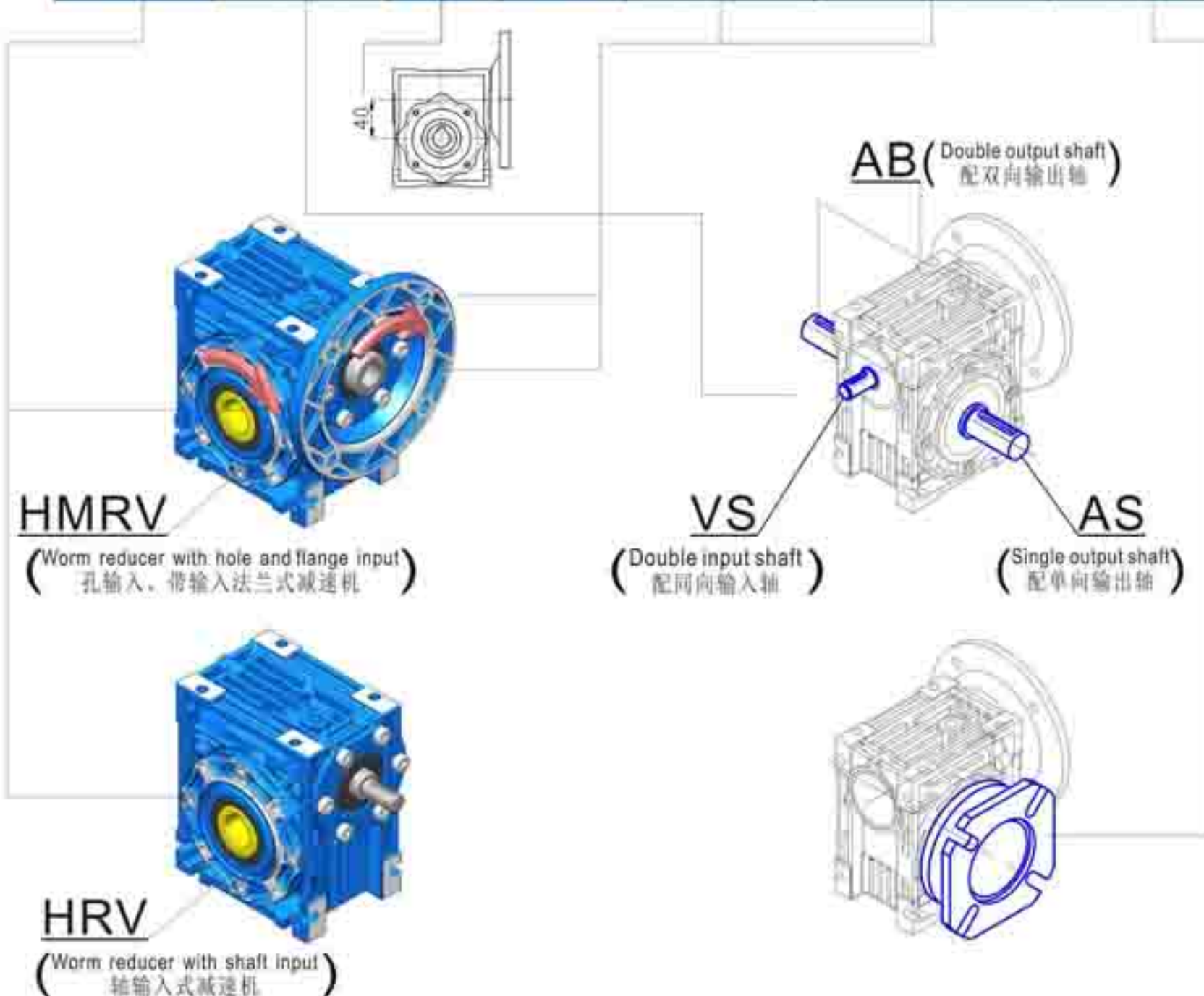
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## 1. Designation 型号注解

HMRV	.VS	040	.20	-140	/11	+FA
Input code name 输入形式	Output code name 输出形式	Size 中心距	Reduction ratio 传动比	Input flange diameter 输入法兰尺寸	Drive shaft diameter HMRV的输入孔尺寸	Output flange 输出法兰
HMRV HRV	VS AB AS	025 030 040 050 063 075 090 105 110 130 150	5 7.5 10 15 20 25 30 40 50 60 80 100	80 90 105 120 140 160 200 250 300 350	9 11 14 19 24 28 38 42	FA FB FC FD FE
Necessary (必要)	Optional (可选)	Necessary (必要)	Necessary (必要)	Optional (可选)	Optional (可选)	Optional (可选)



Sample1: "HMRV.AS063.20-200/24+FB" indicates: HMRV (input hole) form, with single output shaft, size 63mm. Input flange size is 200mm. Input hole is 24mm, matching output flange FB.

示例1: "HMRV.AS063.20-200/24+FB"表示: HMRV(孔输入)形式, 带单向输出轴, 中心距63mm, 传动比20, 输入法兰大小为200mm, 输入孔为24mm, 配FB输出法兰。

Sample2: "HRV110.25" indicates: HRV (shaft) input form, size 110mm. Reduction ratio is 25. The default output hole form, without output flange.

示例2: "HRV110.25"表示: HRV(轴)输入形式, 中心距110mm, 传动比25, 默认孔输出形式, 不带输出法兰。



### Designation 型号注解

HMRV	Worm geaed motor 带输入法兰式减速器(配合电机使用)		
HRV	Worm reduction unit 带输入轴式减速器		
050	Size 中心距		
FA	Output flange 输出法兰		
030	Reduction ratio 传动比	D or S	Output flange mounting positionru 输出法兰的安装型式
PAM	Fitted for motor coupling 带输出法兰式减速器(配合电机使用,基本型)		
200	Motor flange dianeter 输入法兰尺寸	19	Drive shaft diameter HMRV的输入孔尺寸
VS	Double input shaft 配同向输入轴	AS	Single output shaft 配单向输出轴
AB	Double output shaft 配双向输出轴	B3	Mounting position 安装型式
0.75KW	Electric motor power 电机功率	4P	Electric motor polarity 电机极数
230/400V	Electuic motor voltage 电机电压	50HZ	Electric motor frequency 电机频率

### 2.Type selection 选型参数

#### Performance特性

Type of load 加于减速器的负荷性质	Hours/day每日工作时数					
	Starts/hour less than times 每小时断性操作次数少于10次			Starts/hour more than ten times 每小时连续性或间断性操作次数大于10次		
	<2	2-8	8-24	<2	2-8	8-24
	Service factor工作系数					
Uniform 带均衡负荷	0.8	1	1.25	1	1.25	1.75
Moderate 带中级震荡	1	1.25	1.5	1.5	1.75	2
Heavy shocks 带重级震荡	1.25	1.5	1.75	1.75	2	2.25

## Parameter Schedule (With 4p, n1=1400r/min motor)

### 转矩功率参数表(配4级n1=1400r/min电机)

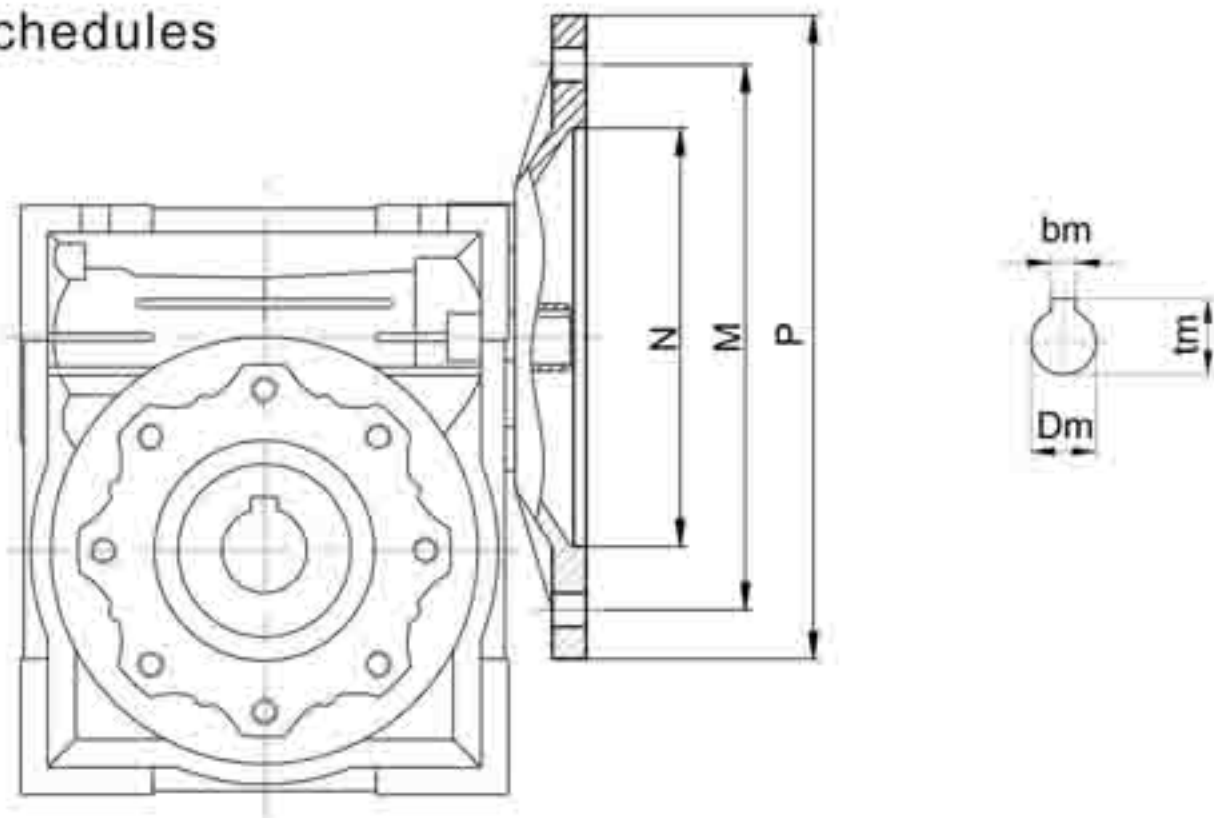
		Size 中心距25			Size 中心距30			Size 中心距40			Size 中心距50		
i	n <sub>2</sub> (r/min)	P <sub>1</sub> (kw)	M <sub>2</sub> (N.m)	s.f.	P <sub>1</sub> (kw)	M <sub>2</sub> (N.m)	s.f.	P <sub>1</sub> (kw)	M <sub>2</sub> (N.m)	s.f.	P <sub>1</sub> (kw)	M <sub>2</sub> (N.m)	s.f.
5	280	-	-	-	0.18	5.3	3.4	0.37	11.2	3	0.75	22.8	2.7
7.5	186.7	-	-	-	0.18	7.8	2.3	0.37	16	2.4	0.75	34	2.1
10	140	-	-	-	0.18	10	1.8	0.37	21	1.9	0.75	44	1.6
15	93.3	0.09	7.3	1.6	0.18	14	1.3	0.37	31	0.8	0.75	63	1.2
20	70	0.09	9.2	1.3	0.18	18	1	0.37	39	1	0.75	81	0.9
25	56	0.09	10	1.2	0.18	21	1	0.37	47	0.8	0.55	71	1
30	46.7	0.09	12	1.1	0.18	24	0.8	0.37	53	0.8	0.55	81	1
40	35	0.09	15	0.8	0.12	19	0.9	0.25	44	0.9	0.37	68	1.1
50	28	0.06	12	0.9	0.12	23	0.8	0.22	47	0.8	0.37	80	0.9
60	23.3	0.06	14	0.7	0.09	19	0.9	0.18	43	0.8	0.37	89	0.8
80	17.5	-	-	-	0.06	14	0.9	0.12	34	1	0.25	72	0.9
100	14	-	-	-	-	-	-	0.12	38	0.8	0.18	60	0.9
		Size 中心距63			Size 中心距75			Size 中心距90			Size 中心距105		
i	n <sub>2</sub> (r/min)	P <sub>1</sub> (kw)	M <sub>2</sub> (Nm)	s.f.	P <sub>1</sub> (kw)	M <sub>2</sub> (N.m)	s.f.	P <sub>1</sub> (kw)	M <sub>2</sub> (N.m)	s.f.	P <sub>1</sub> (kw)	M <sub>2</sub> (N.m)	s.f.
5	280	1.5	46	2	-	-	-	-	-	-	-	-	-
7.5	186.7	1.5	67.5	1.9	4	182	1	4	184.2	1.6	7.5	345	1.3
10	140	1.5	89	1.5	3	180	1.1	4	243	1.3	7.5	455	1.1
15	93.3	1.5	127	1.1	3	261	0.8	4	352	1	5.5	484	1.2
20	70	1.5	166	0.8	1.5	168	1.3	4	458	0.8	4.8	557	1
25	56	1.1	146	0.9	1.5	205	1	3	420	0.8	4	573	1
30	46.7	1.1	167	1	1.5	233	1	3	479	0.9	4	647	1
40	35	0.92	176	0.8	1.1	216	1	1.84	377	1	3	638	1
50	28	0.55	124	1.1	0.55	129	1.6	1.84	452	0.8	3	767	0.8
60	23.3	0.55	140	0.9	0.55	146	1.4	1.5	424	0.8	2.2	648	0.9
80	17.5	0.37	115	1.1	0.55	180	1.1	0.75	258	1.1	1.5	548	0.9
100	14	0.37	129	0.9	0.55	206	0.9	0.75	302	0.9	1.1	473	1
		Size 中心距110			Size 中心距130			Size 中心距150			NOTE		
i	n <sub>2</sub> (r/min)	P <sub>1</sub> (kw)	M <sub>2</sub> (N.m)	s.f.	P <sub>1</sub> (kw)	M <sub>2</sub> (N.m)	s.f.	P <sub>1</sub> (kw)	M <sub>2</sub> (N.m)	s.f.	UNIT		
5	280	-	-	-	-	-	-	-	-	-	n <sub>1</sub> =input speed r/min n <sub>2</sub> =output speed r/min M <sub>2</sub> =output torque N.m i=reduction ratio s.f.=service factor  注释 单位 n <sub>1</sub> =输入速度 r/min n <sub>2</sub> =输出速度 r/min M <sub>2</sub> =输出转矩 N.m i=传动比 s.f.=工作系数		
7.5	186.7	7.5	345	1.3	7.5	349.2	2.1	-	-	-			
10	140	7.5	455	1.1	7.5	455	1.8	15	921	1.3			
15	93.3	5.5	484	1.4	7.5	668	1.4	11	990	1.3			
20	70	5.5	638	0.9	7.5	880	1	11	1291	1			
25	56	4.8	688	0.9	7.5	1074	0.9	7.5	1074	1.1			
30	46.7	4	647	1.1	5.5	900	1.2	7.5	1274	0.9			
40	35	3	638	1	5.5	1171	0.9	5.5	1171	1.3			
50	28	3	767	0.8	4.8	1244	1.1	5.5	1426	1			
60	23.3	2.2	648	0.9	4	1179	0.8	4	1195	1.1			
80	17.5	1.5	548	0.9	2.2	816	1	4	1484	0.8			
100	14	1.1	473	1	2.2	966	1	2.2	960	1			



HMRV025~150 photo  
HMRV025~150 相片

### 3. Dimensions 尺寸

#### 3.1 Input size general schedules 输入尺寸总表





HMRV	Mounting Spec.						Dm											
	PAM-IEC	N	M	P	bm	lm	5	7.5	10	15	20	25	30	40	50	60	80	100
25	56B14	50	65	80	3	10.4	-	-	-	9	9	9	9	9	9	9	-	-
30	63B5	95	115	140	4	12.8	11	11	11	11	11	11	11	11	11	-	-	-
	63B14	60	75	90	4	12.8												
	56B5	80	100	120	3	10.4	9	9	9	9	9	9	9	9	9	9	9	-
	56B14	50	65	80	3	10.4												
40	71B5	110	130	160	5	16.3	14	14	14	14	14	14	14	14	-	-	-	-
	71B14	70	85	105	5	16.3												
	63B5	95	115	140	4	12.8	11	11	11	11	11	11	11	11	11	11	11	11
	63B14	60	75	90	4	12.8												
	56B5	80	100	120	3	10.4	-	-	-	-	-	-	-	-	9	9	9	9
50	80B5	130	165	200	6	21.8	19	19	19	19	19	19	19	-	-	-	-	-
	80B14	80	100	120	6	21.8												
	71B5	110	130	160	5	16.3	14	14	14	14	14	14	14	14	14	14	14	-
	71B14	70	85	105	5	16.3												
	63B5	95	115	140	4	12.8	-	-	-	-	-	-	-	11	11	11	11	11
63	90B5	130	165	200	8	27.3	24	24	24	24	24	24	24	-	-	-	-	-
	90B14	95	115	140	8	27.3												
	80B5	130	165	200	6	21.8	19	19	19	19	19	19	19	19	19	19	-	-
	80B14	80	100	120	6	21.8												
	71B5	110	130	160	5	16.3	-	-	-	-	-	-	-	14	14	14	14	14
	71B14	70	85	105	5	16.3												
75	100/112B5	180	215	250	8	31.3	-	28	28	28	-	-	-	-	-	-	-	-
	100/112B14	110	130	160	8	31.3												
	90B5	130	165	200	8	27.3	-	24	24	24	24	24	24	24	-	-	-	-
	90B14	95	115	140	8	27.3												
	80B5	130	165	200	6	21.8	-	-	-	-	19	19	19	19	19	19	19	19
	80B14	80	100	120	6	21.8												
	71B5	110	130	160	5	16.3	-	-	-	-	-	-	-	-	14	14	14	14
90	100/112B5	180	215	250	8	31.3	-	28	28	28	28	28	28	-	-	-	-	-
	100/112B14	110	130	160	8	31.3												
	90B5	130	165	200	8	27.3	-	24	24	24	24	24	24	24	24	24	-	-
	90B14	95	115	140	8	27.3												
	80B5	130	165	200	6	21.8	-	-	-	-	-	-	-	19	19	19	19	19
	80B14	80	100	120	6	21.8												
105	132B5	230	265	300	10	41.3	-	38*	38*	38*	38*	-	-	-	-	-	-	-
	100/112B5	180	215	250	8	31.3	-	28	28	28	28	28	28	28	28	28	-	-
	90B5	130	165	200	8	27.3	-	-	-	-	-	24	24	24	24	24	24	24
	80B5	130	165	200	6	21.8	-	-	-	-	-	-	-	-	-	-	19	19
110	132B5	230	265	300	10	41.3	-	38*	38*	38*	38*	-	-	-	-	-	-	-
	100/112B5	180	215	250	8	31.3	-	28	28	28	28	28	28	28	28	28	-	-
	90B5	130	165	200	8	27.3	-	-	-	-	-	24	24	24	24	24	24	24
	80B5	130	165	200	6	21.8	-	-	-	-	-	-	-	-	-	-	19	19
130	132B5	230	265	300	10	41.3	-	38*	38*	38*	38*	38*	38*	-	-	-	-	-
	100/112B5	180	215	250	8	31.3	-	-	-	-	-	28	28	28	28	28	28	28
	90B5	130	165	200	8	27.3	-	-	-	-	-	-	-	-	-	-	24	24
150	160B5	250	300	350	12	45.3	-	42	42	42	42	42	-	-	-	-	-	-
	132B5	230	265	300	10	41.3	-	-	-	-	38	38	38	38	38	38	-	-
	100/112B5	180	215	250	8	31.3	-	-	-	-	-	-	-	-	28	28	28	28

Note:(\*)Low profile key supplied by Haitec

注释:薄键由欧特士提供



Marketing office  
业务部



Technical Department  
技术部



Professional production equipment  
专业生产设备



Assembly line  
组装

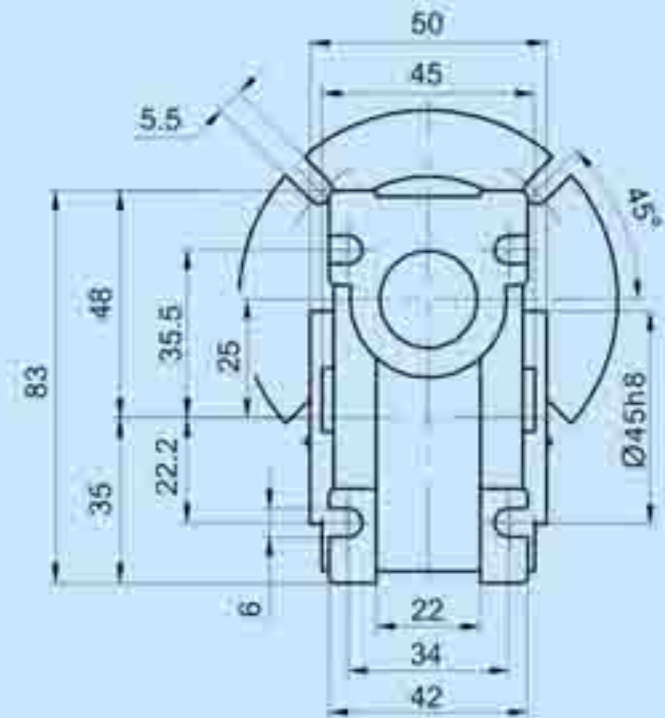
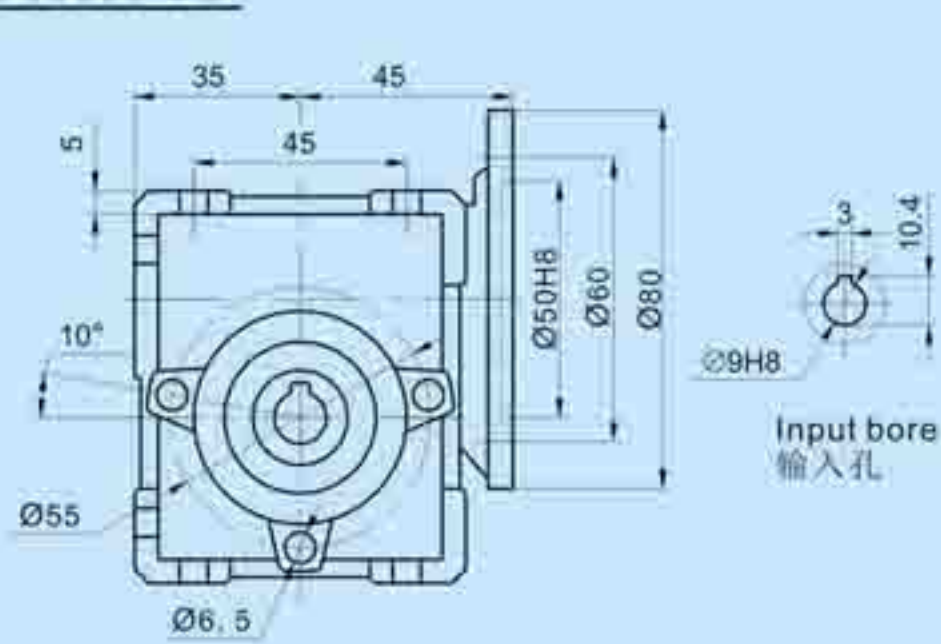


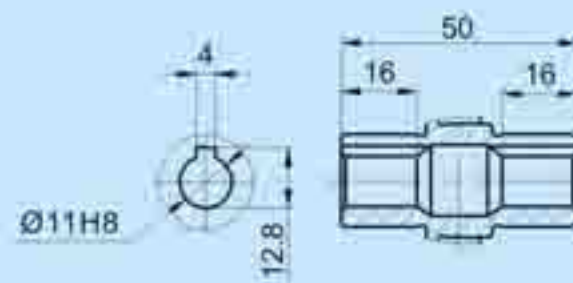
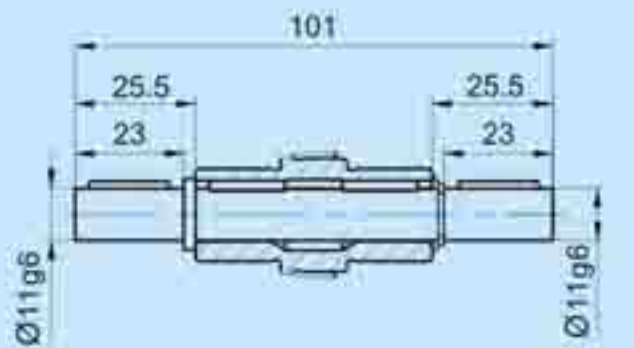
Quality testing  
质检

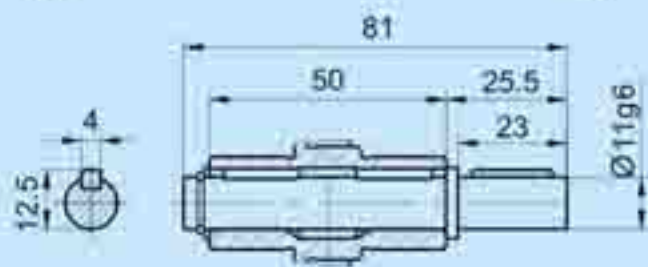
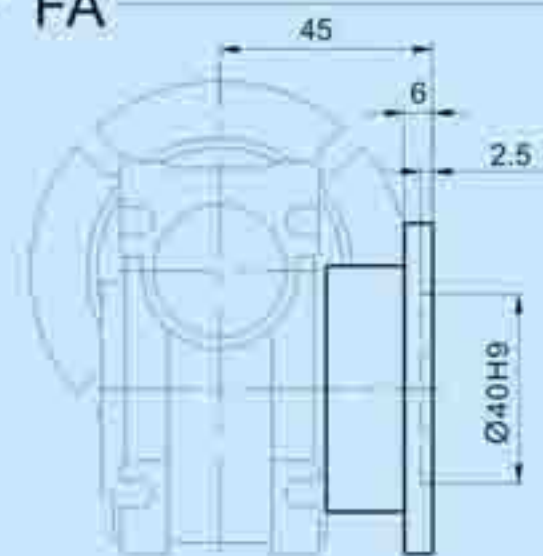
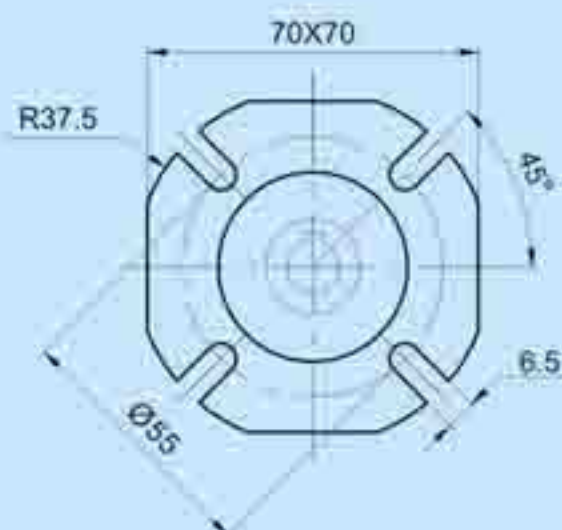
### 3.2 Boundary dimension and output size 外型尺寸及输出尺寸

**025**

## HMRV


 Output shaft  
输出轴

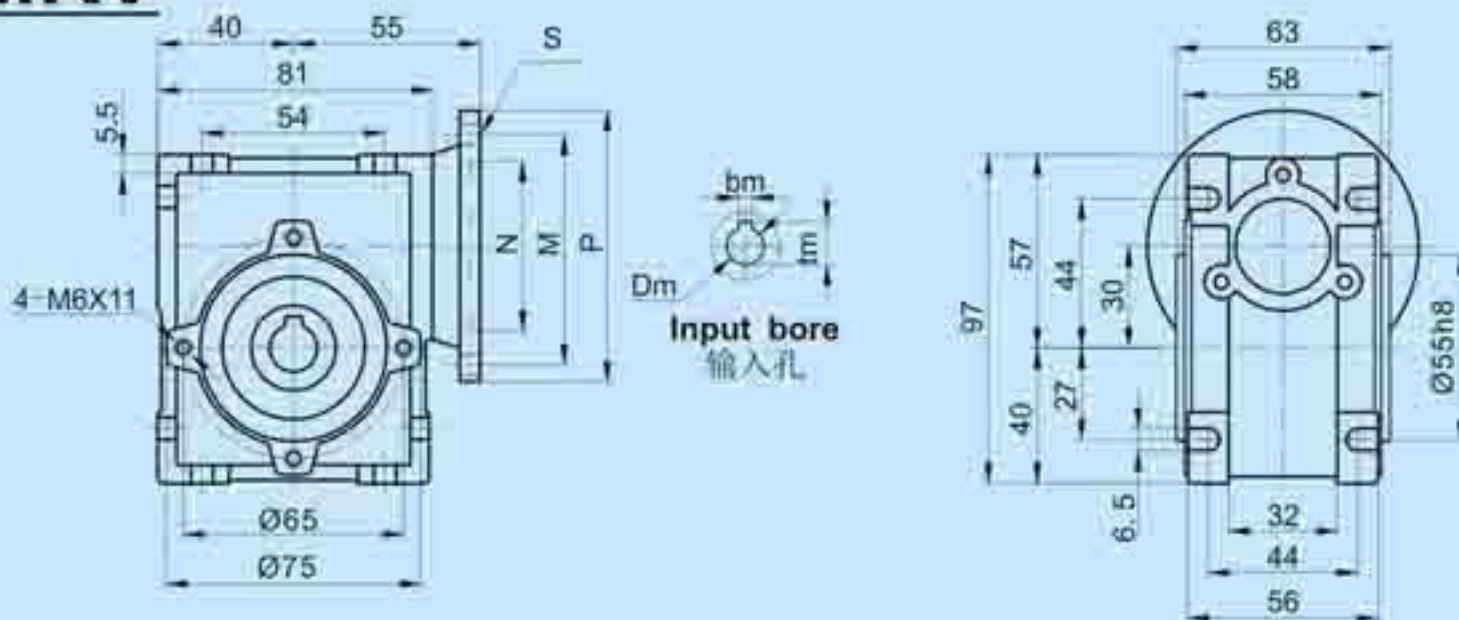
**AB**

 Output bore  
输出孔

**AS**

 Output flange 输出法兰 **FA**

 Weight : 0.7kg  
重量 : 0.7kg

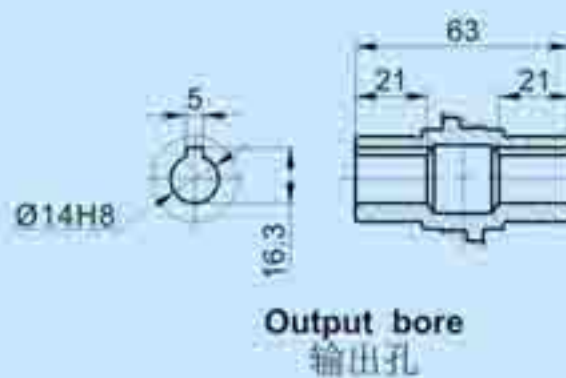
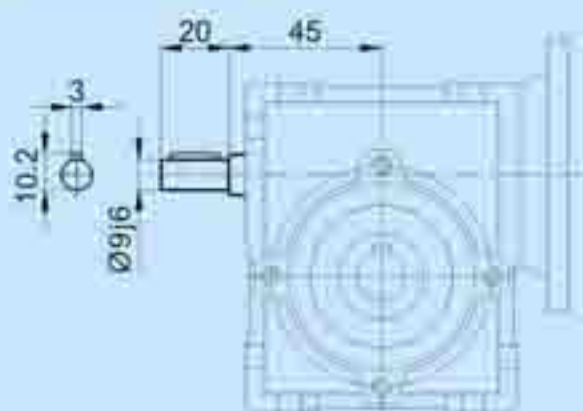
Dimensions  
尺寸

030

**HMRV**



**HMRV. VS**



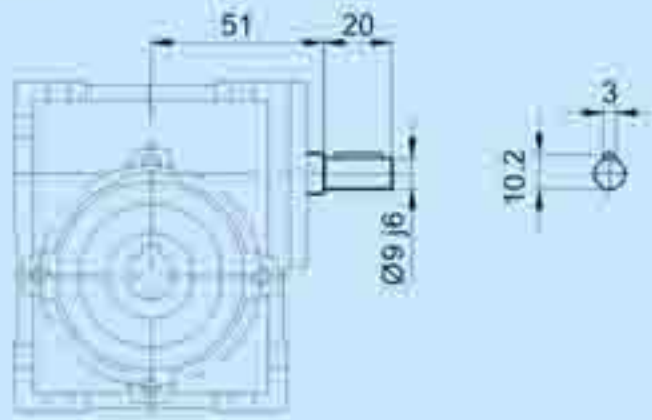
PAM-IEC 适用电机	N (H8)	M	P	bm	tm	S	Dm (H7)											
							5	7.5	10	15	20	25	30	40	50	60	80	100
63B5	Ø95	Ø115	Ø140	4	12.8	Ø9	11	11	11	11	11	11	11	11	-	-	-	23
63B14	Ø60	Ø75	Ø90	4	12.8	Ø6	9	9	9	9	9	9	9	9	9	9	-	20
56B5	Ø80	Ø100	Ø120	3	10.4	Ø7	9	9	9	9	9	9	9	9	9	9	-	20
56B14	Ø50	Ø65	Ø80	3	10.4	Ø6	9	9	9	9	9	9	9	9	9	9	-	20

Weight: 1.3kg  
重量: 1.3kg

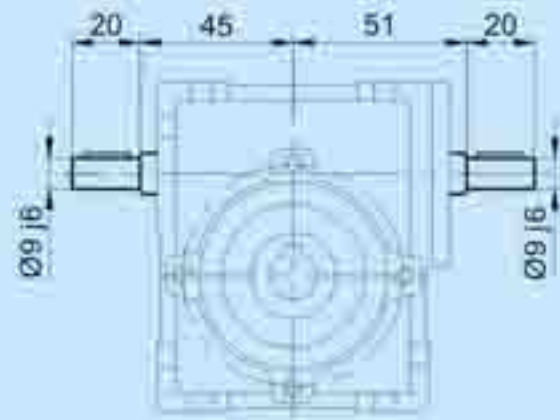
Dimensions  
尺寸

030

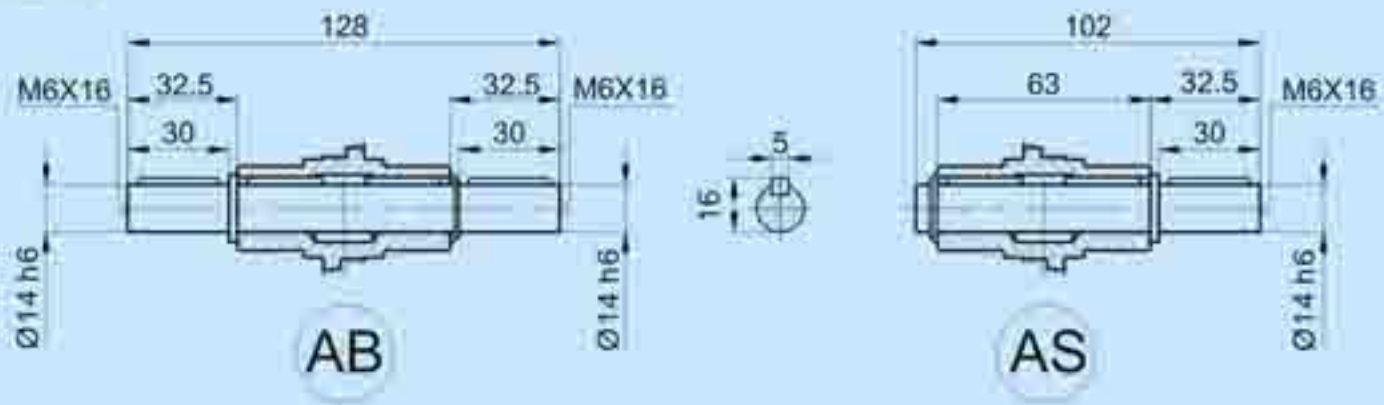
**HRV**



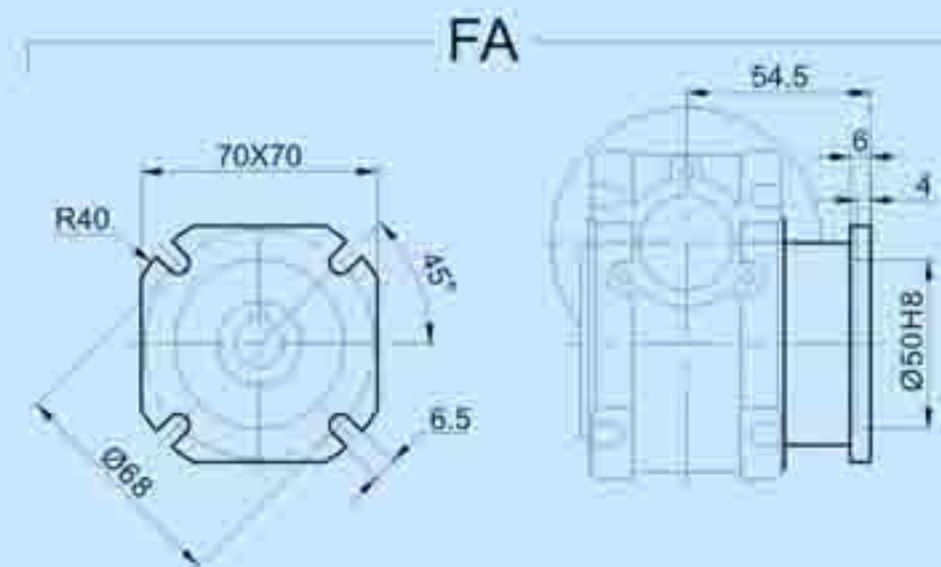
**HRV.VS**



Output shaft 输出轴



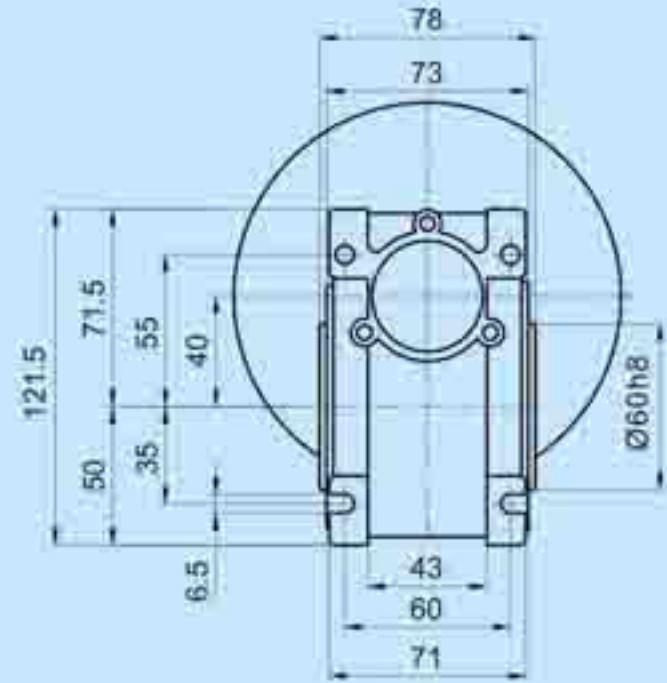
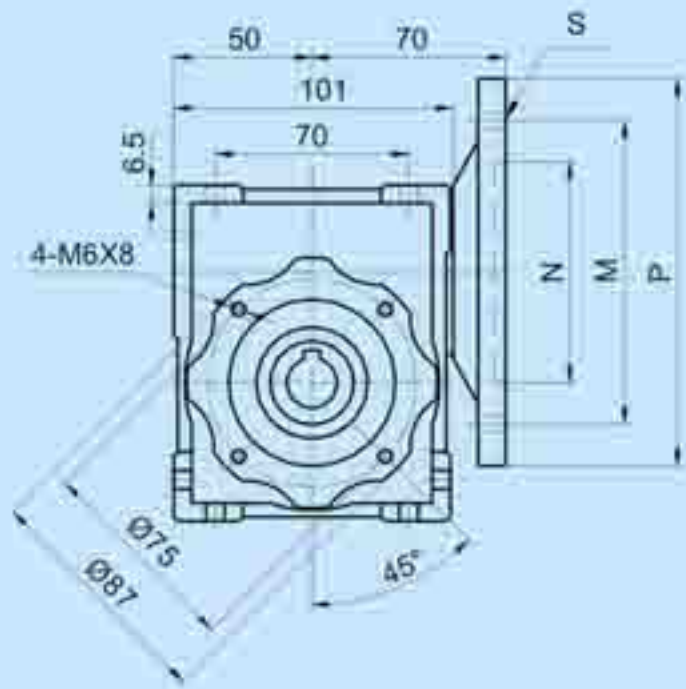
Output flange 输出法兰



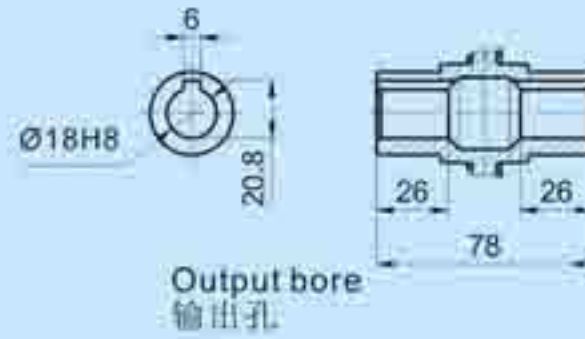
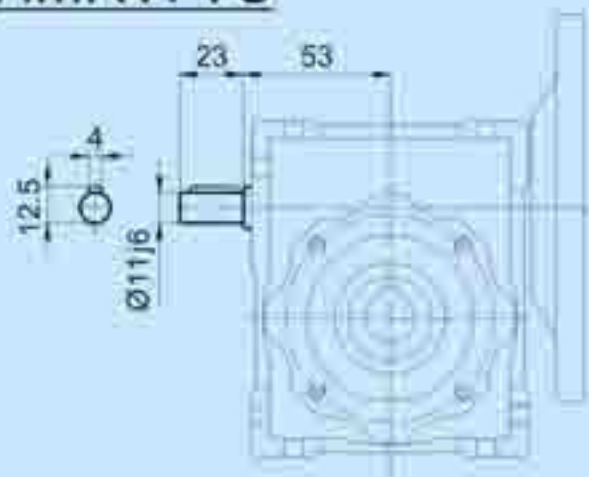
Dimensions  
尺寸

040

**HMRV**



**HMRV. VS**



PAM-IEC 适用电机	N (H8)	M	P	bm	tm	S	Dm (H7)												
							5	7.5	10	15	20	25	30	40	50	60	80	100	Depth 深
71B5	Ø110	Ø130	Ø160	5	16.3	Ø11	14	14	14	14	14	14	14	14	-	-	-	-	30
71B14	Ø70	Ø85	Ø105	5	16.3	Ø7	11	11	11	11	11	11	11	11	11	11	11	11	23
63B5	Ø95	Ø115	Ø140	4	12.8	Ø9	-	-	-	-	-	-	-	-	9	9	9	9	23
63B14	Ø60	Ø75	Ø90	4	12.8	Ø6	-	-	-	-	-	-	-	-	-	-	-	-	23
56B5	Ø80	Ø100	Ø120	3	10.4	Ø7	-	-	-	-	-	-	-	-	9	9	9	9	23

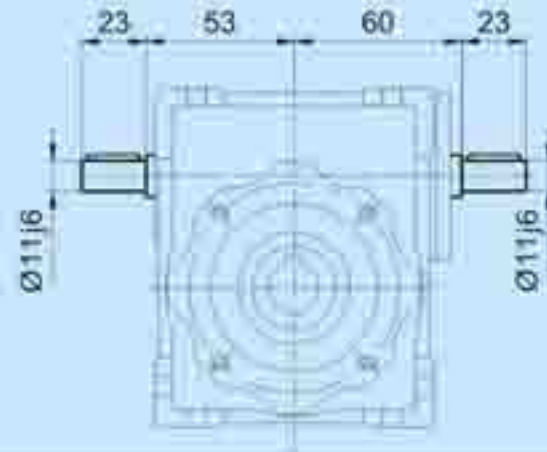
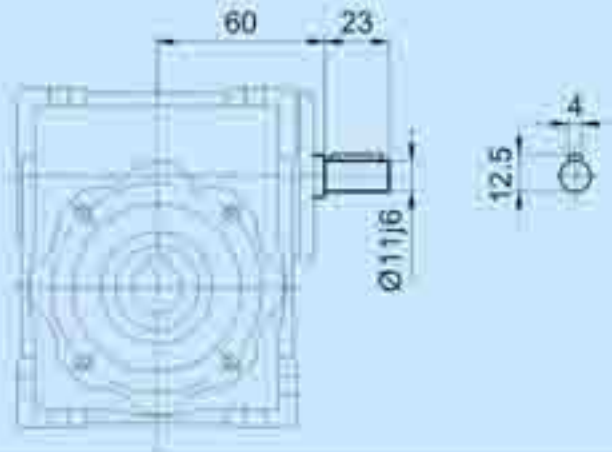
Weight : 2.4kg  
重量 : 2.4kg

# Dimensions 尺寸

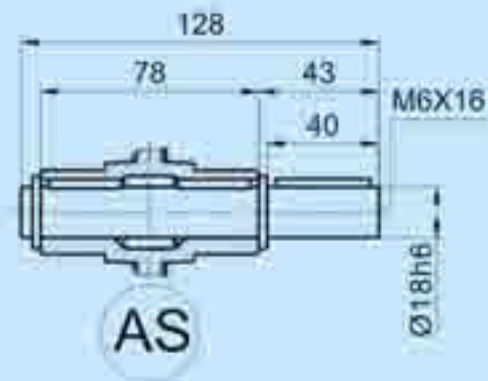
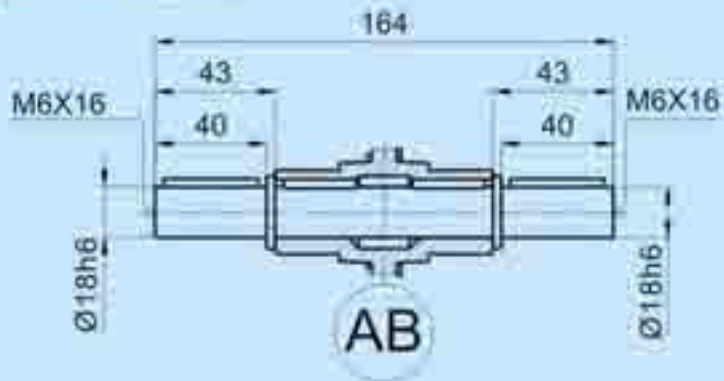
## HRV

## HRV.VS

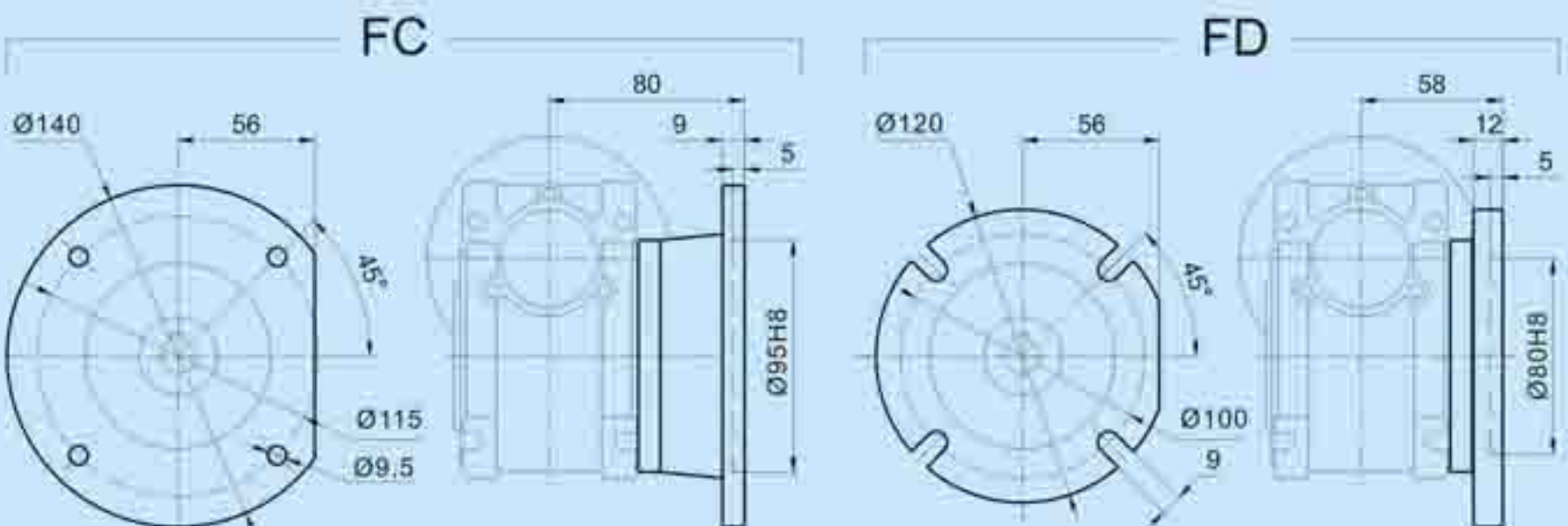
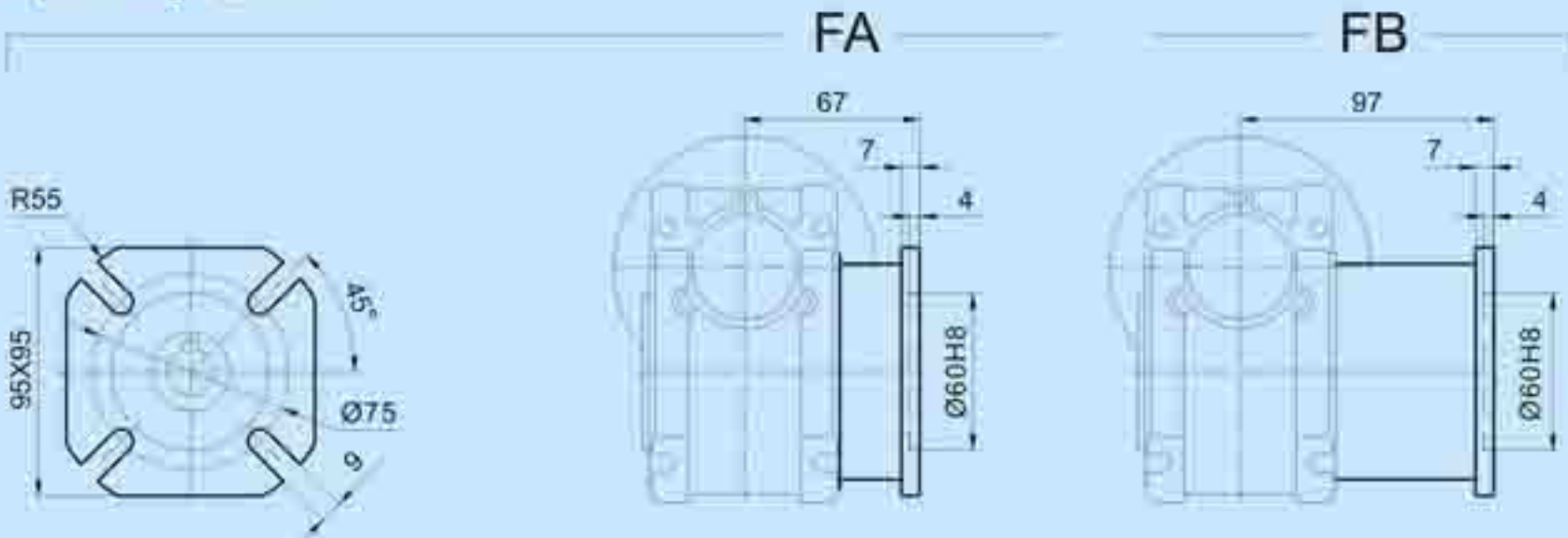
# 040



### Output shaft 输出轴



### Output flange 输出法兰

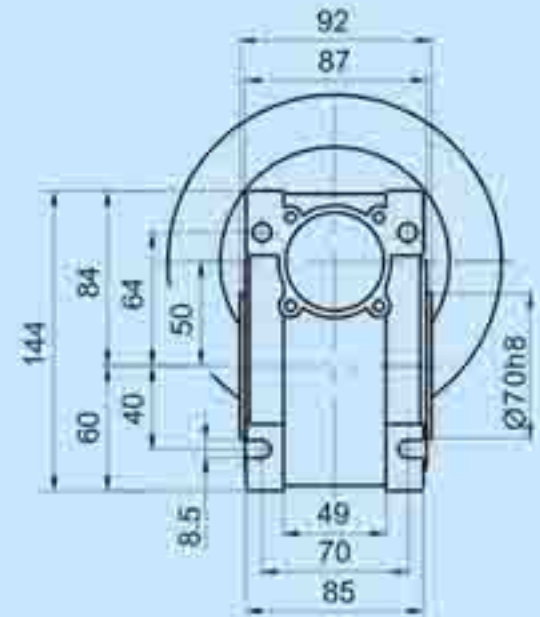
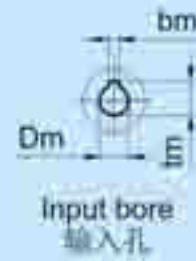
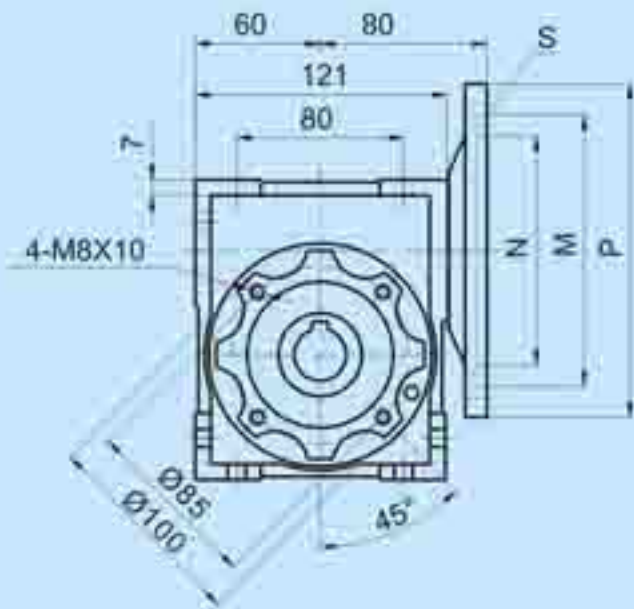




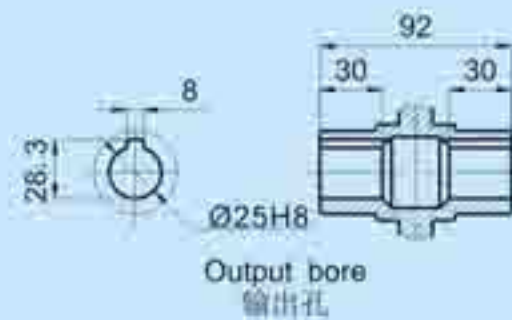
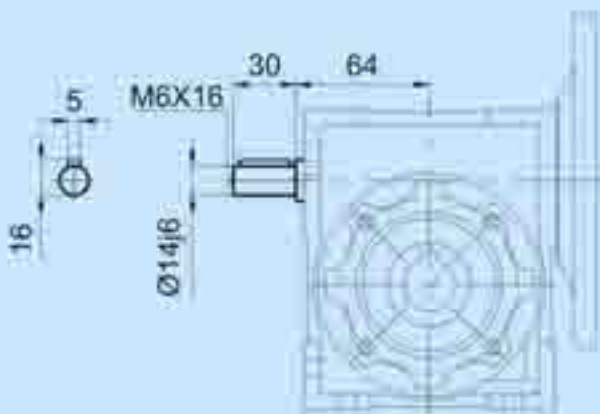
Dimensions  
尺寸

050

**HMRV**



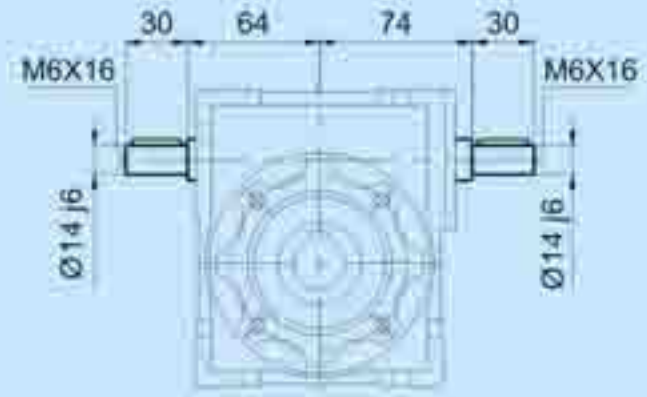
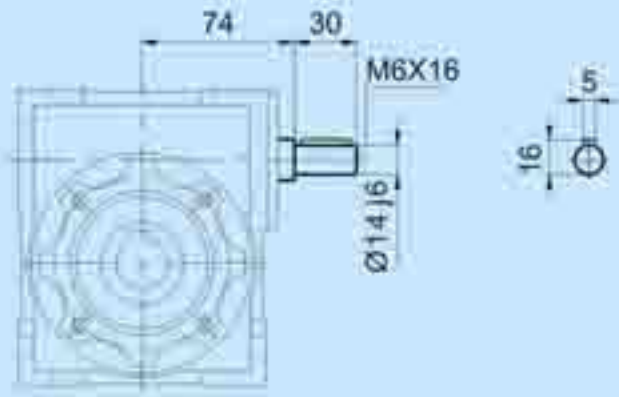
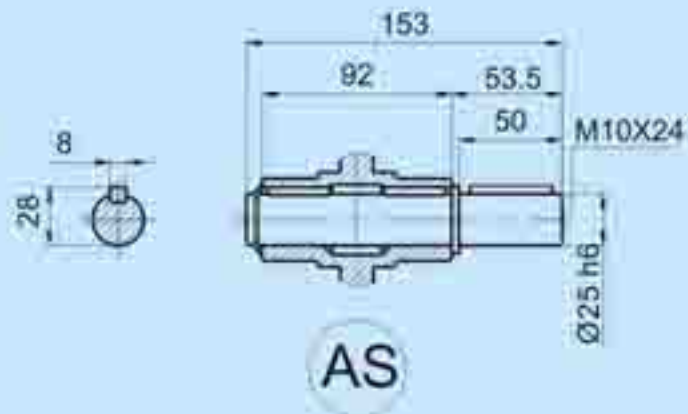
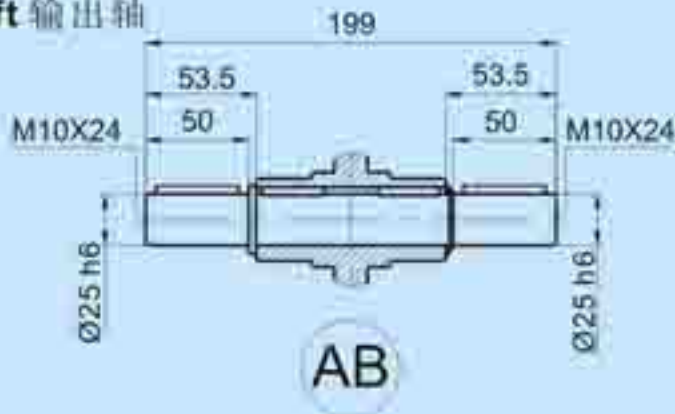
**HMRV. VS**

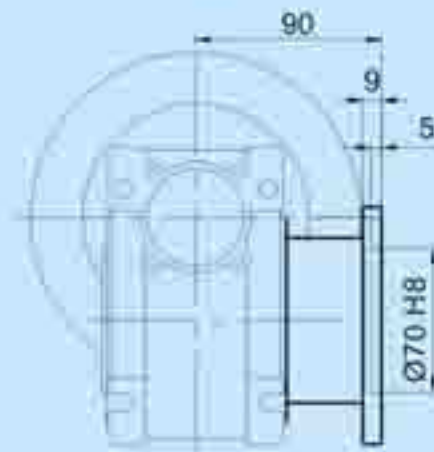
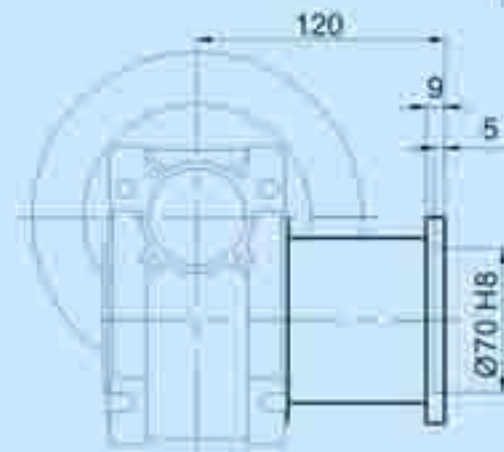
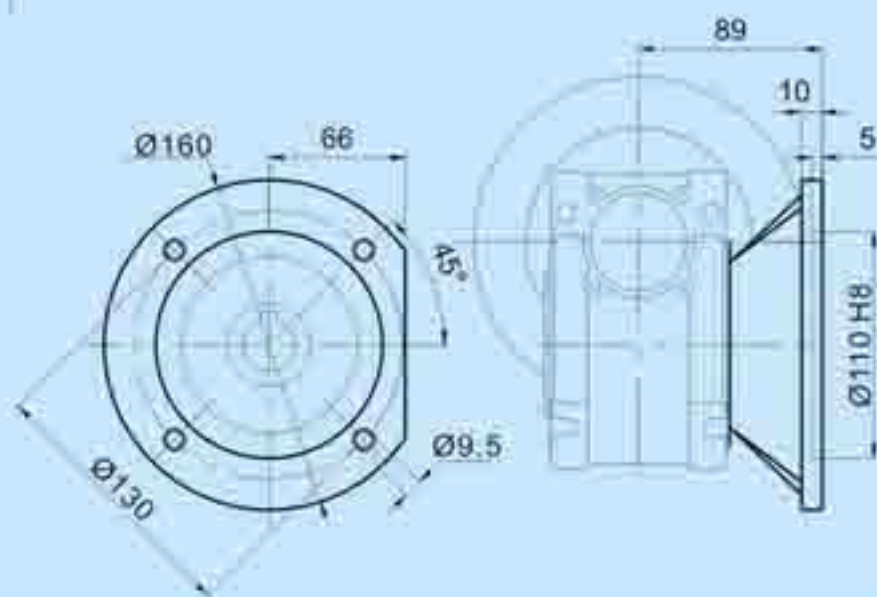
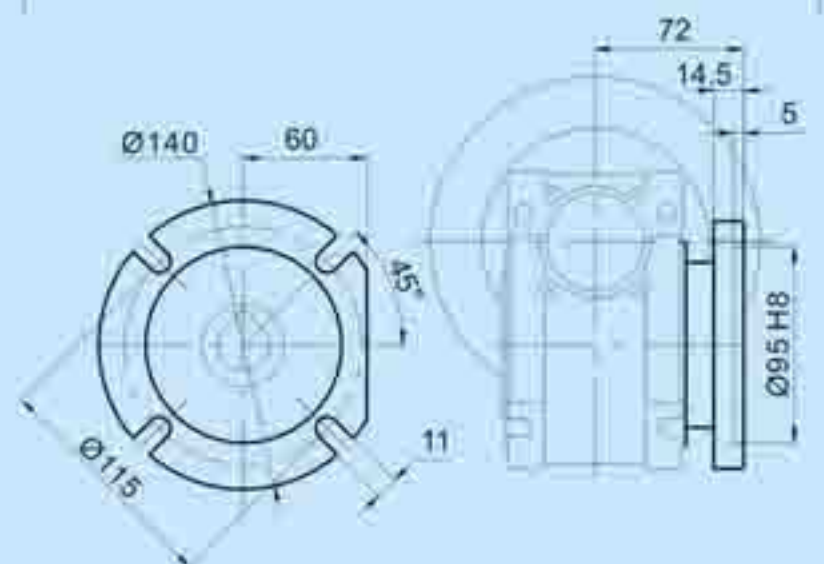


PAM-IEC 适用电机	N (H8)	M	P	bm	tm	S	Dm (H7)												
							5	7.5	10	15	20	25	30	40	50	60	80	100	Depth 深
80B5	Ø130	Ø165	Ø200	6	21.8	Ø11	19	19	19	19	19	19	19	-	-	-	-	-	40
80B14	Ø80	Ø100	Ø120	6	21.8	Ø7	14	14	14	14	14	14	14	14	14	14	14	-	30
71B5	Ø110	Ø130	Ø160	5	16.3	Ø11	-	-	-	-	-	-	-	11	11	11	11	11	23
71B14	Ø70	Ø85	Ø105	5	16.3	Ø7	-	-	-	-	-	-	-	-	-	-	-	-	-
63B5	Ø95	Ø115	Ø140	4	12.8	Ø9	-	-	-	-	-	-	-	-	-	-	-	-	-

Weight : 3.6kg  
重量 : 3.6kg



**Dimensions**  
**尺寸**
**HRV**
**HRV.VS**
**050**

**Output shaft 输出轴**

**Output flange 输出法兰**

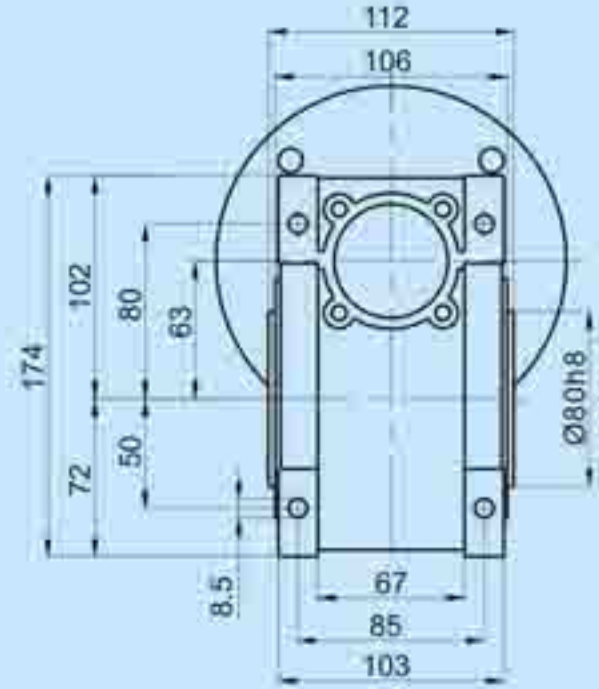
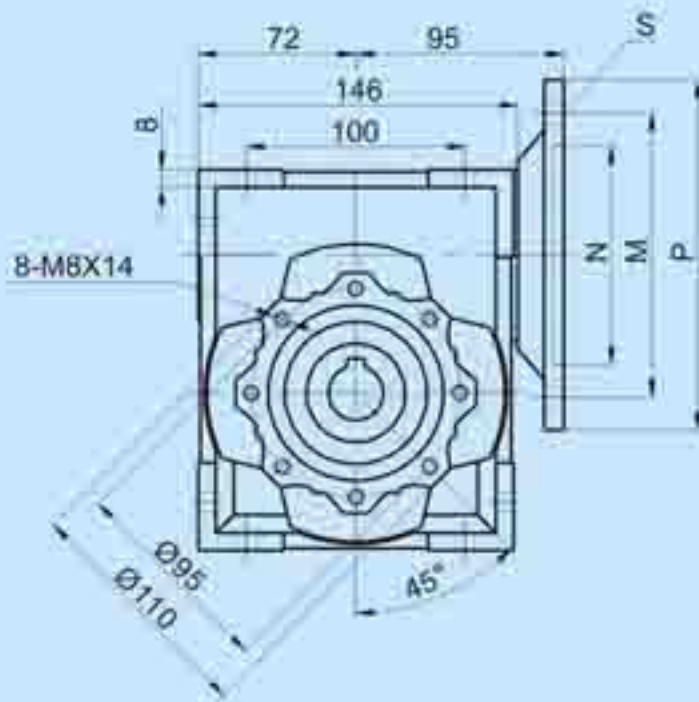
**FA**

**FB**

**FC**

**FD**




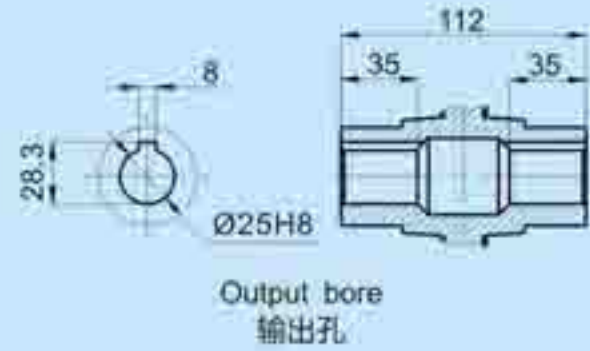
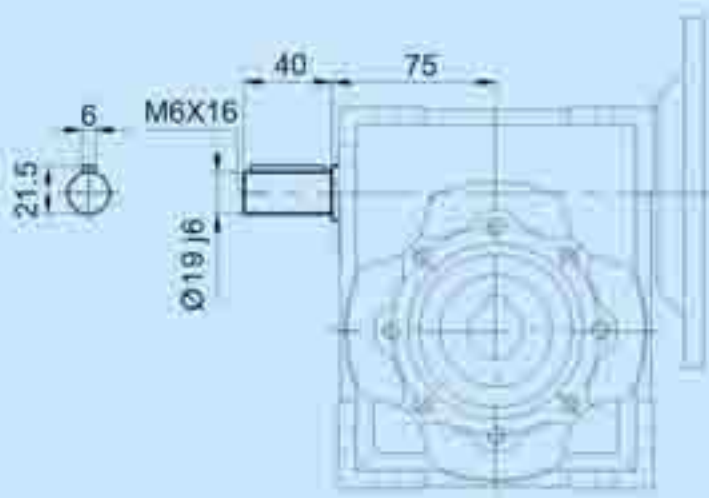
Dimensions  
尺寸

**HMRV**

**063**



**HMRV. VS**

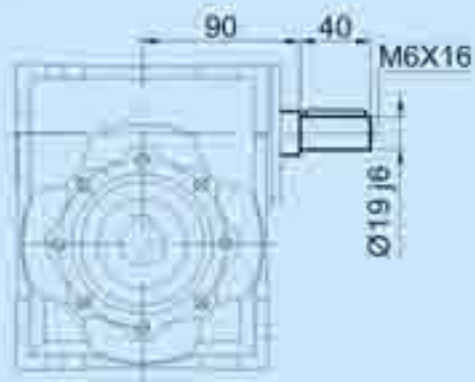


PAM-IEC 适用电机	N (H8)	M	P	bm	tm	S	Dm (H7)												
							5	7.5	10	15	20	25	30	40	50	60	80	100	Depth 深
90B5	Ø130	Ø165	Ø200	8	27.3	Ø11													
90B14	Ø95	Ø115	Ø140	8	27.3	Ø9	24	24	24	24	24	24	-	-	-	-	-	-	50
80B5	Ø130	Ø165	Ø200	6	21.8	Ø11													
80B14	Ø80	Ø100	Ø120	6	21.8	Ø7	19	19	19	19	19	19	19	19	19	19	-	-	40
71B5	Ø110	Ø130	Ø160	5	16.3	Ø11													
71B14	Ø70	Ø85	Ø105	5	16.3	Ø7	-	-	-	-	-	-	-	14	14	14	14	14	30

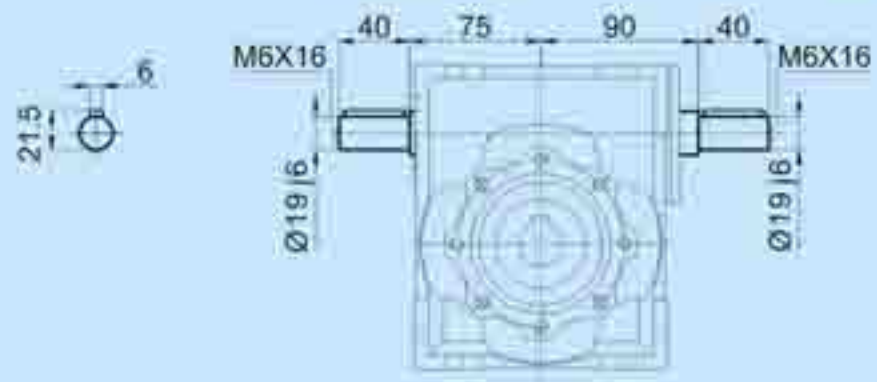
Weight : 6.3kg  
重量 : 6.3kg

# Dimensions 尺寸

## HRV

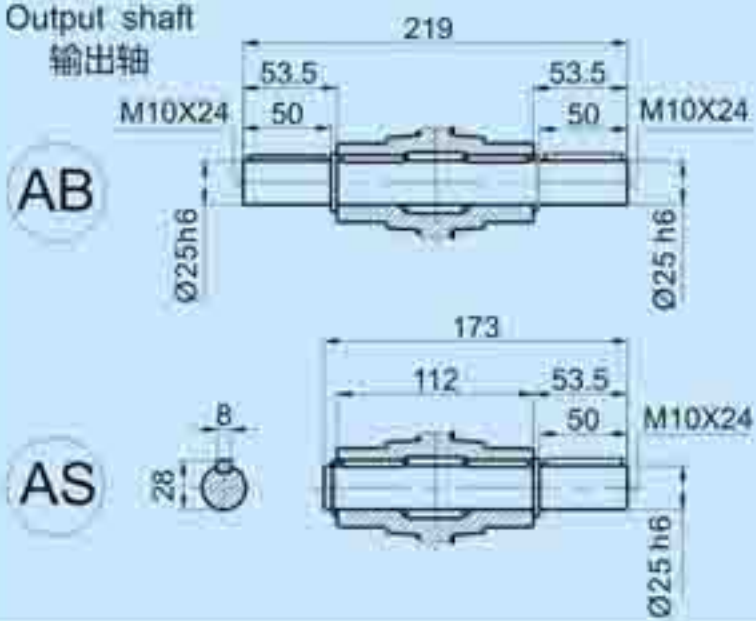


## HRV.VS

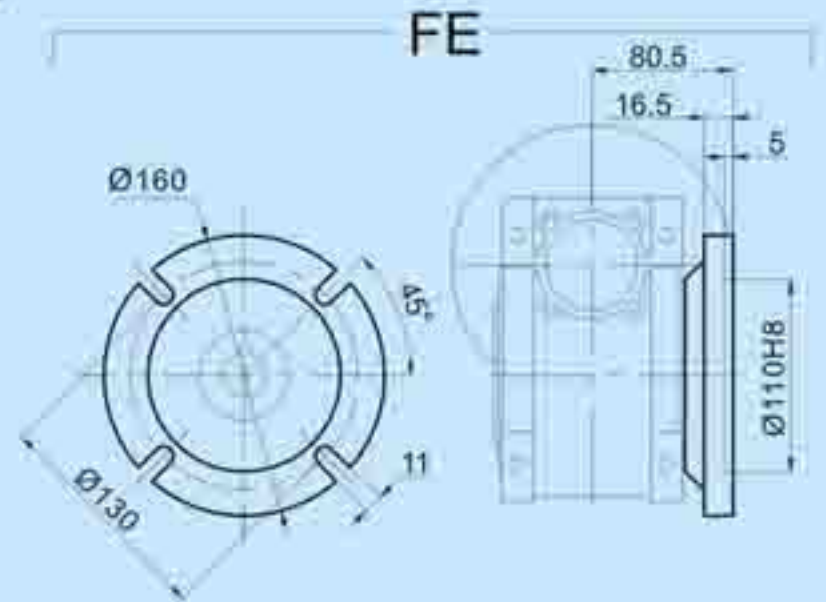


# 063

Output shaft  
输出轴

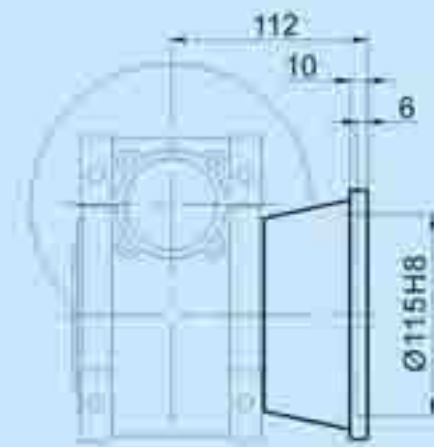
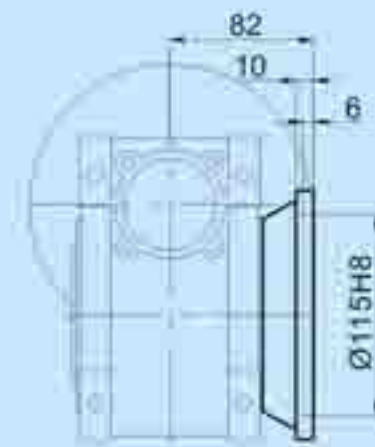
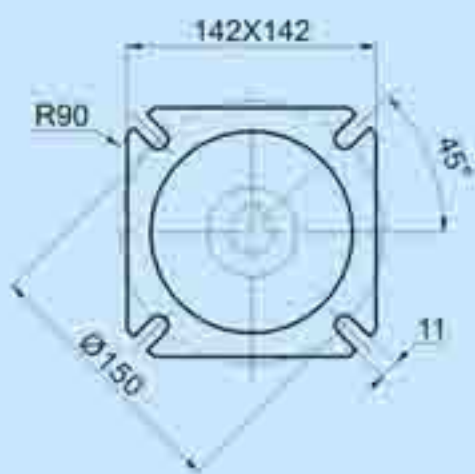


Output flange  
输出法兰



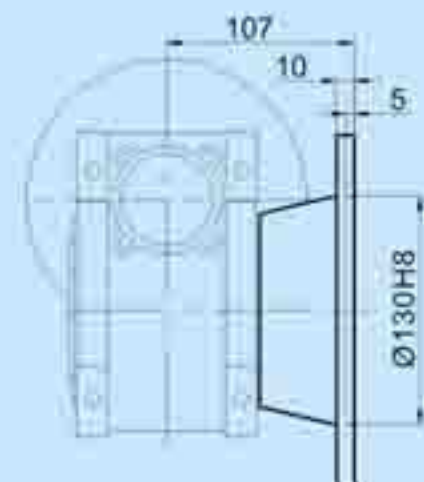
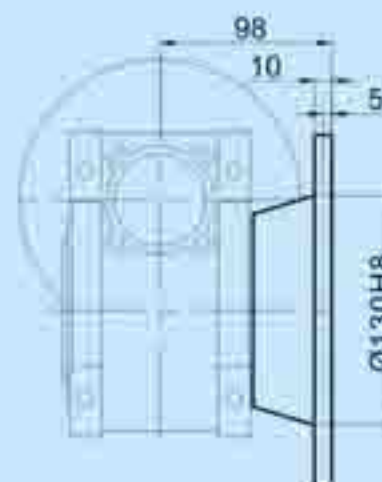
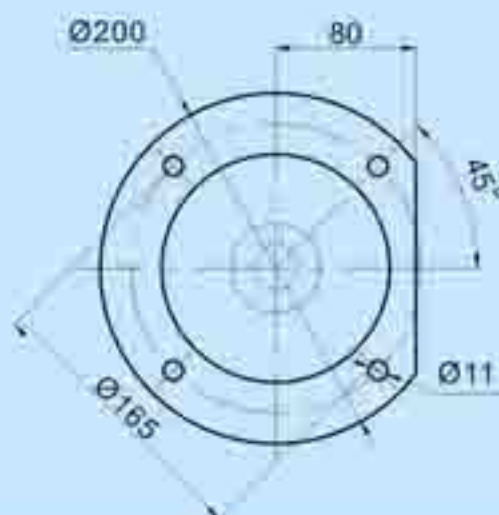
FA

FB



FC

FD

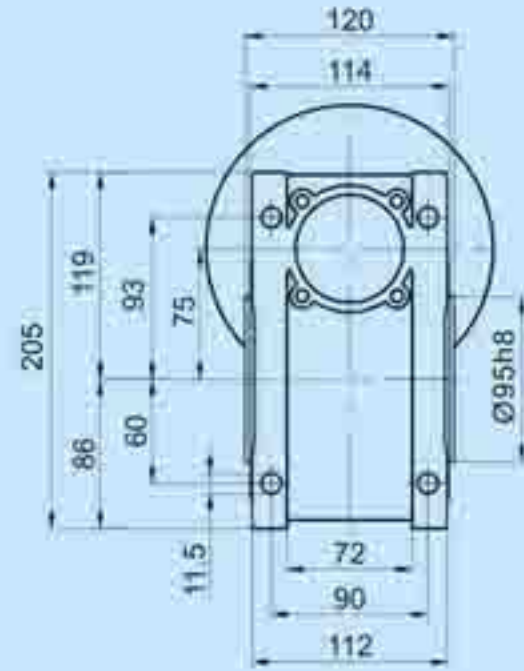
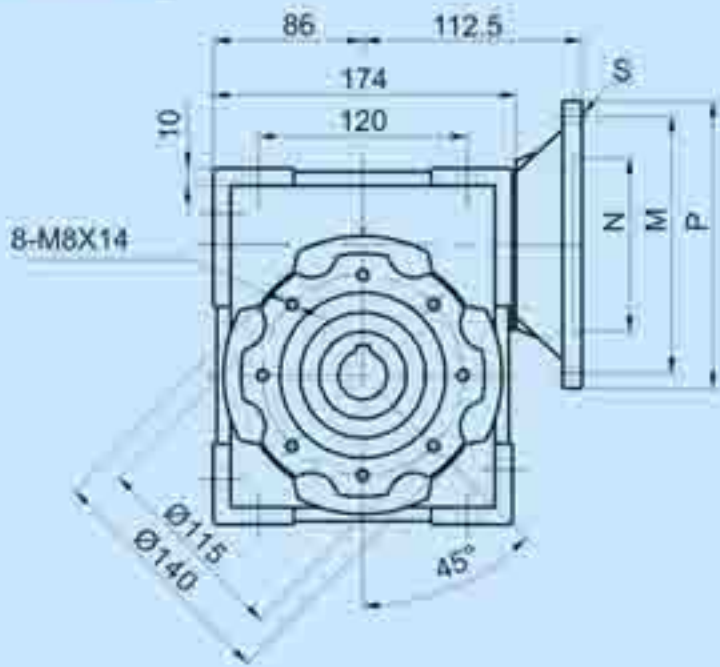




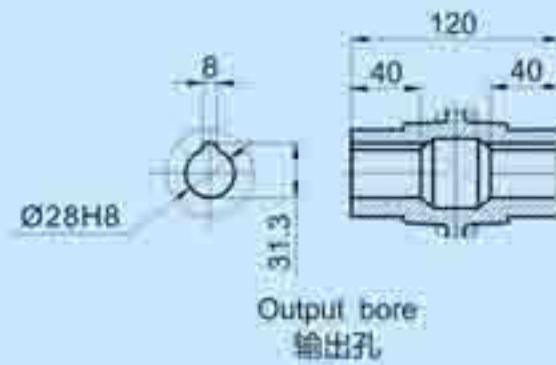
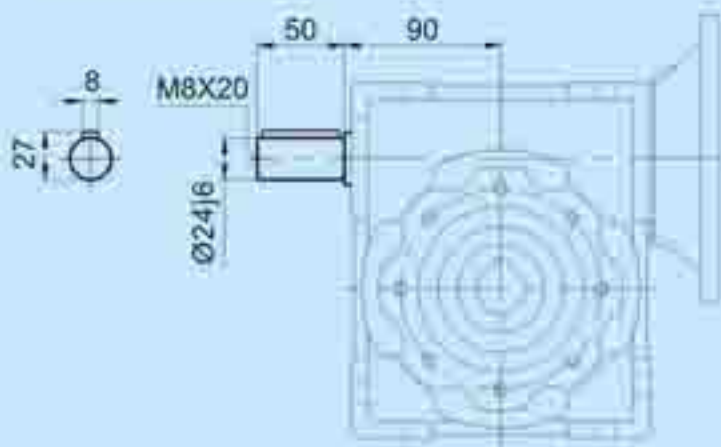
Dimensions  
尺寸

075

**HMRV**



**HMRV. VS**



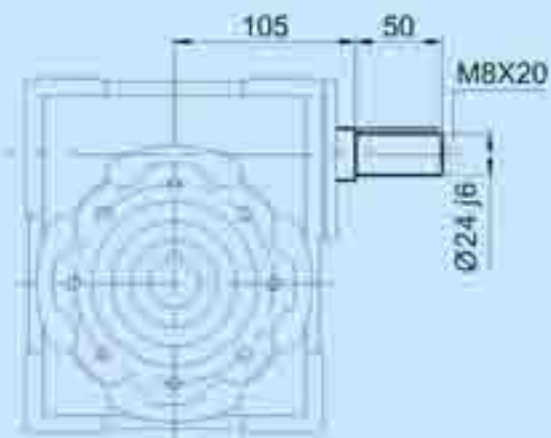
PAM-IEC 适用电机	N (H8)	M	P	bm	tm	S	Dm (H7)													
							5	7.5	10	15	20	25	30	40	50	60	80	100	Depth 深	
100/112B5	Ø180	Ø215	Ø250	8	31.3	Ø15	-	-	-	-	-	-	-	-	-	-	-	-	-	60
100/112B14	Ø110	Ø130	Ø160	8	31.3	Ø9	-	28	28	28	-	-	-	-	-	-	-	-	-	60
90B5	Ø130	Ø165	Ø200	8	27.3	Ø11	-	-	-	-	-	-	-	-	-	-	-	-	-	50
90B14	Ø95	Ø115	Ø140	8	27.3	Ø9	-	24	24	24	24	24	24	-	-	-	-	-	-	50
80B5	Ø130	Ø165	Ø200	6	21.8	Ø11	-	-	-	-	-	-	-	-	-	-	-	-	-	40
80B14	Ø80	Ø100	Ø120	6	21.8	Ø7	-	-	-	-	19	19	19	19	19	19	19	19	19	40
71B5	Ø110	Ø130	Ø160	5	16.3	Ø11	-	-	-	-	-	-	-	-	14	14	14	14	14	30

Weight : 9kg  
重量 : 9kg

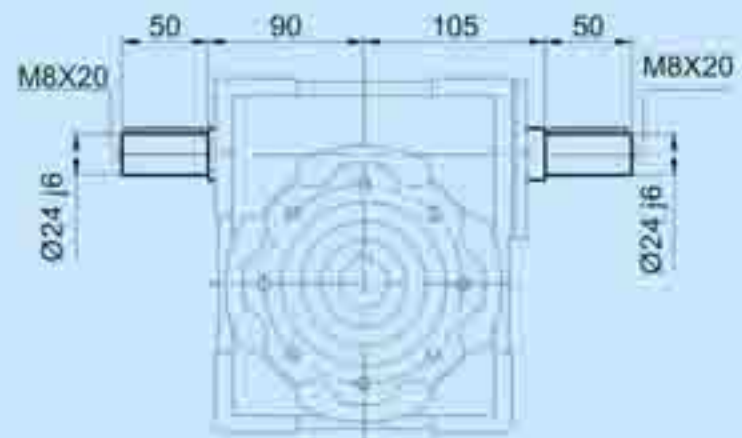
# Dimensions 尺寸

**075**

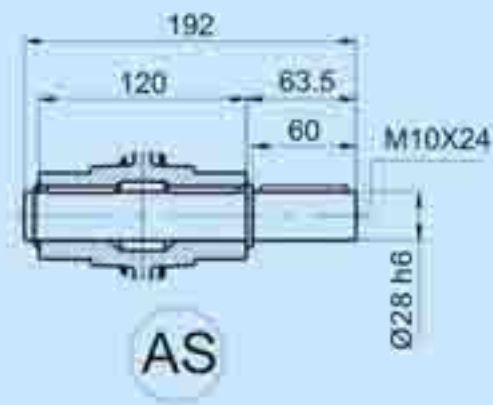
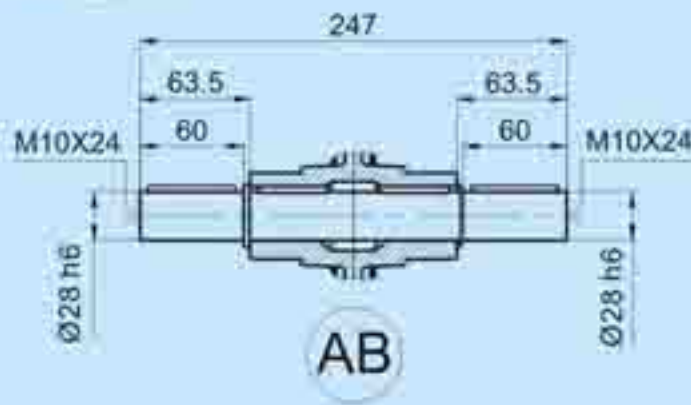
## HRV



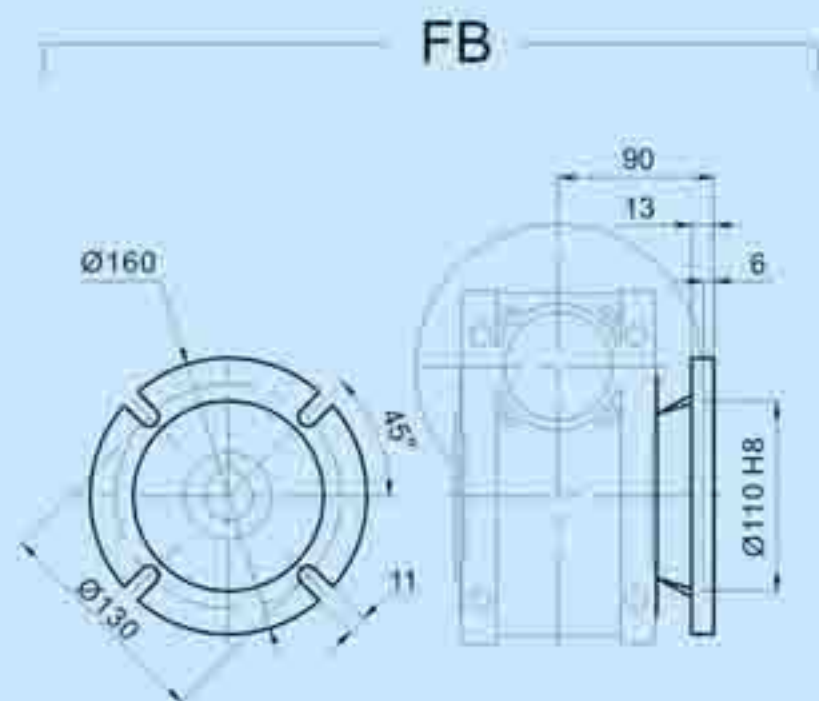
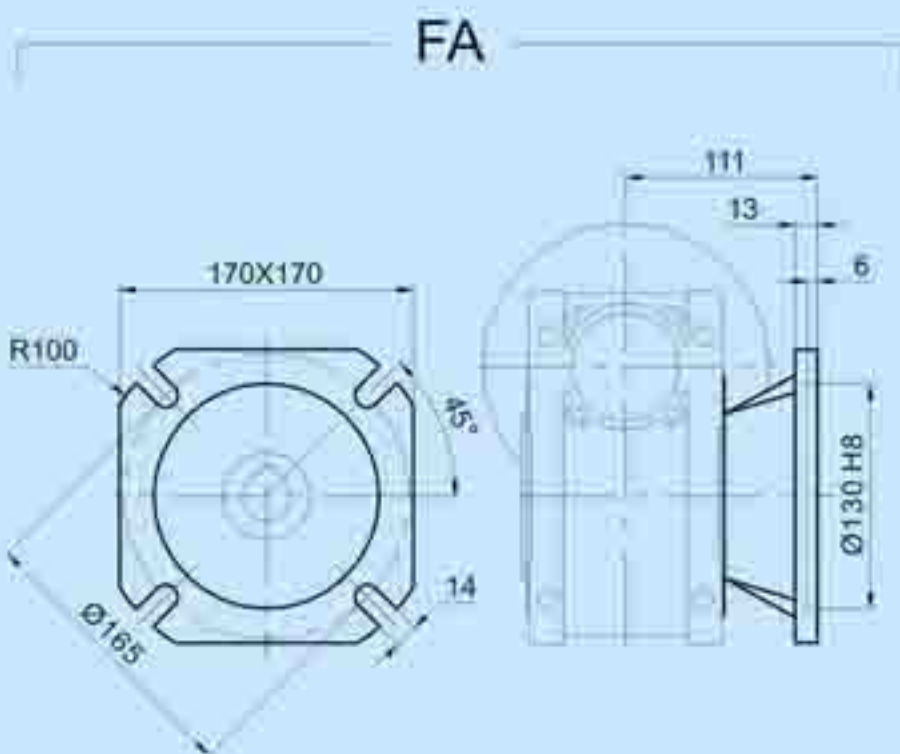
## HRV.VS



### Output shaft 输出轴



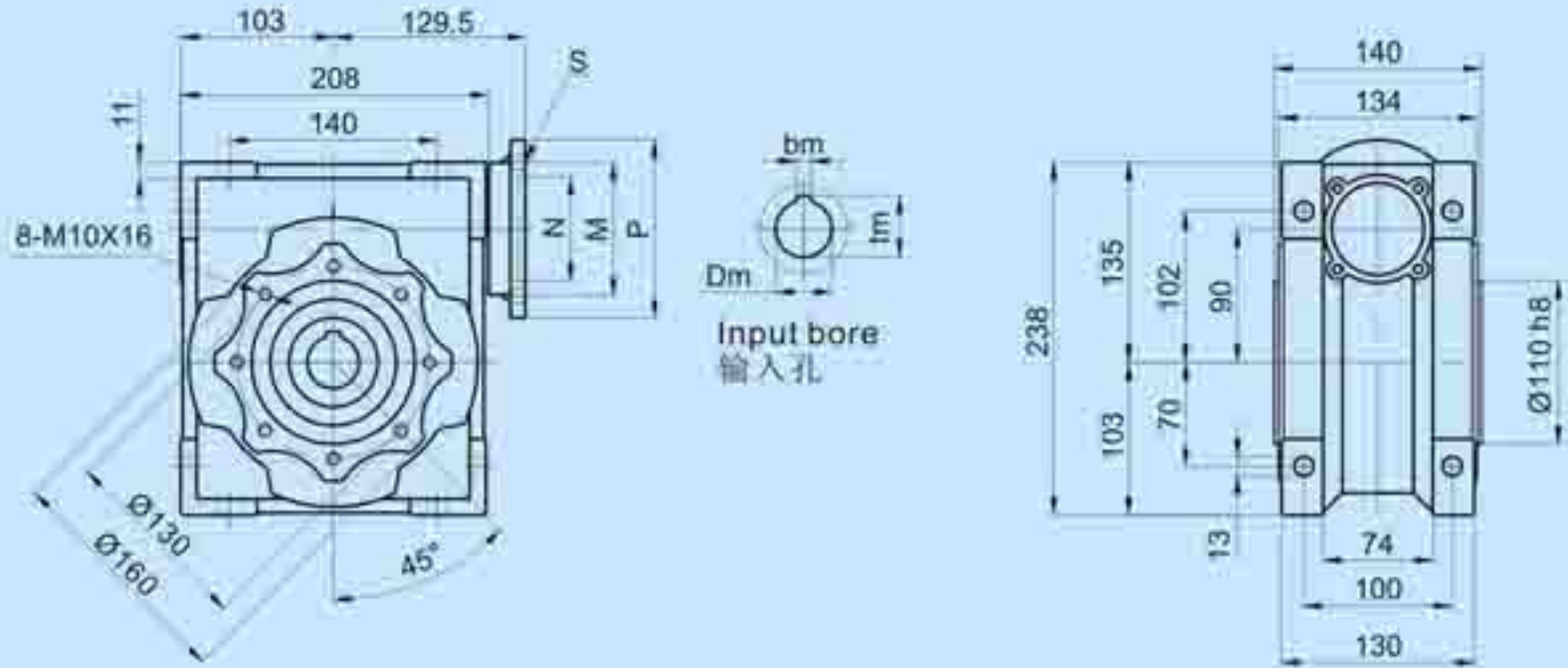
### Output flange 输出法兰



Dimensions  
尺寸

090

**HMRV**



**HMRV.VS**



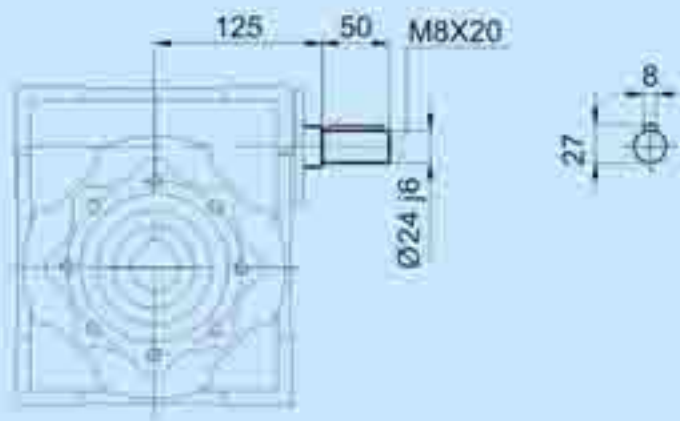
PAM-IEC 通用电机	N (H8)	M	P	bm	tm	S	Dm (H7)												
							5	7.5	10	15	20	25	30	40	50	60	80	100	Depth 深
100/112B5	Ø180	Ø215	Ø250	8	31.3	Ø15	-	28	28	28	28	28	28	-	-	-	-	-	60
100/112B14	Ø110	Ø130	Ø160	8	31.3	Ø9	-	24	24	24	24	24	24	24	24	-	-	-	50
90B5	Ø130	Ø165	Ø200	8	27.3	Ø11	-	-	-	-	-	-	-	19	19	19	19	19	40
90B14	Ø95	Ø115	Ø140	8	27.3	Ø9	-	-	-	-	-	-	-	19	19	19	19	19	40
80B5	Ø130	Ø165	Ø200	6	21.8	Ø11	-	-	-	-	-	-	-	19	19	19	19	19	40
80B14	Ø80	Ø100	Ø120	6	21.8	Ø7	-	-	-	-	-	-	-	19	19	19	19	19	40

Weight : 13kg  
重量 : 13kg

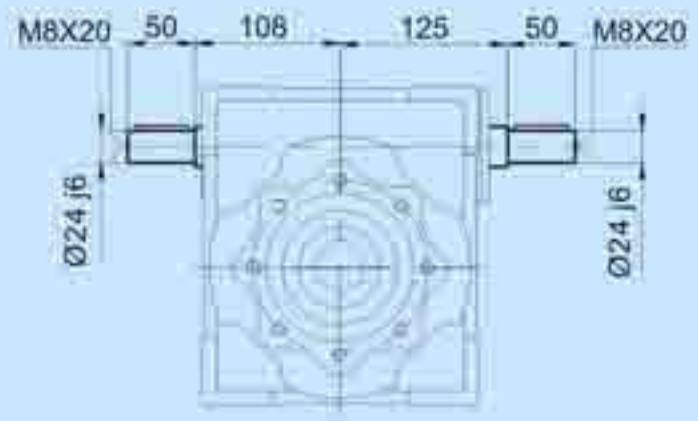
# Dimensions 尺寸

**090**

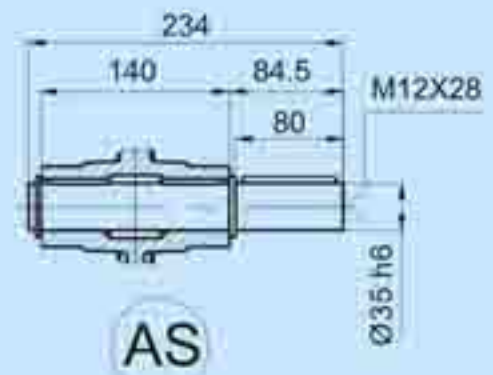
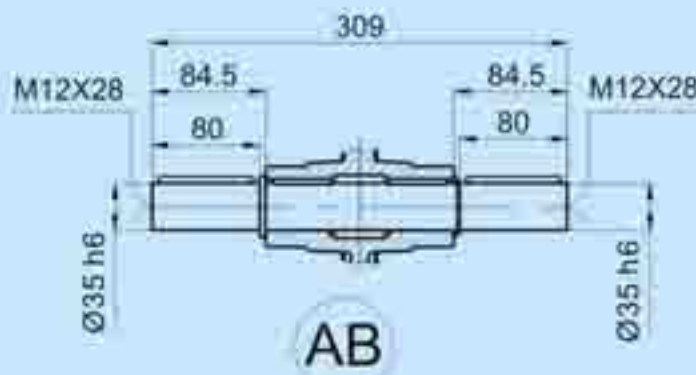
## HRV



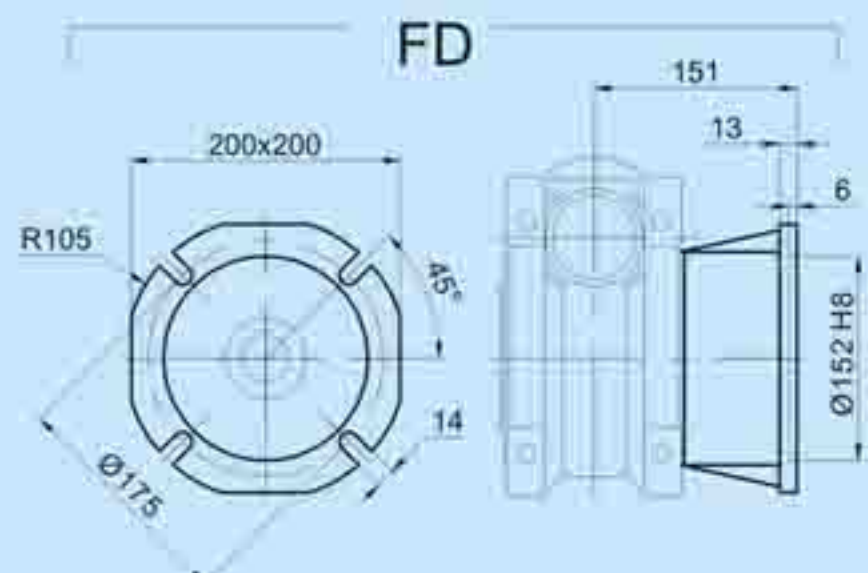
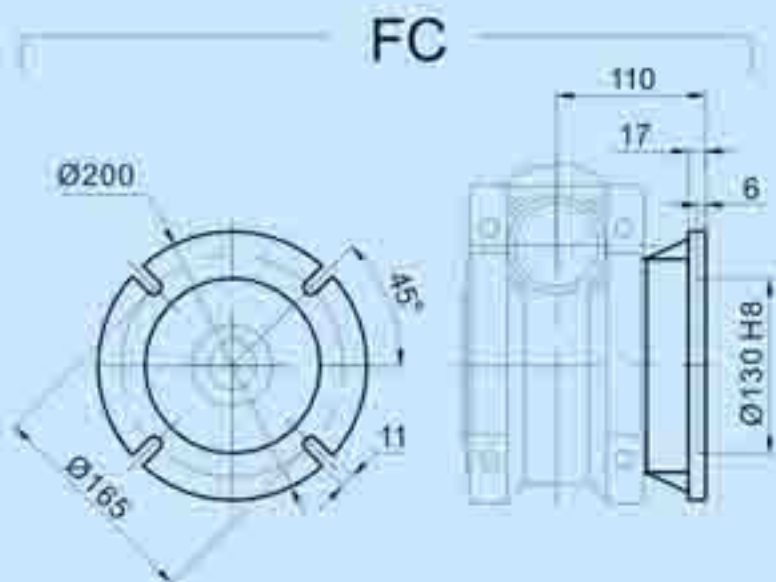
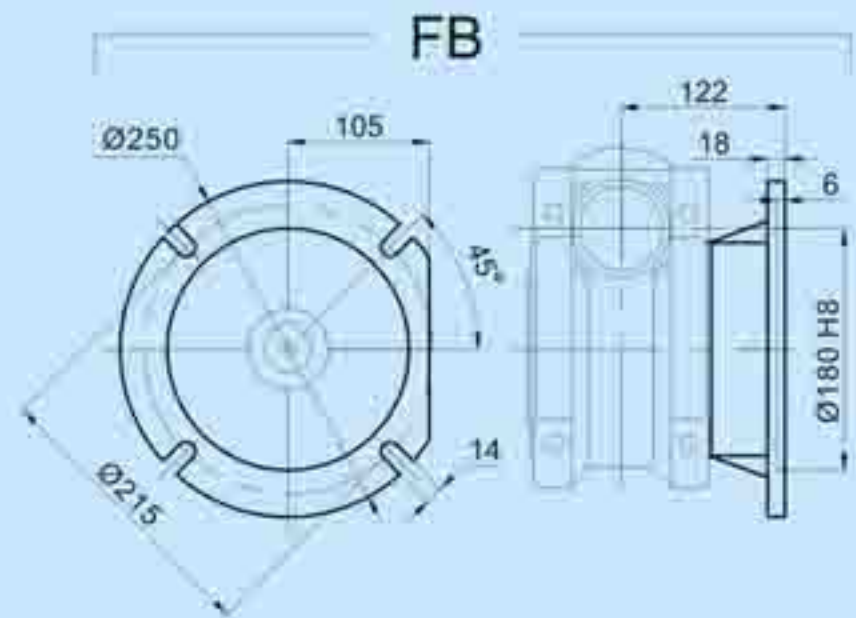
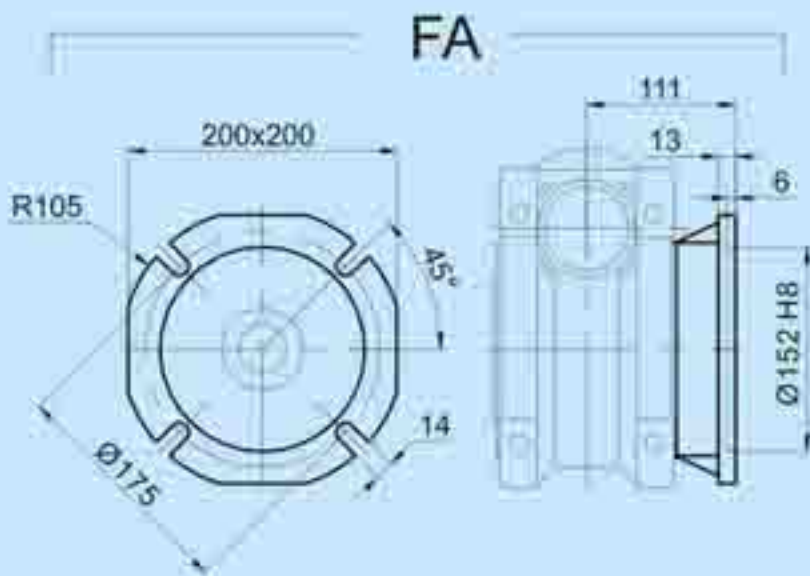
## HRV.VS



### Output shaft 输出轴



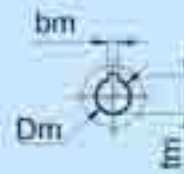
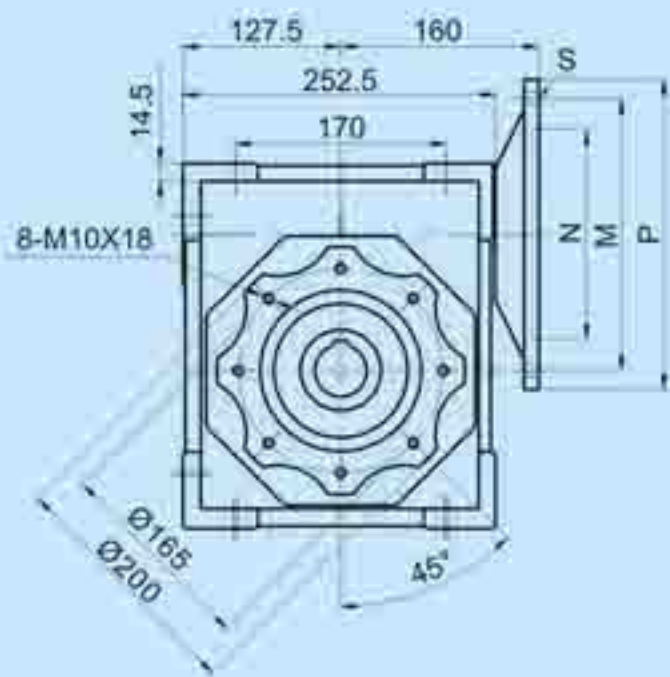
### Output flange 输出法兰



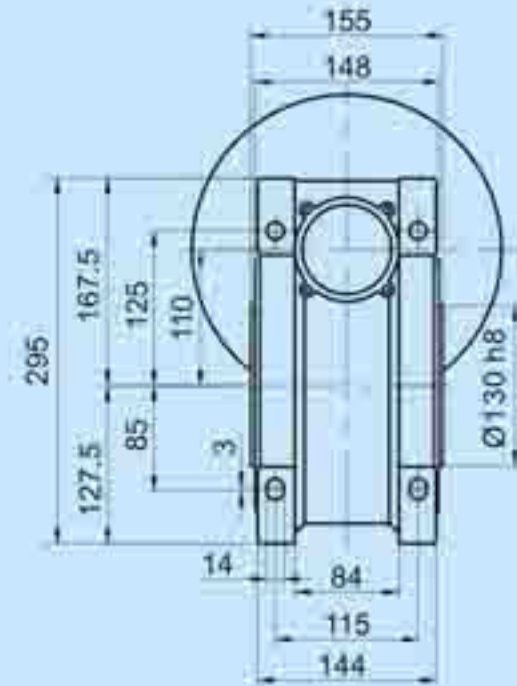
Dimensions  
尺寸

105

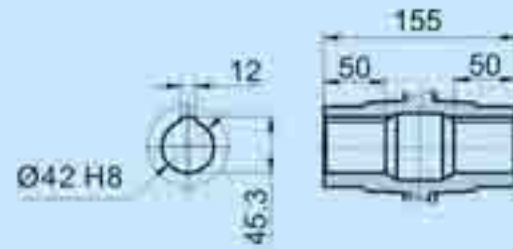
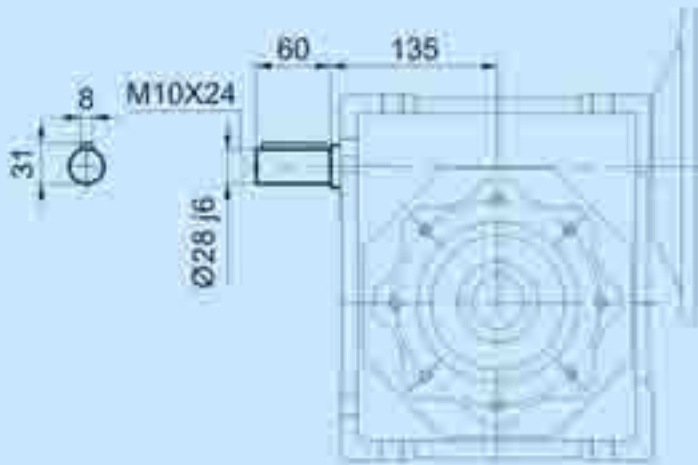
**HMRV**



Input bore  
输入孔



**HMRV. VS**



Output bore  
输出孔



PAM-IEC 适用电机	N (H8)	M	P	bm	tm	S	Dm (H7)													
							5	7.5	10	15	20	25	30	40	50	60	80	100	Depth (mm)	
132B5	Ø230	Ø265	Ø300	10	41.3	Ø15	-	38*	38*	38*	38*	-	-	-	-	-	-	-	-	80
100/112B5	Ø180	Ø215	Ø250	8	31.3	Ø15	-	28	28	28	28	28	28	28	28	28	28	-	-	60
90B5	Ø130	Ø165	Ø200	8	27.3	Ø11	-	-	-	-	-	24	24	24	24	24	24	24	24	50
80B5	Ø130	Ø165	Ø200	6	21.8	Ø11	-	-	-	-	-	-	-	-	-	-	-	19	19	40

Weight : 21kg  
重量 : 21kg

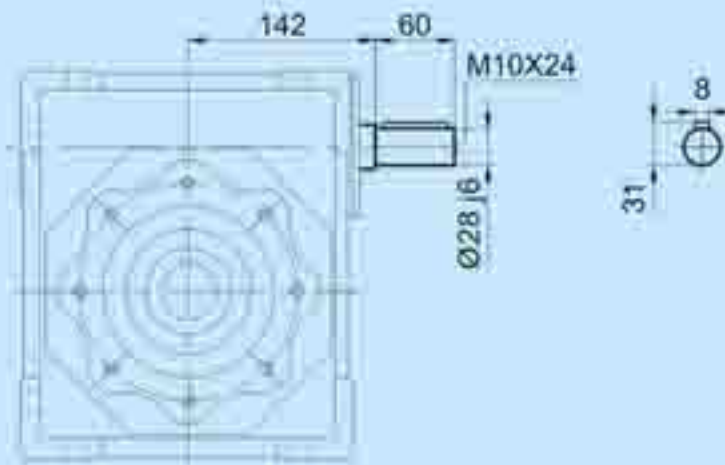
Note:(\*)Low profile key supplied by Haitec.  
注释: 薄键由欧特士提供。



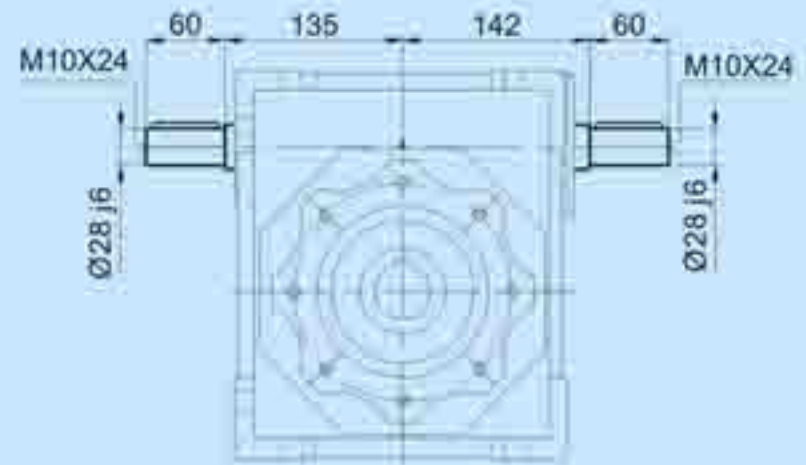
Dimensions  
尺寸

105

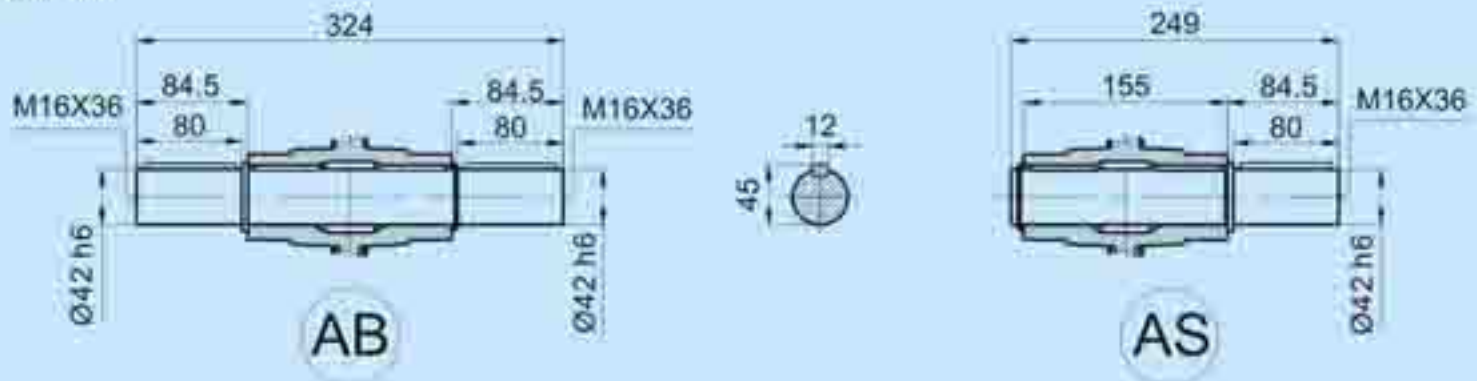
**HRV**



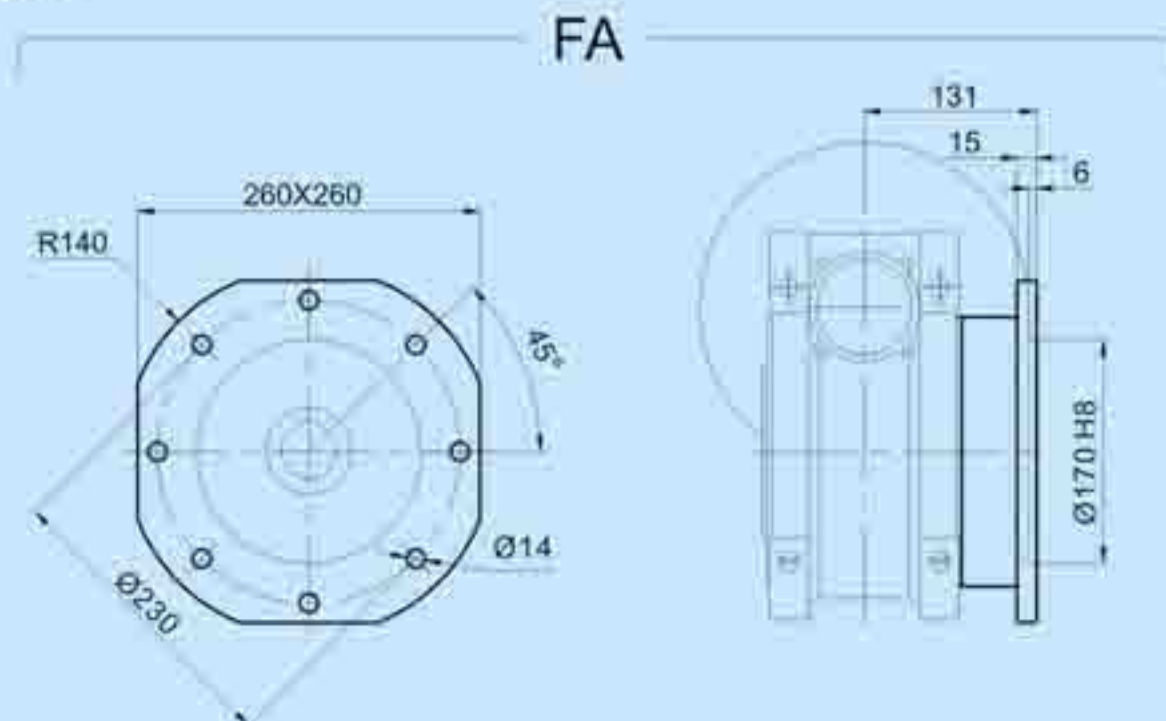
**HRV.VS**



Output shaft 输出轴



Output flange 输出法兰

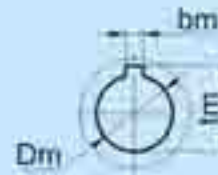
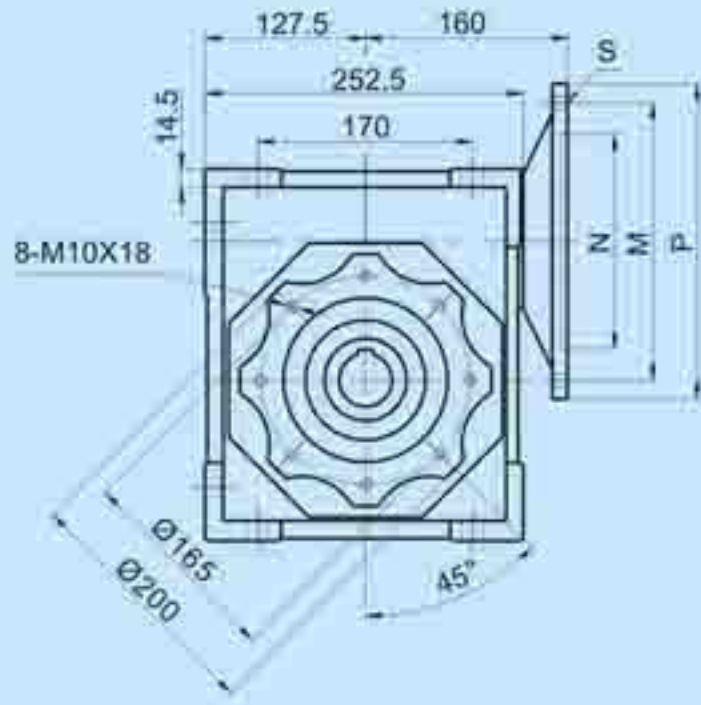




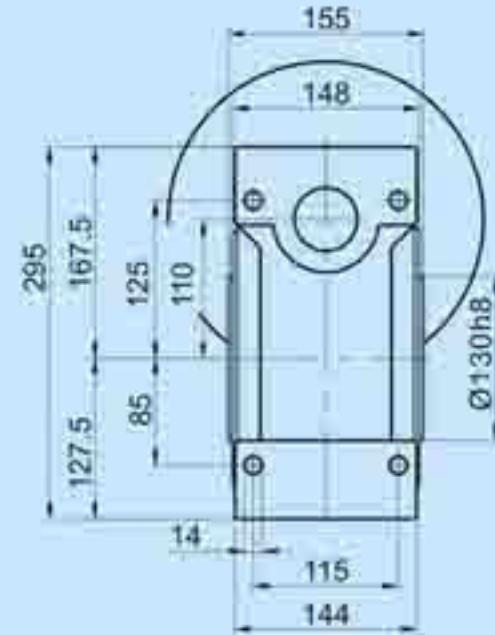
Dimensions  
尺寸

110

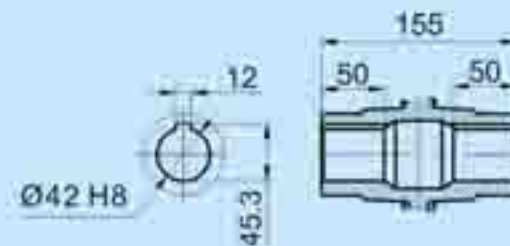
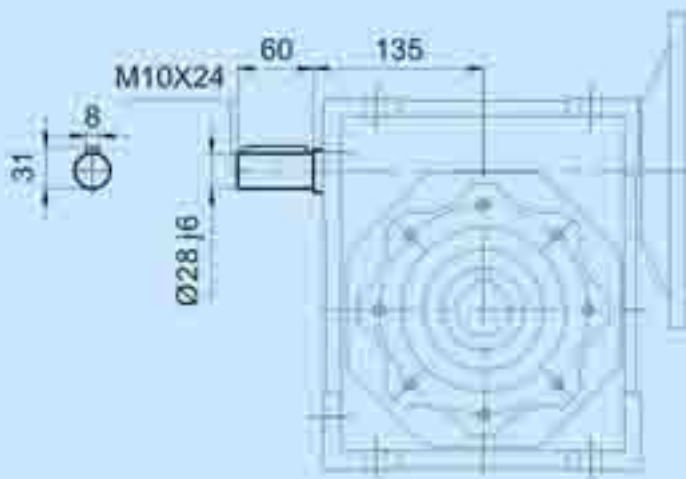
**HMRV**



Input bore  
输入孔



**HMRV. VS**



Output bore  
输出孔

PAM-IEC 适用电机	N (H8)	M	P	bm	tm	S	Dm (H7)												
							5	7.5	10	15	20	25	30	40	50	60	80	100	Depth 深
132B5	Ø230	Ø265	Ø300	10	41.3	Ø15	-	38°	38°	38°	38°	-	-	-	-	-	-	-	80
100/112B5	Ø180	Ø215	Ø250	8	31.3	Ø15	-	28	28	28	28	28	28	28	28	28	-	-	60
90B5	Ø130	Ø165	Ø200	8	27.3	Ø11	-	-	-	-	-	24	24	24	24	24	24	24	50
80B5	Ø130	Ø165	Ø200	6	21.8	Ø11	-	-	-	-	-	-	-	-	-	-	19	19	40

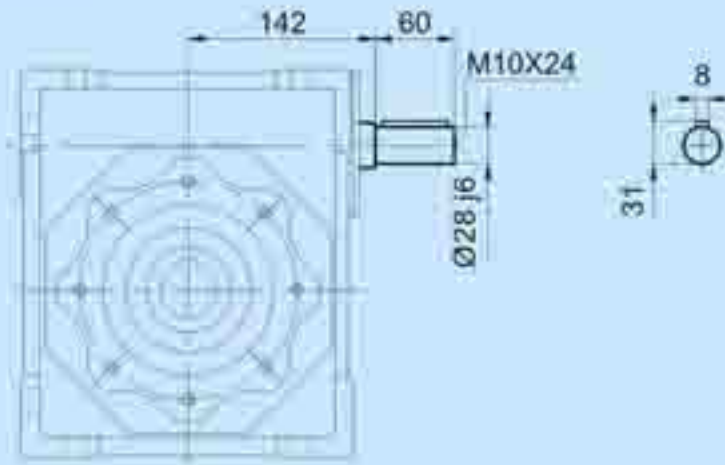
Weight : 40kg  
重量 : 40kg

Note:(\*)Low profile key supplied by Haitec.  
注释：薄键由欧特士提供。

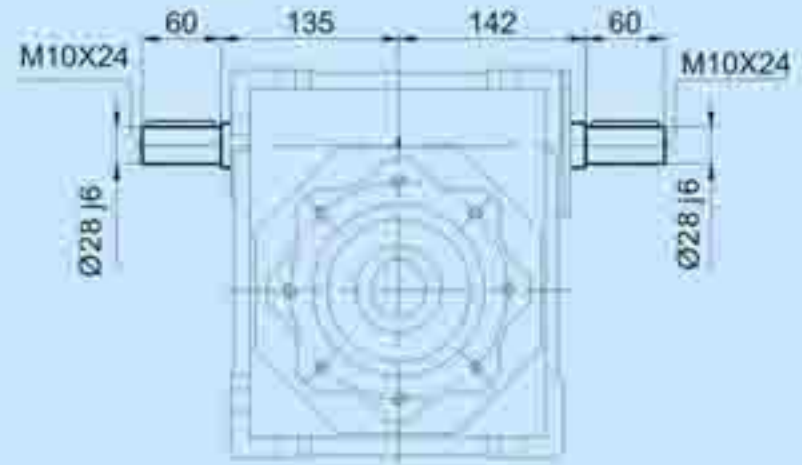
Dimensions  
尺寸

110

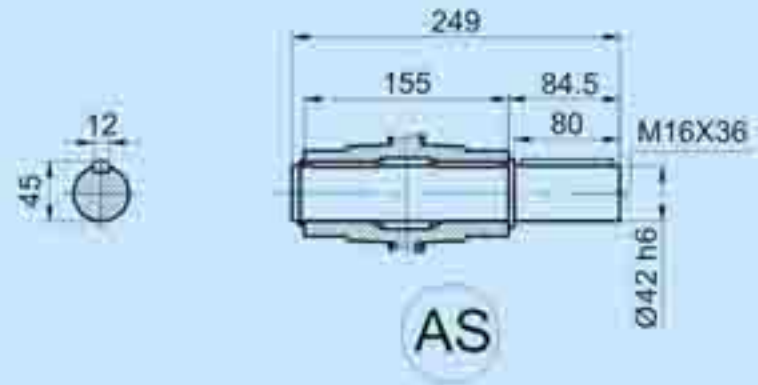
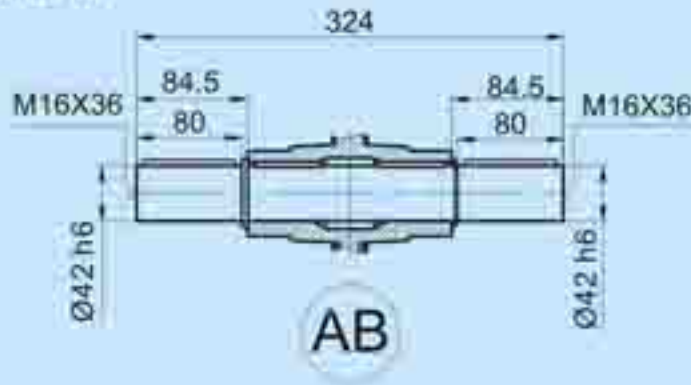
**HRV**



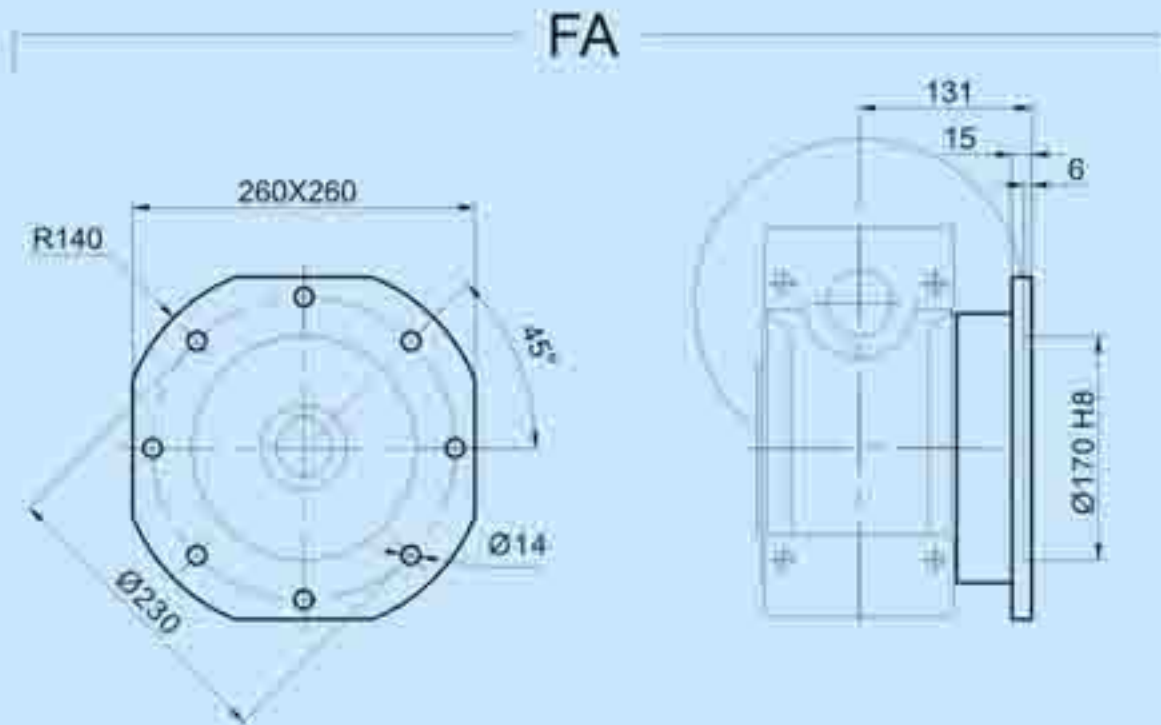
**HRV.VS**



Output shaft 输出轴



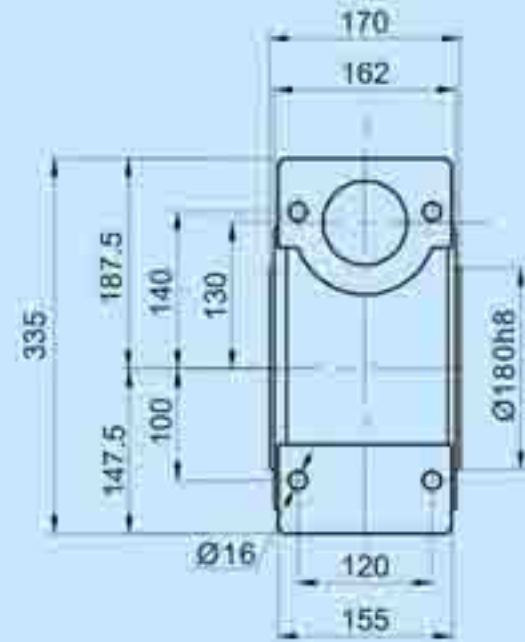
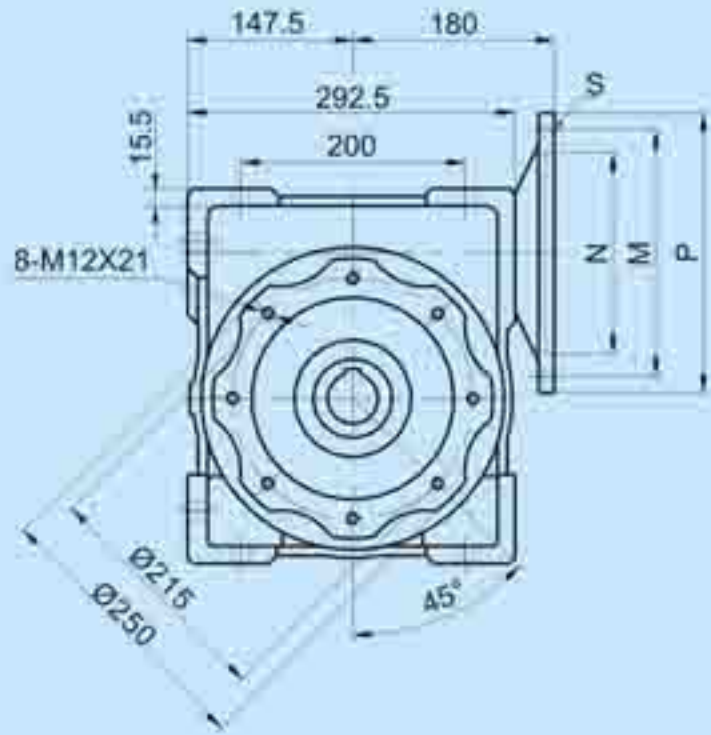
Output flange 输出法兰



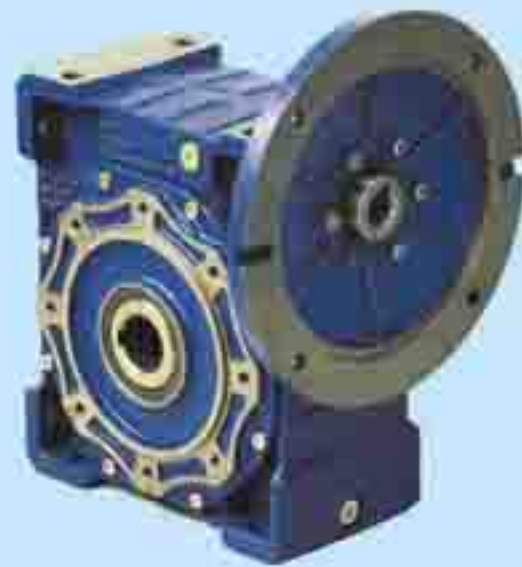
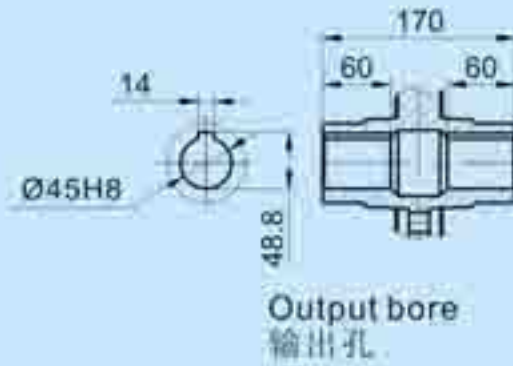
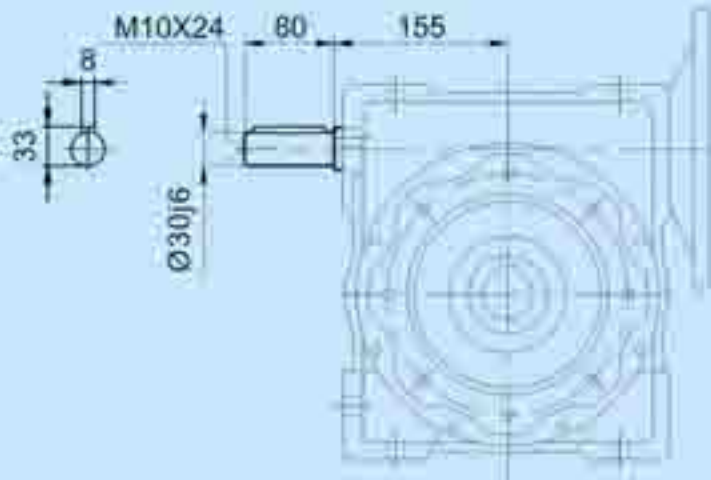
Dimensions  
尺寸

130

**HMRV**



**HMRV. VS**



PAM-IEC 适用电机	N (H8)	M	P	bm	tm	S	Dm (H7)												
							5	7.5	10	15	20	25	30	40	50	60	80	100	Depth 深
132B5	Ø230	Ø265	Ø300	10	41.3	Ø15	-	38*	38*	38*	38*	38*	38*	38*	-	-	-	-	80
100/112B5	Ø180	Ø215	Ø250	8	31.3	Ø15	-	-	-	-	-	28	28	28	28	28	28	28	60
90B5	Ø130	Ø165	Ø200	8	27.3	Ø11	-	-	-	-	-	-	-	-	-	-	24	24	50

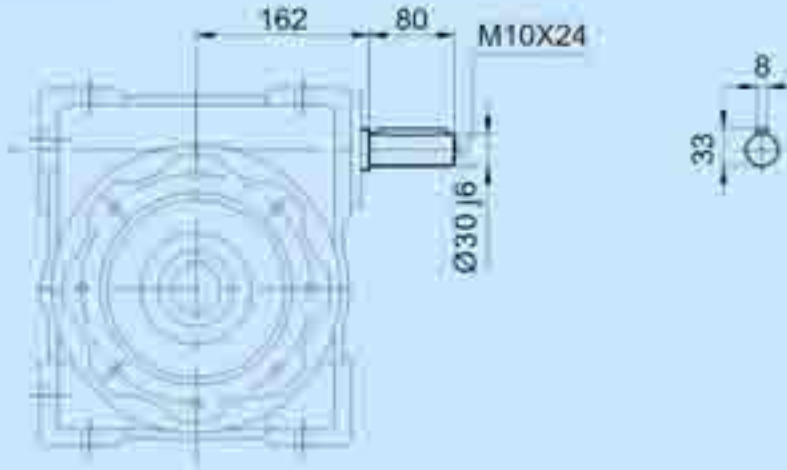
Weight : 50kg  
重量 : 50kg

Note:(\*)Low profile key supplied by Haitec.  
注释：薄键由欧特士提供。

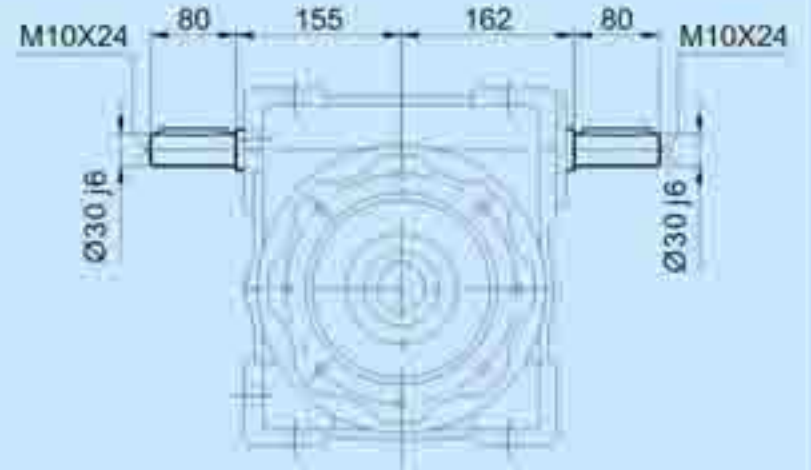
Dimensions  
尺寸

130

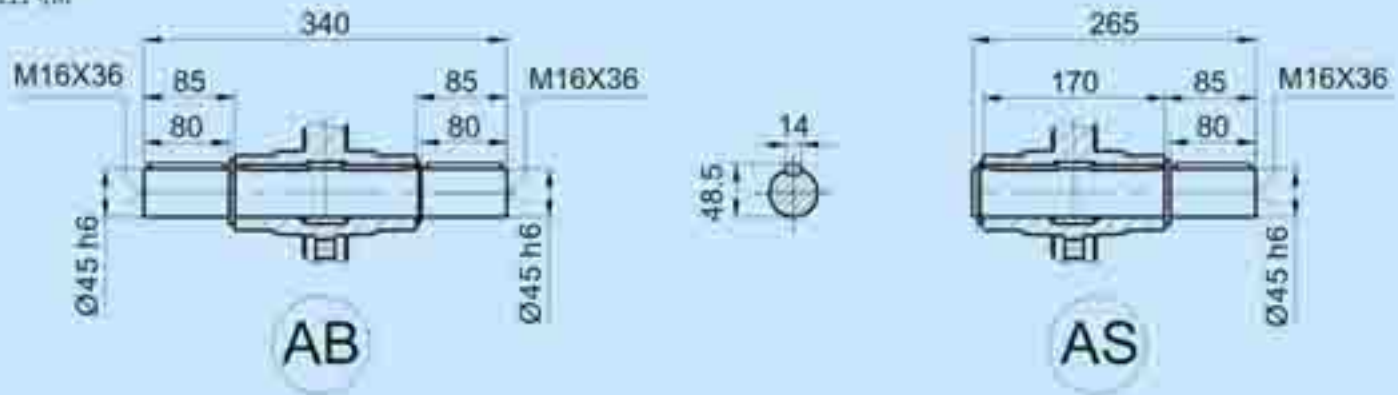
**HRV**



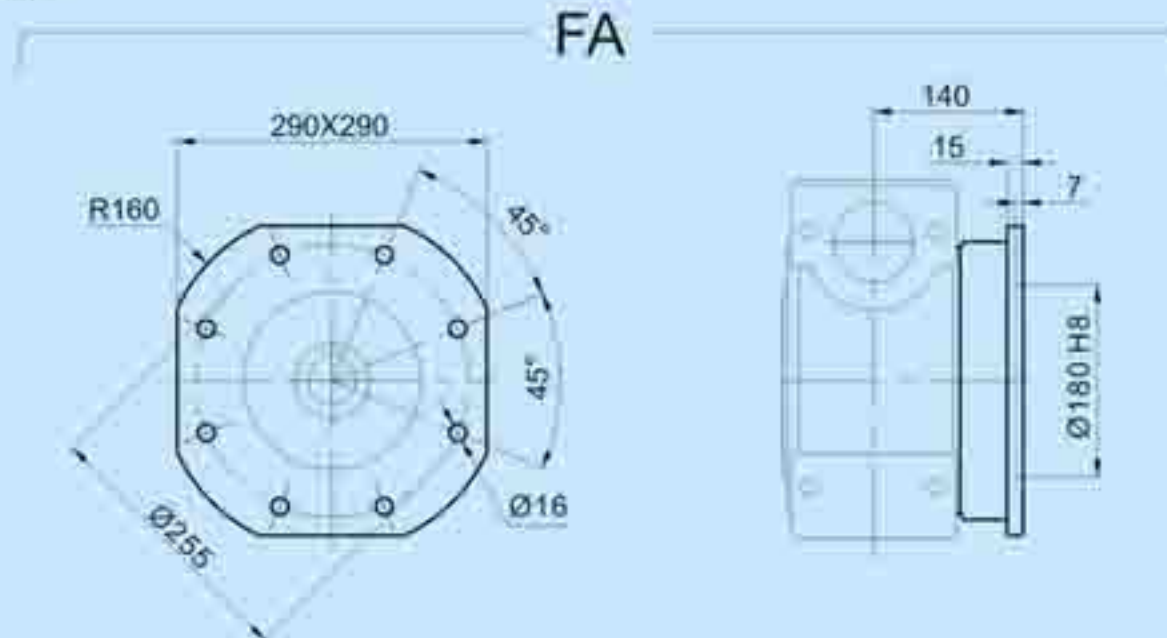
**HRV.VS**



Output shaft 输出轴



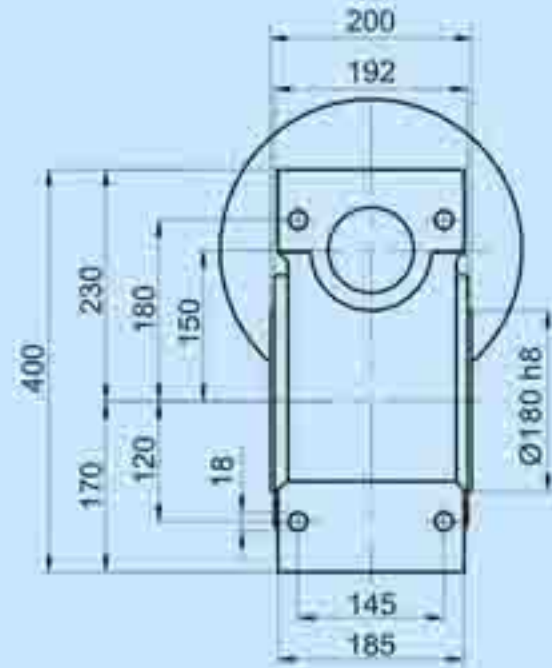
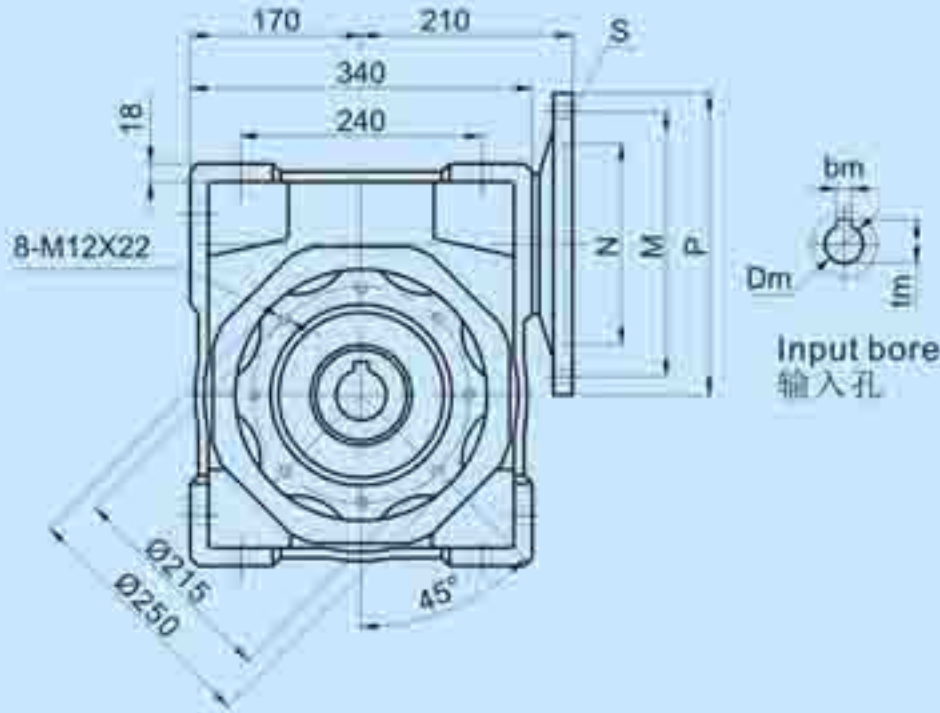
Output flange 输出法兰



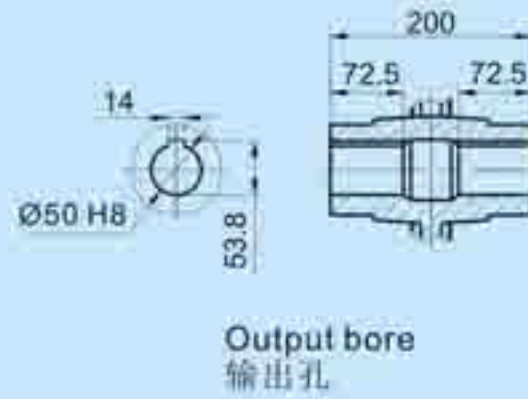
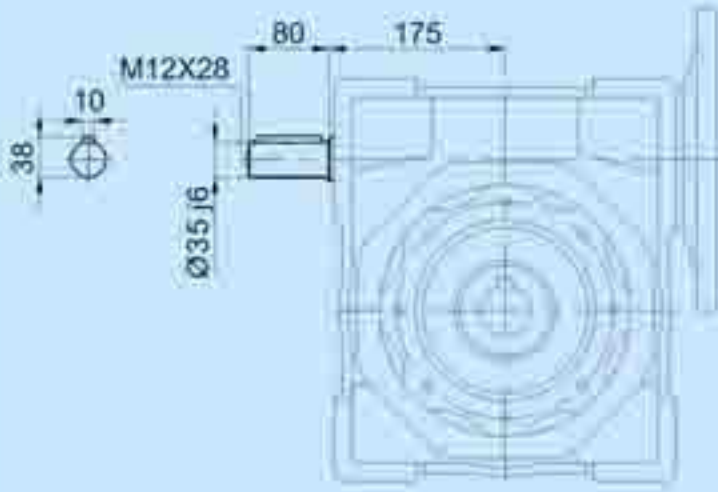
Dimensions  
尺寸

150

**HMRV**



**HMRV.VS**



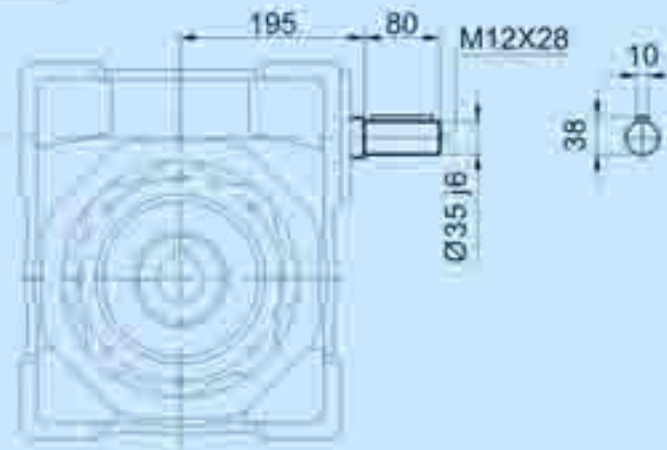
PAM-IEC 适用电机	N (H8)	M	P	bm	tm	S	Dm (H7)												
							5	7.5	10	15	20	25	30	40	50	60	80	100	Depth 深
160B5	Ø250	Ø300	Ø350	12	45.3	Ø15	-	42	42	42	42	42	-	-	-	-	-	-	110
132B5	Ø230	Ø265	Ø300	10	41.3	Ø15	-	-	-	-	38	38	38	38	38	38	-	-	80
100/112B5	Ø180	Ø215	Ø250	8	31.3	Ø15	-	-	-	-	-	-	-	-	28	28	28	28	60

Weight : 84kg  
重量 : 84kg

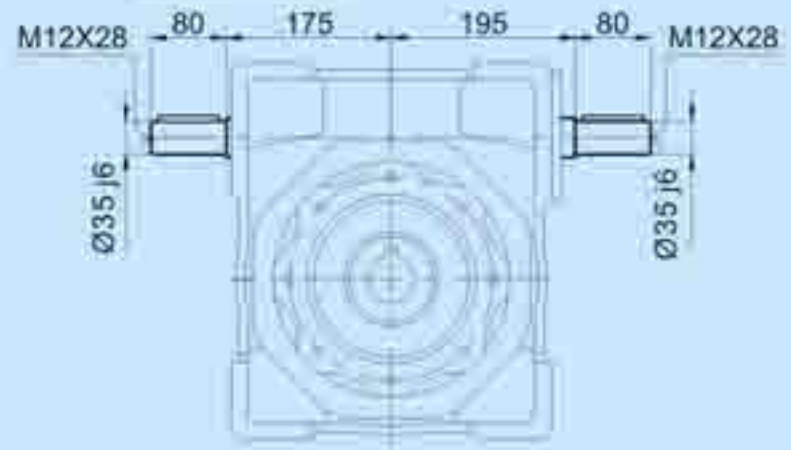
Dimensions  
尺寸

150

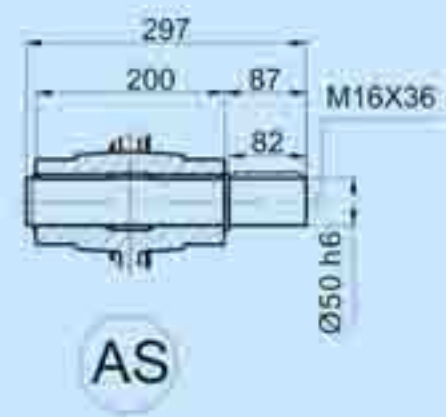
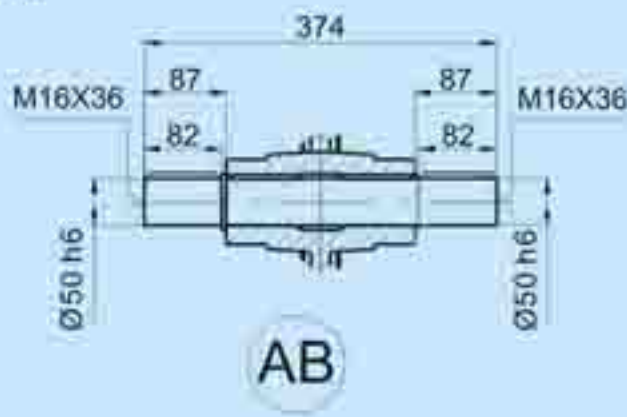
**HRV**



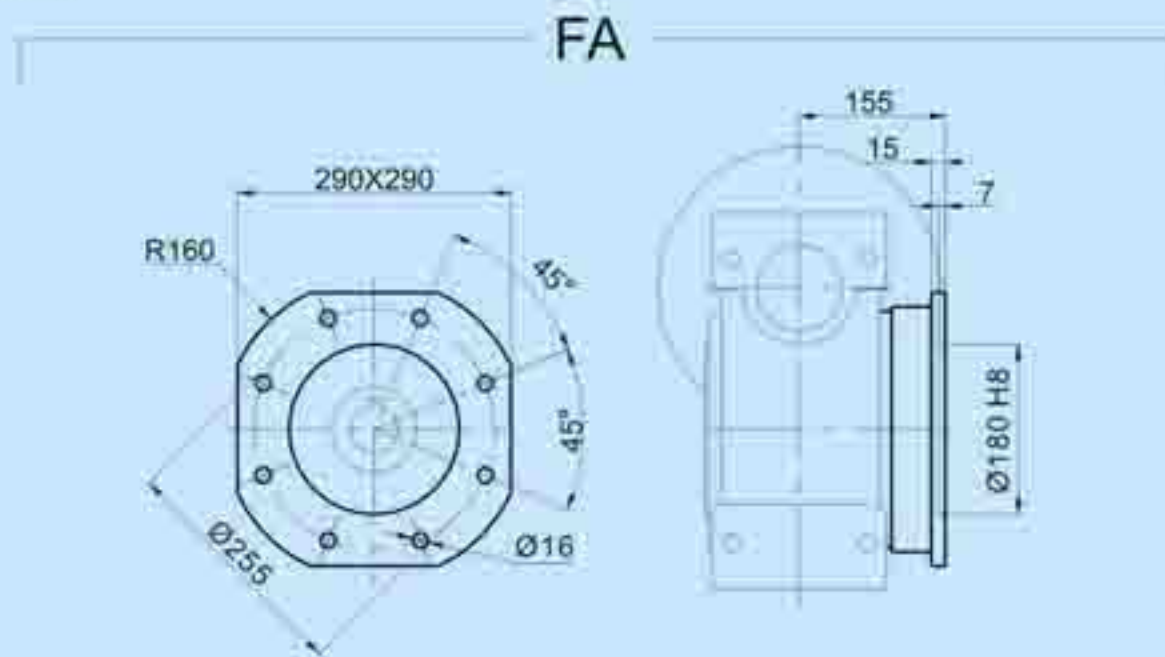
**HRV.VS**



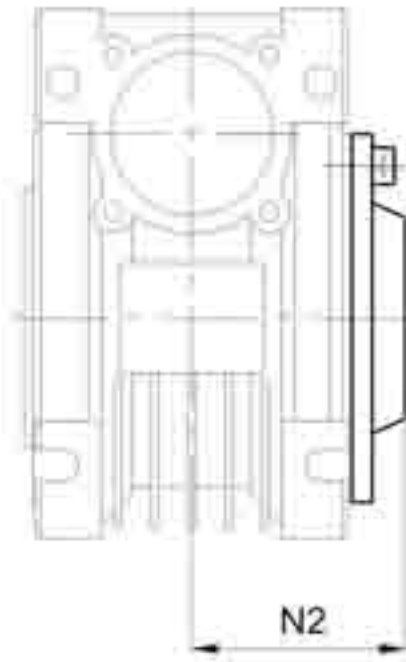
Output shaft 输出轴



Output flange 输出法兰

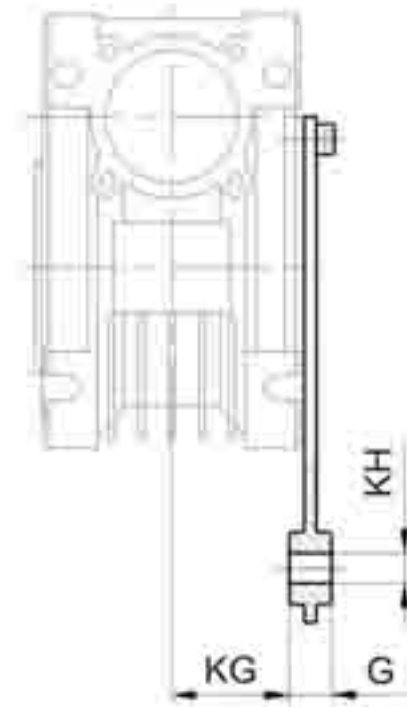
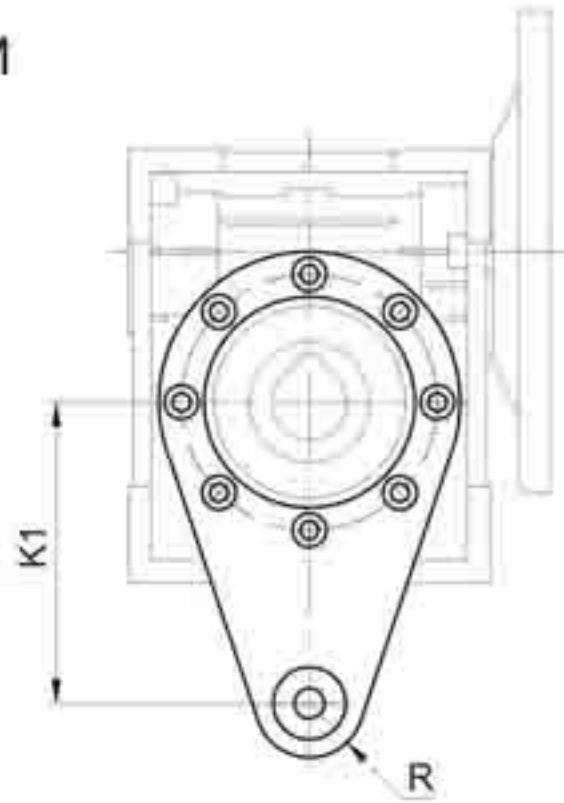


### 3.3 COVER 防护盖



	N2
030	42
040	50
050	58
063	69
075	74
090	86
105	94
110	94
130	102
150	113

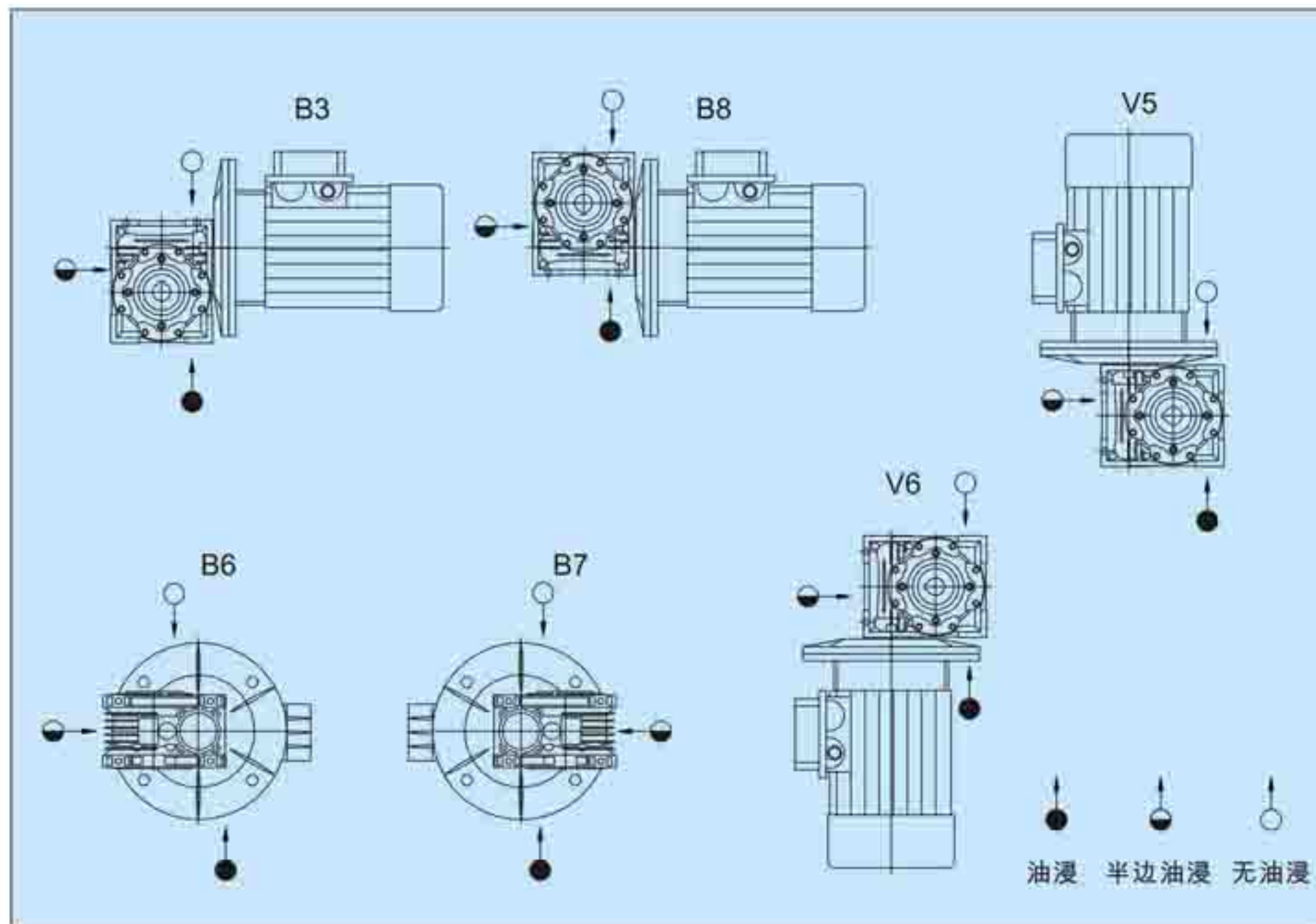
### TORQUE ARM 转矩臂



	K1	G	KG	KH	R
025	70	14	17.5	8	15
030	85	14	24	8	15
040	100	14	31.5	10	18
050	100	14	38.5	10	18
063	150	14	49	10	18
075	200	25	47.5	20	30
090	200	25	57.5	20	30
105	250	30	62	25	35
110	250	30	62	25	35
130	250	30	69	25	35
150	250	30	84	25	35




#### 4 HMRV Mounting positions with motor HMRV与电机的安装型式



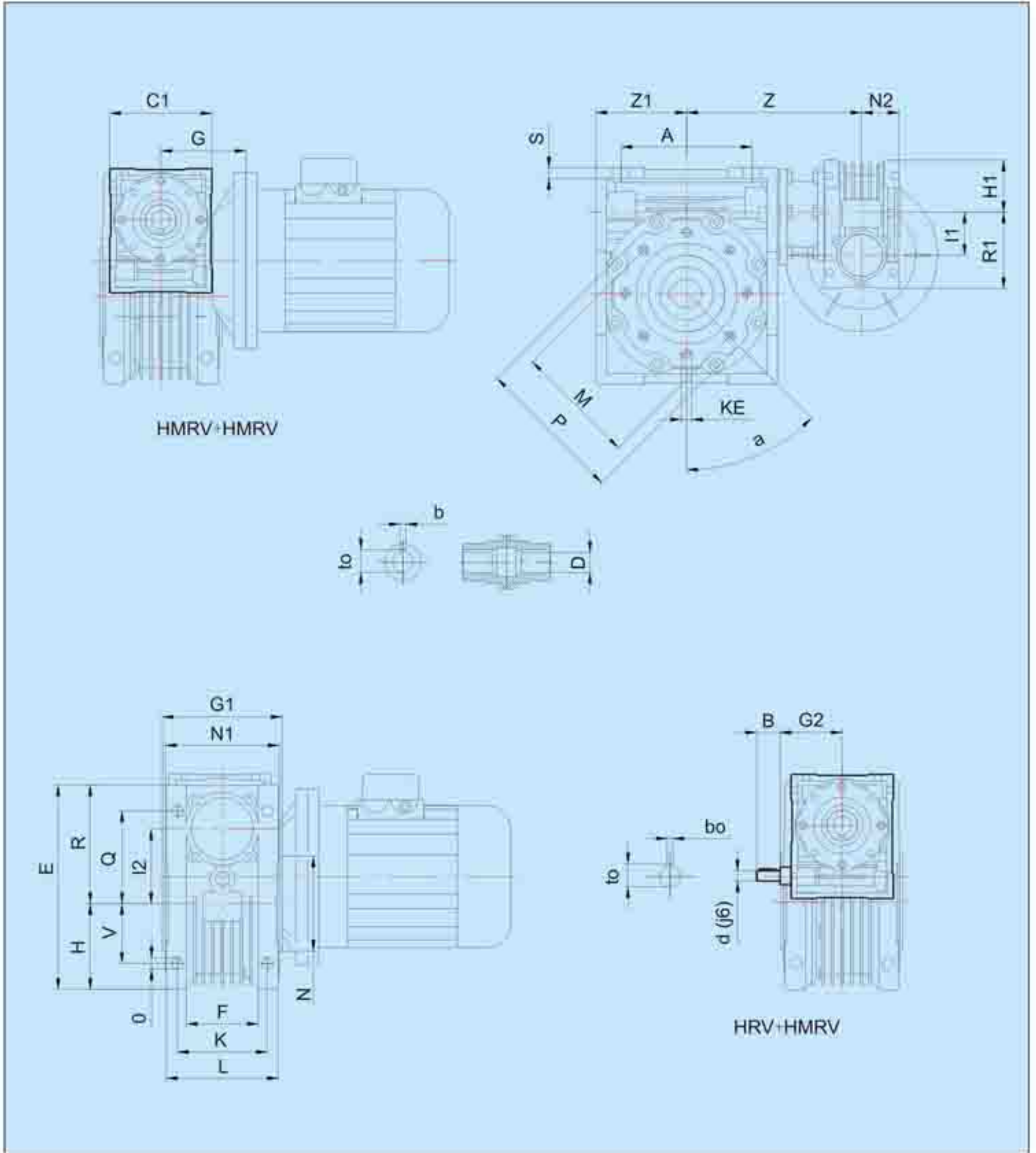
5. Combine worm geared motor performance  
双级机型参数



HRV/HMRV (n1=1400r/min)										
	M2	I	P1(KW)	n2(r/min)		M2	I	P1(KW)	n2(r/min)	
HRV030/040	73	300	0.08	4.7	HRV050/105	1100	300	0.9	4.7	
	65	400	0.06	3.5		1030	400	0.7	3.5	
	61	500	0.04	2.8		1000	500	0.6	2.8	
	73	600	0.04	2.3		1030	600	0.5	2.3	
	73	750	0.04	1.9		1100	750	0.4	1.9	
	73	900	0.03	1.6		1100	900	0.4	1.6	
	65	1200	0.02	1.2		1030	1200	0.3	1.2	
	73	1500	0.02	0.9		1100	1500	0.3	0.93	
	73	1800	0.02	0.8		1100	1800	0.2	0.78	
	65	2400	0.01	0.58		1030	2400	0.2	0.58	
	65	3200	0.01	0.4		1000	3000	0.1	0.47	
	33	4000	0.01	0.4		780	4000	0.1	0.35	
29	5000	0.01	0.28	710	5000	0.1	0.28			
HRV030/050	145	300	0.15	4.7	HRV050/110	1265	300	1.1	4.7	
	124	400	0.1	3.5		1185	400	0.8	3.5	
	120	500	0.09	2.8		1100	500	0.6	2.8	
	145	600	0.08	2.3		1185	600	0.6	2.3	
	145	750	0.07	1.9		1265	750	0.5	1.9	
	145	900	0.06	1.6		1265	900	0.4	1.6	
	124	1200	0.04	1.2		1185	1200	0.3	1.2	
	145	1500	0.04	0.93		1265	1500	0.3	0.93	
	145	1800	0.04	0.78		1265	1800	0.3	0.78	
	124	2400	0.03	0.6		1185	2400	0.2	0.58	
	120	3000	0.02	0.5		1100	3000	0.1	0.47	
	82	4000	0.02	0.35		819	4000	0.1	0.35	
	82	4800	0.02	0.29		746	5000	0.1	0.28	

HRV/HMRV (n1=1400r/min)									
	M2	I	P1(KW)	n2(r/min)		M2	I	P1(KW)	n2(r/min)
HRV030/063	230	300	0.24	4.7	HRV063/130	1760	300	1.5	4.7
	230	400	0.19	3.5		1650	400	1.1	3.5
	216	500	0.15	2.8		1550	500	0.9	2.8
	230	600	0.13	2.3		1650	600	0.8	2.3
	216	750	0.11	1.9		1760	750	0.7	1.9
	198	900	0.09	1.6		1760	900	0.6	1.6
	230	1200	0.08	1.2		1650	1200	0.4	1.2
	216	1500	0.06	0.93		1760	1500	0.4	0.93
	198	1800	0.05	0.78		1760	1800	0.3	0.78
	230	2400	0.05	0.58		1650	2400	0.3	0.58
	216	3000	0.04	0.47		1550	3000	0.2	0.47
	172	4000	0.03	0.35		1220	4000	0.1	0.35
150	5000	0.02	0.28	1100	5000	0.1	0.28		
HRV040/075	390	300	0.36	4.7	HRV063/150	2340	150	3.4	9.3
	360	400	0.27	3.5		2340	200	2.7	7
	320	500	0.21	2.8		2050	250	1.9	5.6
	390	600	0.19	2.3		2340	300	1.9	4.7
	390	750	0.16	1.9		2670	400	1.8	3.5
	390	900	0.14	1.6		2330	500	1.4	2.8
	390	1200	0.11	1.2		2670	600	1.3	2.3
	390	1500	0.1	0.93		2330	750	1.0	1.9
	390	1800	0.09	0.78		2100	900	0.7	1.6
	360	2400	0.07	0.58		2670	1200	0.7	1.2
	320	3000	0.05	0.47		2100	1800	0.4	0.8
	250	4000	0.04	0.35		2670	2400	0.5	0.6
230	5000	0.03	0.28	2330	3000	0.3	0.5		
HRV040/090	610	300	0.6	4.7	1880	4000	0.2	0.4	
	610	400	0.4	3.5	1650	5000	0.2	0.3	
	560	500	0.3	2.8					
	610	600	0.3	2.3					
	560	750	0.2	1.9					
	505	900	0.2	1.6					
	610	1200	0.2	1.2					
	560	1500	0.1	0.93					
	505	1800	0.1	0.78					
	610	2400	0.1	0.58					
	560	3000	0.1	0.47					
	460	4000	0.1	0.35					
410	5000	0.1	0.28						

6. Combine worm geared motor size  
双级机型尺寸

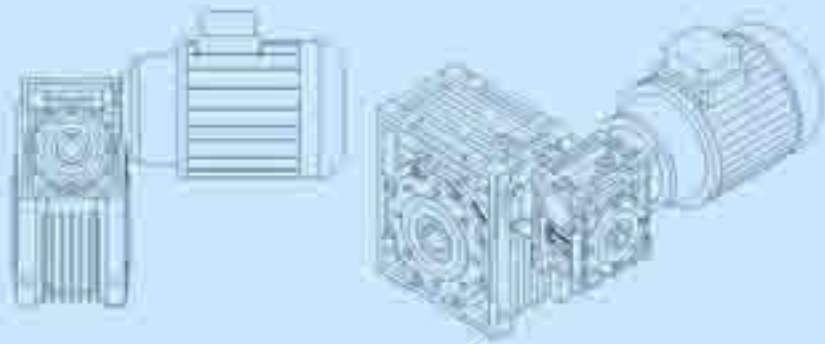


HMRV + HMRV	Dimensions																		
	A	B	C1	D(H8)	d(j6)	E	F	G	G1	G2	H	H1	I	I1	I2	L	M	N(H8)	N1
025-030	54	-	70	14	-	97	32	45	63	-	40	35	-	25	30	56	65	55	58
025-040	70	-	70	18	-	121.5	43	45	78	-	50	35	-	25	40	71	75	60	73
030-040	70	20	80	18	9	121.5	43	55	78	51	50	40	10	30	40	71	75	60	73
030-050	80	20	80	25	9	144	49	55	92	51	60	40	20	30	50	85	85	70	87
030-063	100	20	80	25	9	174	67	55	112	51	72	40	33	30	63	103	95	80	106
040-075	120	23	100	28	11	205	72	70	120	60	86	50	35	40	75	112	115	95	114
040-090	140	23	100	35	11	238	74	70	140	60	103	50	50	40	90	130	130	110	134
050-105	170	30	120	42	14	295	-	80	155	74	127.5	60	60	50	110	144	165	130	148
050-110	170	30	120	42	14	295	-	80	155	74	127.5	60	60	50	110	144	165	130	148
063-130	200	40	144	45	19	335	-	95	170	90	147.5	72	67	63	130	155	215	180	162
063-150	240	40	144	50	19	400	-	95	200	90	170	72	87	63	150	185	215	180	192

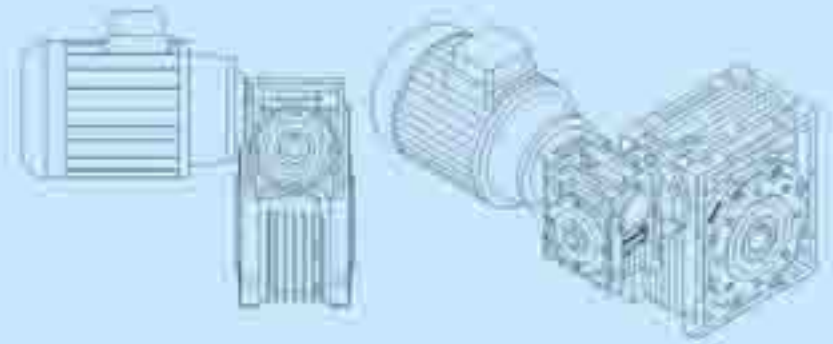
HMRV + HMRV	Dimensions																	
	N2	O	P	Q	R	R1	S	V	Z	Z1	K	KE	a	b	t	bo	to	f
025-030	22.5	6.5	75	44	57	48	5.5	27	100	40	44	M6x11	0°	5	16.3	-	-	-
025-040	22.5	6.5	87	55	71.5	48	6.5	35	115	50	60	M6x8	45°	6	20.8	-	-	-
030-040	29	6.5	87	55	71.5	57	6.5	35	122	50	60	M6x8	45°	6	20.8	3	10.2	-
030-050	29	8.5	100	64	84	57	7	40	132	60	70	M8x10	45°	8	28.3	3	10.2	-
030-063	29	8.5	110	80	102	57	8	50	145	72	85	M8x14	45°	8	28.3	3	10.2	-
040-075	36.5	11.5	140	93	119	71.5	10	60	167.5	86	90	M8x14	45°	8	31.3	4	12.5	-
040-090	36.5	13	160	102	135	71.5	11	70	184.5	103	100	M10x18	45°	10	38.3	4	12.5	-
050-105	43.5	14	200	125	167.5	84	14.5	85	226	127.5	115	M10x18	45°	12	45.3	5	16	M6
050-110	43.5	14	200	125	167.5	84	14.5	85	226	127.5	115	M10x18	45°	12	45.3	5	16	M6
063-130	53	16	250	140	187.5	102	15.5	100	245	147.5	120	M12x21	45°	14	48.8	6	21.5	M6
063-150	53	18	250	180	230	102	18	120	275	170	145	M12x21	45°	14	53.8	6	21.5	M6

7. Combine mounting positions with motor  
 双级机型带电机安装型式

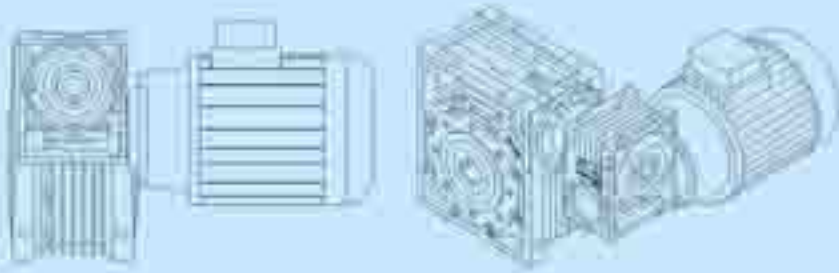
AS1



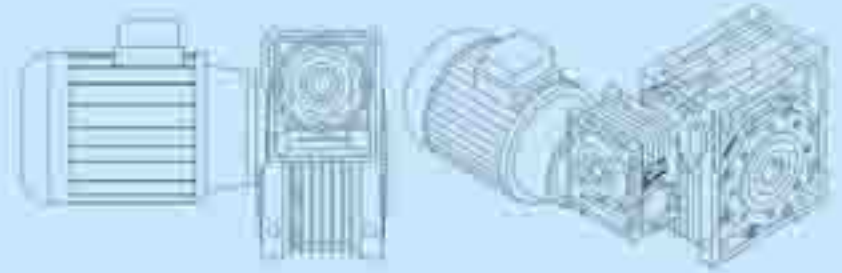
AS2



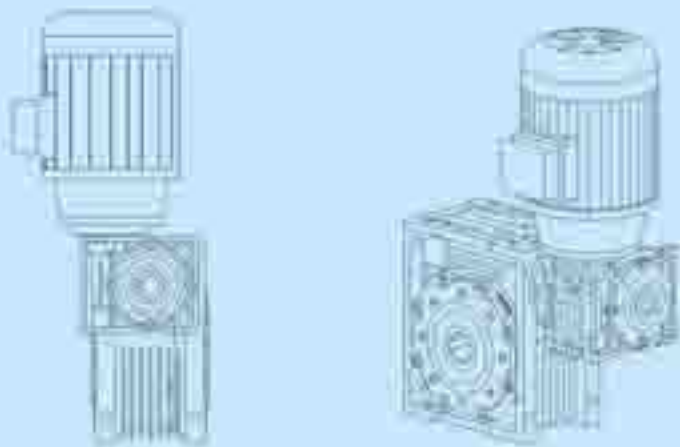
BS1



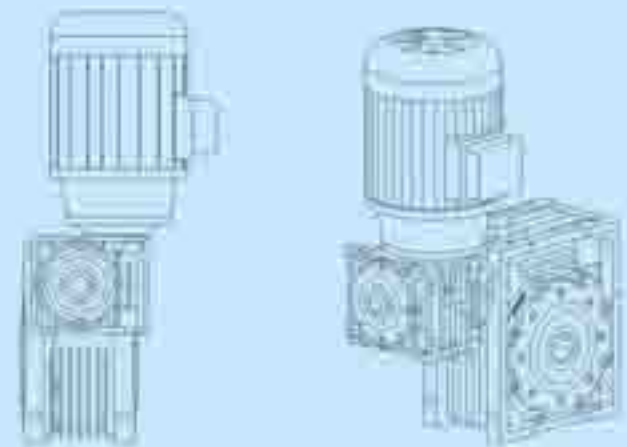
BS2



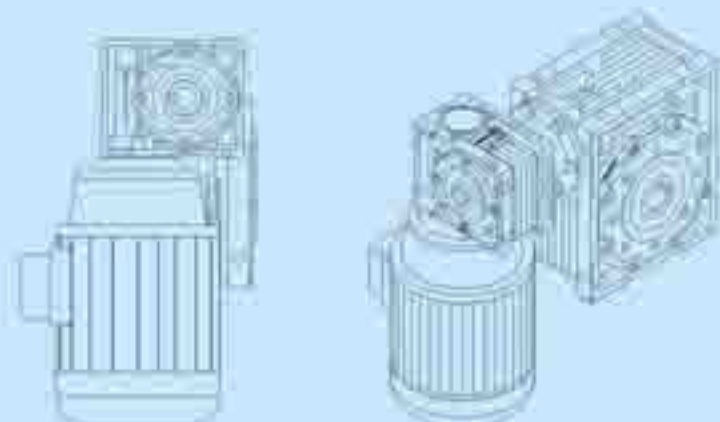
VS1



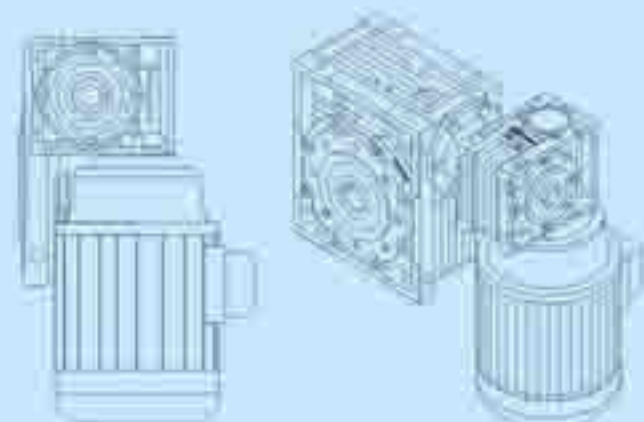
VS2



PS1



PS2



## User's Manual

Thank you very much to choose our company's products. Before using, please carefully read the following instructions, and ensure the right operations about it.

### Types:

1. Worm gear reducer can be classified as flange input and shaft input by input way, and be classified as hollow shaft output, single shaft output, double shaft output and so on by output way.
  2. Size series: 25, 30, 40, 50, 63, 75, 90, 105, 110, 130, 150.
- Reduction ratio series (Single) : 5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80, 100.

### Installation:

1. Suggest the rotate speed of worm less than 1500r/min.
2. The mounting on the machine must be stable and avoid any vibration.
3. Check the correct input efficiency, speed of rotation and output torque according to unit nameplate, and the same direction of rotation of the reduction unit output shaft before fitting the unit to the machine.
4. For a shaft mounting, for reduction unit with a hollow output shaft, make sure that the constraint is axially free and with such play as to ensure free movement for the reduction unit.
5. The various parts (pulleys, gear wheels, couplings, shafts, etc.) must be mounted on the solid or hollow shafts using special threaded holes or other systems that anyhow ensure correct operation units. Lubrication the surfaces in contact to avoid seizure or oxidation.
6. After mounting, rotating shaft by hand must be agility and no lock.
7. Starting must take place gradually, without immediately applying the maximum load, and ensure stable, no noise, no loosen, no leaking oil and so on in rotation.

### Lubrication:

1. Environment temperature of unit is  $-10^{\circ}\text{C}$ ~ $60^{\circ}\text{C}$ . In the case of temperatures under  $0^{\circ}\text{C}$ , it is necessary to heat up lubrication over  $0^{\circ}\text{C}$  or use low freezing oil before operation.
2. During the early stages of service, problem of lubrication may arise due to the high level of viscosity taken on by the oil and so it is wise to have a few minutes of rotation under no load.
3. In the case of particularly lengthy period of storage (4-6 months), if the oil seal is not immersed in the lubricant inside the unit, it is recommended to change it since the rubber could stick to the shaft or may even have lost the elasticity it needs to function properly.
4. Check the correct level of the lubricant through the indicator, if there is one.
5. The oil needs to be changed after approximately 10000 hours. This period depends on the type of service and the environment where this reduction unit works.
6. For units supplied without oil plugs, lubrication is permanent and so they need no servicing.

### Maintain:

1. Avoid to hit the shell of the reduction unit by gravitational hammer to protect it.
2. Check the correct state of installation basis, oil seals, input / output shaft and so on in the same period. Otherwise, it is necessary to stop reduction unit and get rid of matter, then go on work.
3. Whenever possible, protect the reduction unit against solar radiation and bad weather.
4. Ensure the motor cools correctly by assuring good passage of air from the fan side.

### Recommendation of lubricant brand:

	HMRV110~150		HMRV025~105
	Mineral oil		Synthetic oil
TC ISO VG	(-5) ~(+40) ISO VG460	(-15) ~(+25) ISO VG220	(-25) ~(+50) ISO VG320
AGIP	BLASIA 460	BLASIA 220	TELIUM VSF320
SHELL	OMALA OIL460	OMALA OIL220	TIVELA OIL SC320
ESSO	SPARTAN EP460	SPARTAN EP220	S220
MOBIL	MOBIL GEAR634	MOBIL GEAR630	GLYGOYLE 320
CASTROL	ALPHA MAX460	ALPHA MAX220	ALPHASYN PG320
BP	ENERGOL GR-XP460	ENERGOL GR-XP220	ENERGOL SG-XP320

### The quantity of oil: (liter)

HMRV	025	030	040	050	063	075	090	105	110	130	150
B3									3	4.5	7
B8									2.2	3.3	5.1
B6-B7	0.02	0.04	0.08	0.15	0.3	0.55	1	1.6	2.5	3.5	5.4
V5									3	4.5	7
V6									2.2	3.3	5.1

## 使用说明书

十分感谢您选用了本公司产品。在使用之前，请详细参阅以下说明，以确保正确使用。

### 型式说明:

1. 蜗轮蜗杆减速器按输入方式可分为孔式输入和轴式输入，按输出方式可分为孔输出、单向轴输出、双向轴输出等轴型。
  2. 按中心距分有：25、30、40、50、63、75、90、105、110、130、150系列。
- 单级传动比系列：5、7.5、10、15、20、25、30、40、50、60、80、100。

### 一、安装

1. 蜗杆转速建议小于1500 r/min。
2. 安装应避免任何振动，保持平稳。
3. 安装之前，应复核其输入功率、转速及输出轴扭矩与铭牌相符，并检查减速器输出轴的旋转方向，并与工作机一致。
4. 对于减速器输出轴的安装，应保证轴向自由无约束并能相对于减速器轴向自由移动。
5. 各种与减速器输出端相联接的零部件（滑轮、齿轮、联轴器、轴等）可采用螺纹孔或其它方式联接，以确保元件正确运行。润滑面应避免接触和防止氧化。
6. 安装后用手转动轴，必须保证灵活，无卡滞现象。
7. 起动应逐渐加载，避免过大的冲击载荷，并保证转动平稳，无噪声、不松动、无漏油等。

### 二、润滑

1. 减速器的环境温度为-10℃~60℃，在环境温度低于0℃时，起动前润滑油必须加热到0℃以上或采用低凝固点的润滑油。
2. 减速器刚开始运转时，可能会出现润滑油粘度高而产生的问题，建议进行几分钟的空载跑合。
3. 存放了一段时间（4~6月）的减速器，如果油封和箱体之间没有润滑剂，应该建议更换油封，因为这会由于油封橡胶老化粘于轴或失去弹性而导致性能下降。
4. 如果有油量指示器，应定期检查油量使其在正确的范围内。
5. 经过累计10000小时工作后应更换润滑油。在有效工作时间内，应使减速器处于正常的工作环境和对其进行正确保养。
6. 对于没有油塞的减速器，不用润滑，也不用维修。

### 三、维护

1. 不得重力捶击减速器外壳，以免损坏。
2. 定期检查安装基础、密封件、传动轴等是否正常。若产生不正常现象，应立即停机检查，排除故障，方可继续使用。
3. 应尽量避免减速器受阳光直射和处于恶劣气候条件下。
4. 应提供良好的通风条件确保减速器正常散热。

### 推荐润滑油:

	HMRV110-150		HMRV025-105
	矿物油		合成油
TC ISO VG	(-5) ~ (+40) ISO VG460	(-15) ~ (+25) ISO VG220	(-25) ~ (+50) ISO VG320
AGIP	BLASIA 460	BLASIA 220	TELIUM VSF320
SHELL	OMALA OIL460	OMALA OIL220	TIVELA OIL SC320
ESSO	SPARTAN EP460	SPARTAN EP220	S220
MOBIL	MOBIL GEAR634	MOBIL GEAR630	GLYGOYLE 320
CASTROL	ALPHA MAX460	ALPHA MAX220	ALPHASYN PG320
BP	ENERGOL GR-XP460	ENERGOL GR-XP220	ENERGOL SG-XP320

### 油量:(单位 升)

HMRV	025	030	040	050	063	075	090	105	110	130	150
B3									3	4.5	7
B8									2.2	3.3	5.1
B6-B7	0.02	0.04	0.08	0.15	0.3	0.55	1	1.6	2.5	3.5	5.4
V5									3	4.5	7
V6									2.2	3.3	5.1



## 9. Motor parameter and size

### 电机参数及尺寸

#### 9.1 General motor parameter and size

##### 普通电机参数及尺寸



机座号Frame size: 56~132

功率Power: 1/12~10HP (0.06~7.5kW)

电压Voltage: 380V

频率Frequency: 50HZ

#### ● YS、Y2 三相异步电动机

YS/Y2 3-Phase asynchronous motor

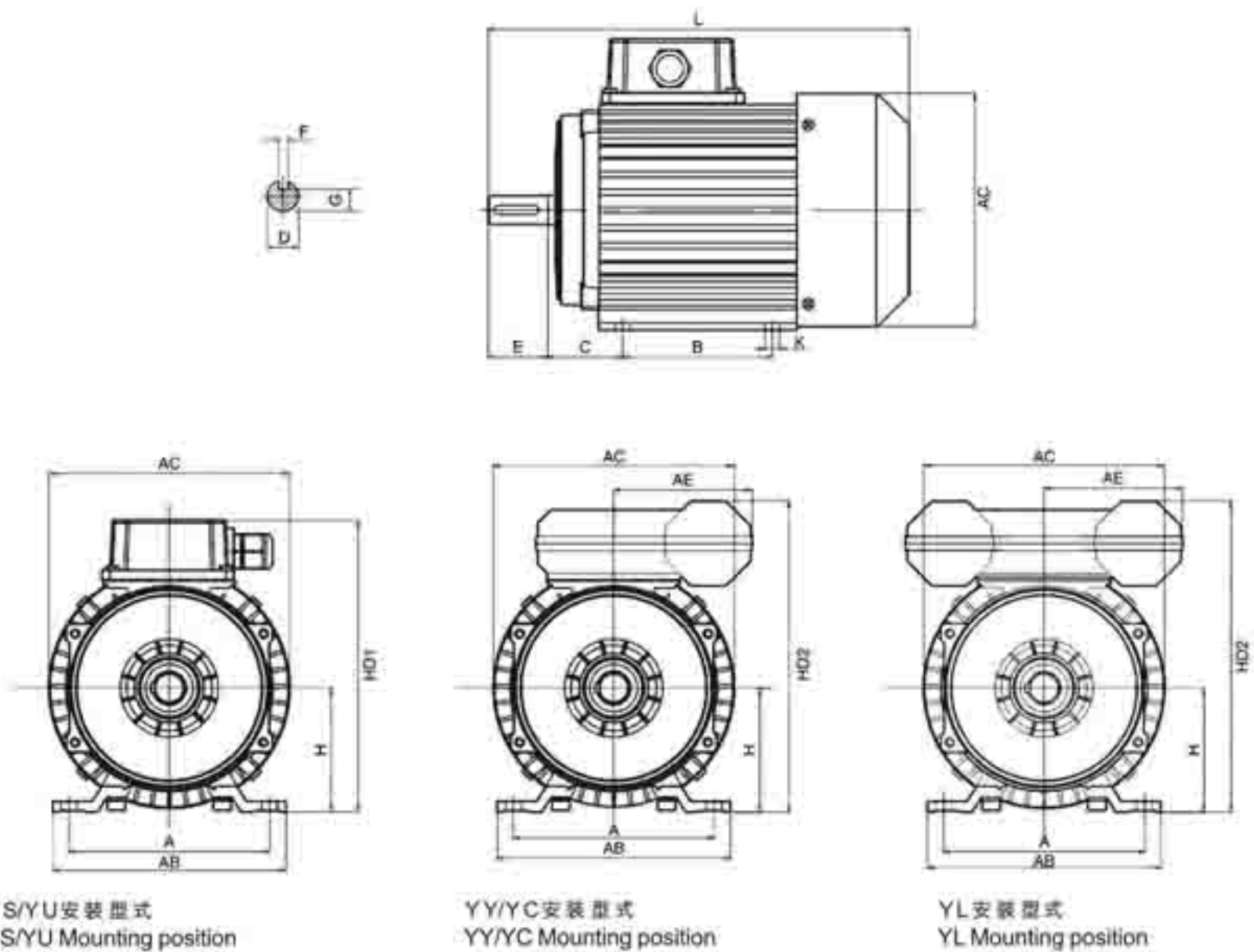
型号 Type	机座号 Frame size	额定功率 Rating power		电压 Voltage (V)	频率 Frequency (HZ)	转速 Speed (R.P.M)	额定电流 Rated current (A)	效率 Efficiency (%)	功率因数 Power factor (cos φ)	堵转转矩	
		(HP)	(W)							额定转矩 Mst Mn	
YS5612	56	1/8	90	380	50	2800	0.32	62	0.68	2.2	
YS5622		1/6	120				0.38	67	0.71		
YS5632		1/4	180				0.53	69	0.75		
YS5614		1/12	60			1400	0.28	56	0.58		
YS5624		1/8	90				0.39	58	0.61		
YS5634		1/6	120				0.48	60	0.63		
YS6312	63	1/4	180	380	50	2800	0.53	69	0.75	2.2	
YS6322		1/3	250				0.68	72	0.78		
YS6332		1/2	370				0.96	73.5	0.80		
YS6314		1/6	120			1400	0.48	60	0.63		
YS6324		1/4	180				0.65	64	0.66		
YS6334		1/3	250				0.83	67	0.68		
YS6344	1/2	370	1.12	69.5	0.72						
YS7112	71	1/2	370	380	50	2800	0.96	73.5	0.80	2.2	
YS7122		3/4	550				1.35	75.5	0.82		
YS7132		1	750				1.75	76.5	0.85		
YS7114		1/3	250			1400	0.83	67	0.68		
YS7124		1/2	370				1.12	69.5	0.72		
YS7134		3/4	550				1.56	73.5	0.73		
YS7116	71	1/4	180	380	50	930	0.74	59	0.63	2.2	
YS7126		1/3	250				0.94	63	0.64		
YS7136		1/2	370				1.29	68			
YS7118		1/8	90			700	0.51	49	0.55		1.8
YS7128		1/6	120				0.64	52			
YS7138		3/4	180				0.86	58			
YS8012	80	1	750	380	50	2800	1.75	76.5	0.85	2.2	
YS8022		1.5	1100				2.55	77			
YS8032		2	1500				3.44	78			
YS8014		3/4	550			1400	1.56	73.5	0.73		
YS8024		1	750				2.01	75.5	0.75		
YS8034		1/5	1100				2.75	78	0.78		

型号 Type	机座号 Frame size	额定功率 Rating power		电压 Voltage (V)	频率 Frequency (HZ)	转速 Speed (R.P.M)	额定电流 Rated current (A)	效率 Efficiency (%)	功率因数 Power factor (cosφ)	堵转转矩 额定转矩 Mst Mn
		(HP)	(W)							
YS8016	80	1/2	370	380	50	930	1.29	78	0.78	2.3
YS8026		3/4	550				1.81	71	0.65	2.0
YS8016		1/3	250			700	0.86	58	0.55	1.8
YS8028		1/2	370				1.09	62	0.56	
YS90S2	90	2	1500	380	50	2800	3.44	78	0.85	2.2
YS90L2		3	2200				4.82	80.5	0.86	
YS80S4		1.5	1100			1400	2.75	78	0.78	
YS90L4		2	1500				3.65	79	0.79	
YS90S6	90	1	750	380	50	930	2.26	73	0.69	2.0
YS90L6		1.5	1100				3.18	74	0.71	
YS90S8		3/4	550			700	1.38	68	0.60	1.8
YS90L8		1	750				1.95	69	0.62	
Y2-100L-2	100	4	3000	380	50	2860	6.30	83	0.87	2.2
Y2-100L1-4		3	2200			1420	5.2	80	0.81	2.3
Y2-100L2-4		4	3000				6.8	82	0.82	
Y2-100L-6		2	1500			960	4.0	76	0.75	2.0
Y2-100L1-8		1	750			680	2.4	71	0.67	1.8
Y2-100L2-8		1.5	1100				3.3	73	0.69	
Y2-112M-2	112	5.5	4000	380	50	2890	8.20	85	0.88	2.2
Y2-112M-4		5.5	4000			1440	8.8	84	0.82	2.3
Y2-112M-6		3	2200			940	5.57	79	0.76	2.0
Y2-112M-8		2	1500			690	4.4	75	0.69	1.8
Y2-132S1-2	132	7.5	5500	380	50	2900	11.0	86	0.88	2.2
Y2-132S2-2		10	7500				15.0	87		
Y2-132S-4		7.5	5500			1440	11.7	85	0.83	2.3
Y2-132M-4		10	7500			1460	15.6	87	0.84	
Y2-132S-6		4	3000			960	7.4	81	0.76	2.1
Y2-132M1-6		5.5	4000				9.7	82		
Y2-132M2-6		7.5	5500			12.9	84	0.77		
Y2-132S-8		3	2200			710	6.03	78	0.71	1.8
Y2-132M-8		4	3000				7.9	79	0.73	1.9



B3 型机座有底脚，端盖上无凸缘。

B3 foot mounting without flange on the end shield.



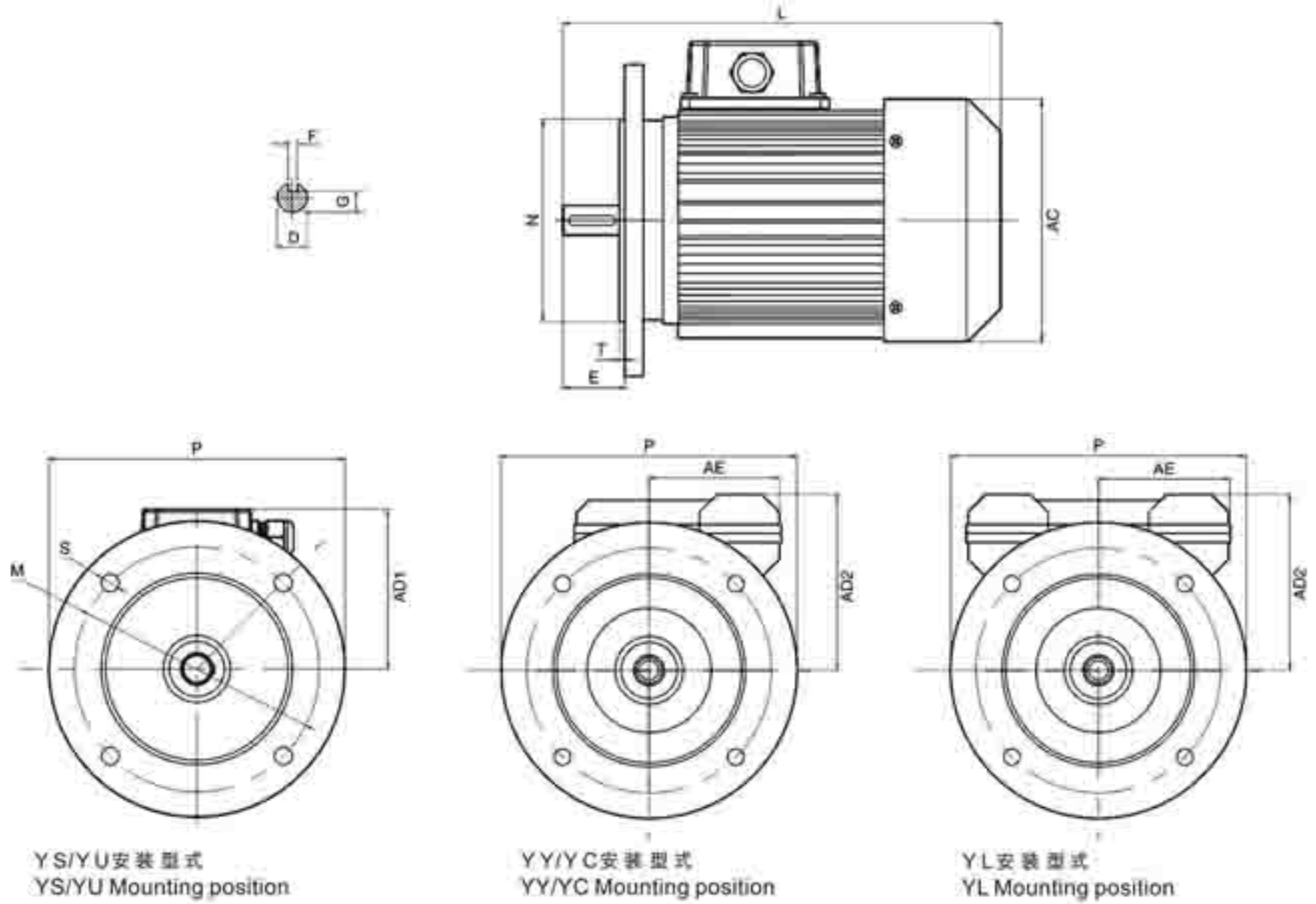
### ● B3 型机座安装型式 (B3 Mounting position)

机座号 Frame size	外型尺寸 Forfilomtry						安装尺寸 Mounted size					轴伸尺寸 Shaft Extension				重量 Kg
	AB	AC	AE	HD1	HD2	L	A	B	C	H	K	E	F	D	G	
56	108	112	73	139	152	204	90	71	36	56	φ5.8	20	3	9	7.2	4.6
63	121	122	73	151	162	211	100	80	40	63	φ7	23	4	11	8.5	6.1
71	132	138	73	164	176	247	112	90	45	71	φ7	30	5	14	11	8.8
80	150	156	89	188	202	270	125	100	50	80	φ10	40	6	19	15.5	13.7
90S	166	176	89	206	220	312	140	100	56	90	φ10	50	8	24	20	14.6
90L	166	176	89	206	220	339	140	125	56	90	φ10	50	8	24	20	19.1
100L	193	184		237		379	160	140	63	100	φ12	60	8	28	24	26
112M	226	207		255		395	190	140	70	112	φ12	80	8	28	24	38
132S	250	244		297		505	216	140	89	132	φ12	80	10	38	33	44.2
132S	250	244		297		505	216	178	89	132	φ12	80	10	38	33	48

注: 132表格中重量为约重, 下同。

B5 型机座无底脚，端盖上有小凸缘，轴伸在凸缘端。

B5 footless mounting and big flange on the end shield, shaft extension at the end of the flange.



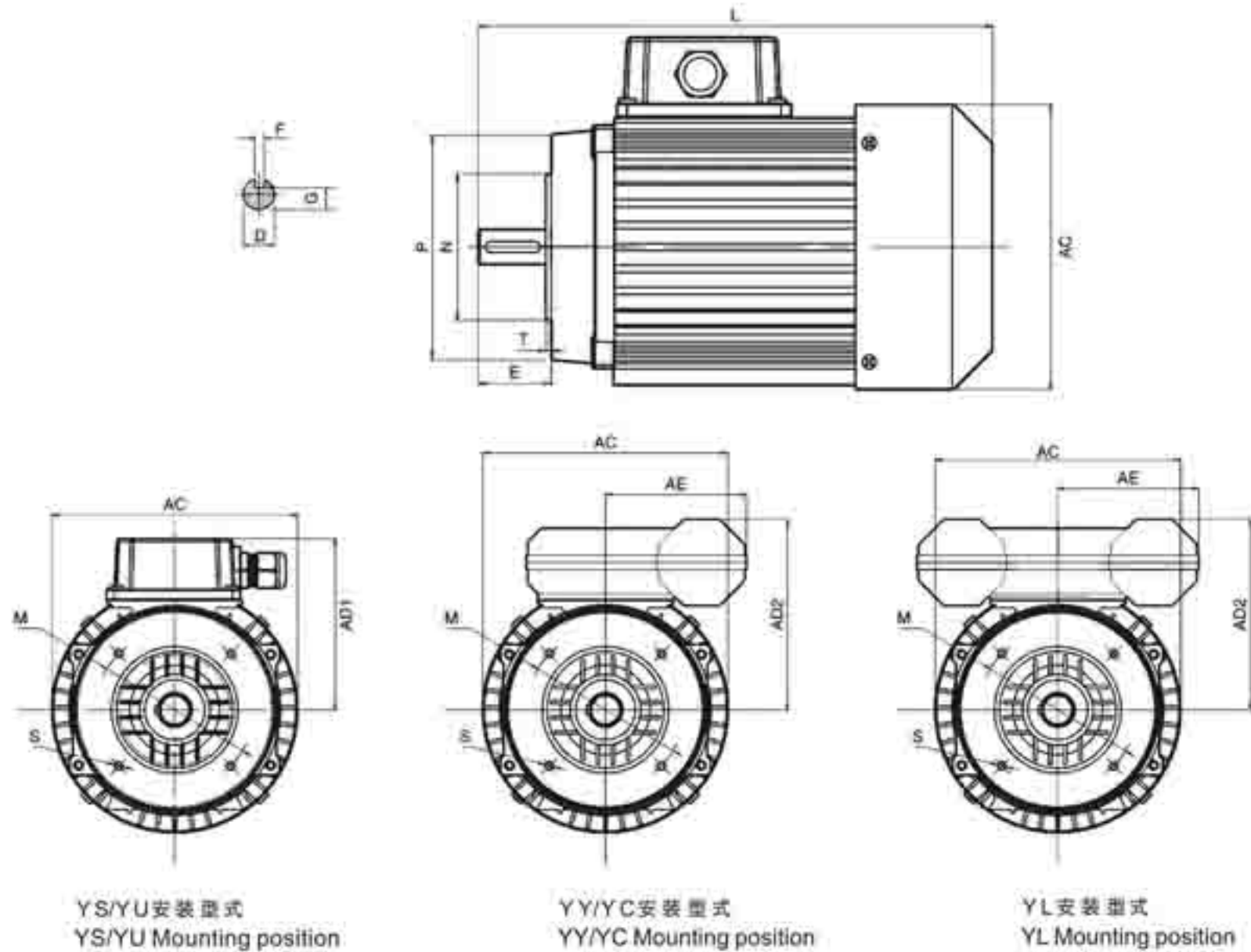
● B5 型机座安装型式 (B5 Mounting position)

机座号 Frame size	外型尺寸 Forfilomtry					安装尺寸 Mounted size					轴伸尺寸 Shaft Extension				重量 Kg
	AC	AD1	AD2	AE	L	P	N	T	M	S	E	F	D	G	
56	112	83	96	73	204	φ120	φ80	3	φ100	φ7	20	3	9	7.2	5.2
63	122	88	99	73	211	φ140	φ95	3	φ115	φ9	23	4	11	8.5	6.7
71	138	93	105	73	247	φ160	φ110	3.5	φ130	φ10	30	5	14	11	7.5
80	156	108	122	89	270	φ200	φ130	3.5	φ165	φ10	40	6	19	15.5	14.5
90S	176	116	130	89	312	φ200	φ130	3.5	φ165	φ10	50	8	24	20	16.7
90L	176	116	130	89	339	φ200	φ130	3.5	φ165	φ10	50	8	24	20	21.6
100L	184	137			379	φ250	φ180	4	φ215	φ15	60	8	28	24	30
112M	207	143			395	φ250	φ180	4	φ215	φ15	80	8	28	24	42
132S	244	165			505	φ300	φ230	4	φ265	φ15	80	10	38	33	48.5
132L	244	165			505	φ300	φ230	4	φ265	φ15	80	10	38	33	53

注: 132规格中重量为约重, 下同。

B14 型机座无底脚，端盖上有小凸缘，轴伸在凸缘端。

B14 footless mounting and small flange on the end shield, shaft extension at the end of the flange.



### ● B14 型机座安装型式 (B14 Mounting position)

机座号 Frame size	外型尺寸 Forfilomtry					安装尺寸 Mounted size					轴伸尺寸 Shaft Extension				重量 Kg
	AC	AE	AD1	AD2	L	P	N	T	M	S	E	F	D	G	
56	112	73	83	96	204	φ82	φ50	2.5	φ65	M5	20	3	9	7.2	4.6
63	122	73	88	99	211	φ90	φ60	2.5	φ75	M5	23	4	11	6.5	6.1
71	138	73	93	105	247	φ107	φ70	3	φ85	M6	30	5	14	11	8.8
80	156	89	108	122	270	φ124	φ80	3	φ100	M6	40	6	19	15.5	13.7
90S	176	89	116	130	312	φ139.5	φ95	3.5	φ115	M8	50	8	24	20	14.6
90L	176	89	116	130	339	φ139.5	φ95	3.5	φ115	M8	50	8	24	20	19.1
100L	184		137		379	φ160	φ110	3.5	φ130	M8	60	8	28	24	26
112M	207		143		395	φ160	φ110	3.5	φ130	M8	80	8	28	24	38
132S	244		165		505	φ209.5	φ130	4	φ165	M10	80	10	38	33	48
132M	244		165		505	φ209.5	φ130	4	φ165	M10	80	10	38	33	53

## 9.2 Frequency-variable motor parameter and size 变频电机参数及尺寸

### ESP系列变频调速三相异步电动机 Frequency-variable induction motor

#### 概述 General

ESP系列变频调速三相异步电动机采用AMCAD设计而成,可实现电动机的无级调速,具有运行噪声低、转动平稳、节能效果明显、调速性能好、调速比宽等优点。能和国内外各类变频装置相配套。

为了使电机能适应PWM变频电源供电的状况,在设计上,对定子、转子槽形和定子绕组分布形式作了特殊的考虑,以期获得一个较为合适的电感值,来抑制和减小时间谐波和由其引起的一系列电机空间谐波所产生的不良影响。电机的电磁负荷设计也考虑了一定的裕度,这样,既能保证电机在高频率时的过载能力,又能在低频运行时仍能保持恒转矩输出。

ESP系列变频调速三相异步电动机绝缘结构的设计,考虑了采用IGBT的PWM变频器的高谐波频率的影响,尤其是匝间绝缘;为了能够承受由高电压上升率在线圈匝间反复施加的陡度极大的冲击电压所导致的严酷考验,采用了特殊措施予以加强,电机的匝间耐压试验值远超过了JB/Z346-89对交流电的规定。

在结构设计方面,ESP系列的安装尺寸与Y系列相同,以便用户的配套和选用,电机采用了独特的冷却结构,使用单独的轴流风机强迫通风,保证了电机在低速恒转矩长期运行时温升不超过允许值。

#### 型号说明 Meaning of Type

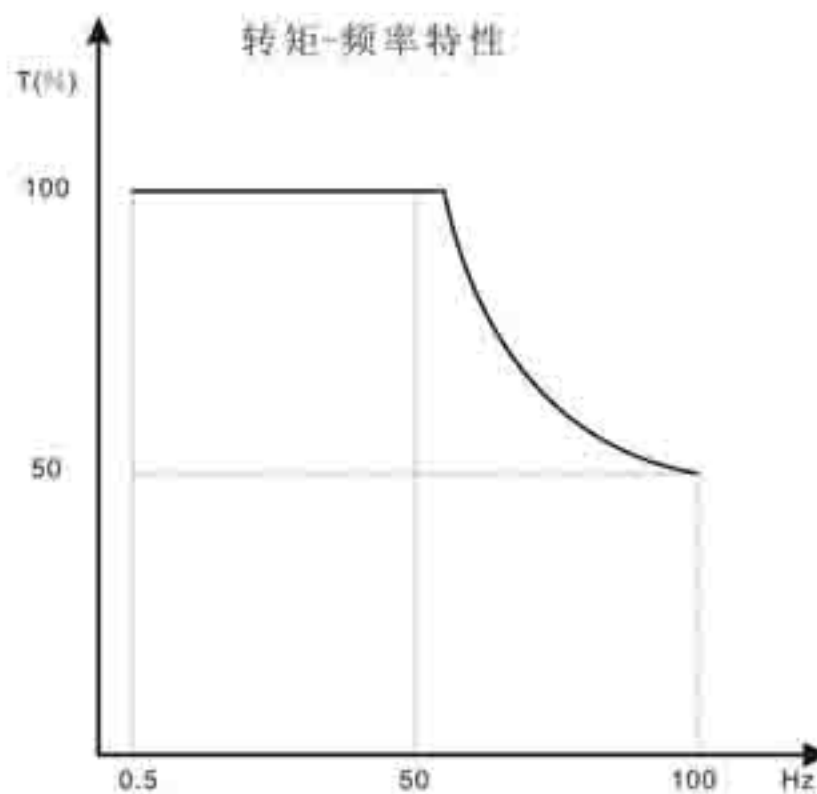
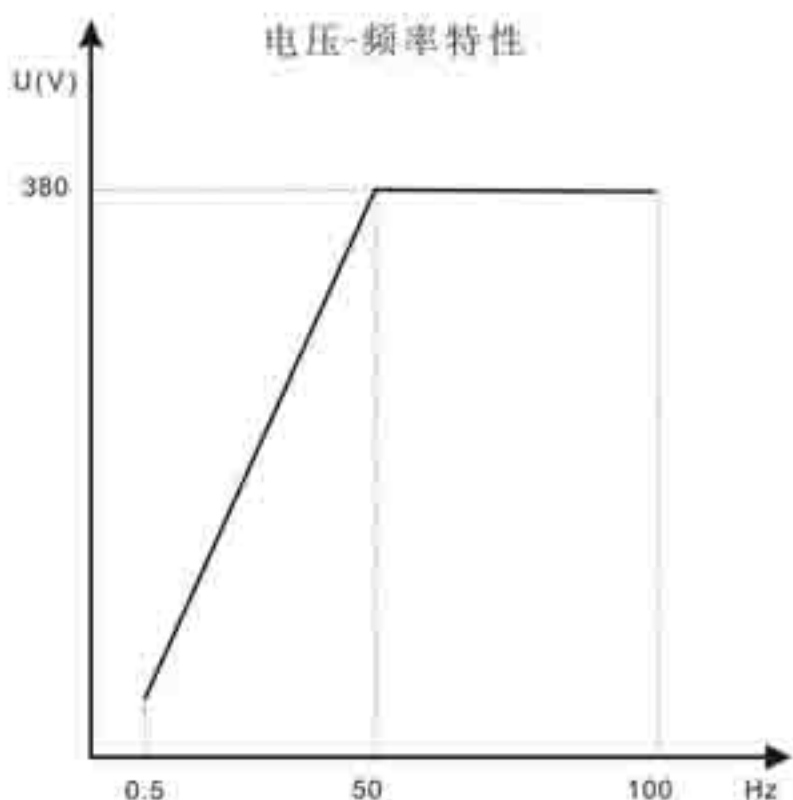


#### 使用条件 Working Condition

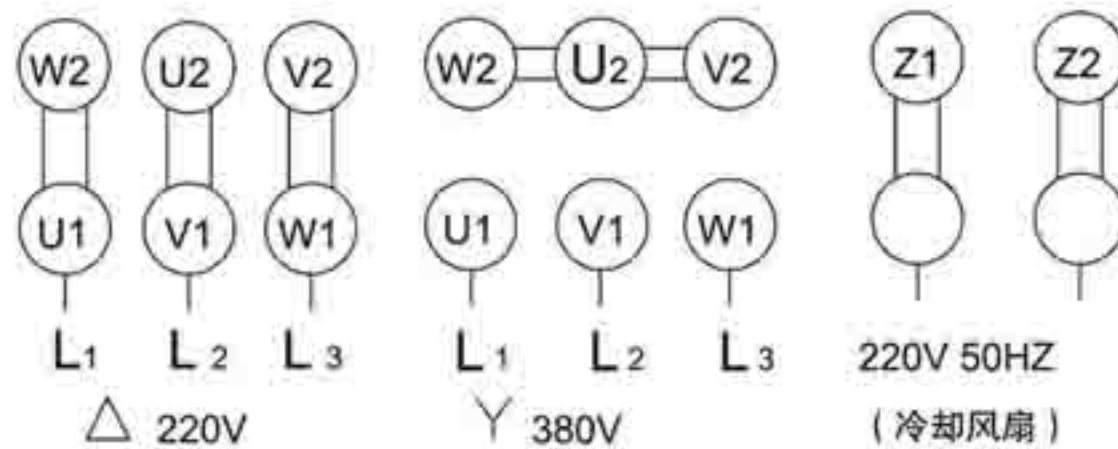
Ambient temperature 环境温度	-5~+40℃
Altitude 海拔:	≤1000m
Protection 防护等级:	IP44或IP54
Voltage 电压:	380(220)V±10%
Frequency 频率:	50(60)Hz±2%
Duty 工作制:	S1连续
Insulation 绝缘:	F
Connection 接法:	≤3KW Y; ≥4KW Δ

#### 主要技术性能和技术参数 MAJOR TECHNICAL CHARACTERISTICS AND DATA

对电网频率为50Hz(或60Hz)的电源,其调速范围一般为5Hz~100Hz(或6Hz~120Hz)(1:2)电动机在5Hz~50Hz(或6Hz~60Hz)输出额定转矩,为恒转矩运行区,在50Hz~100Hz(或60Hz~120Hz)时输出额定功率,为恒功率运行区。



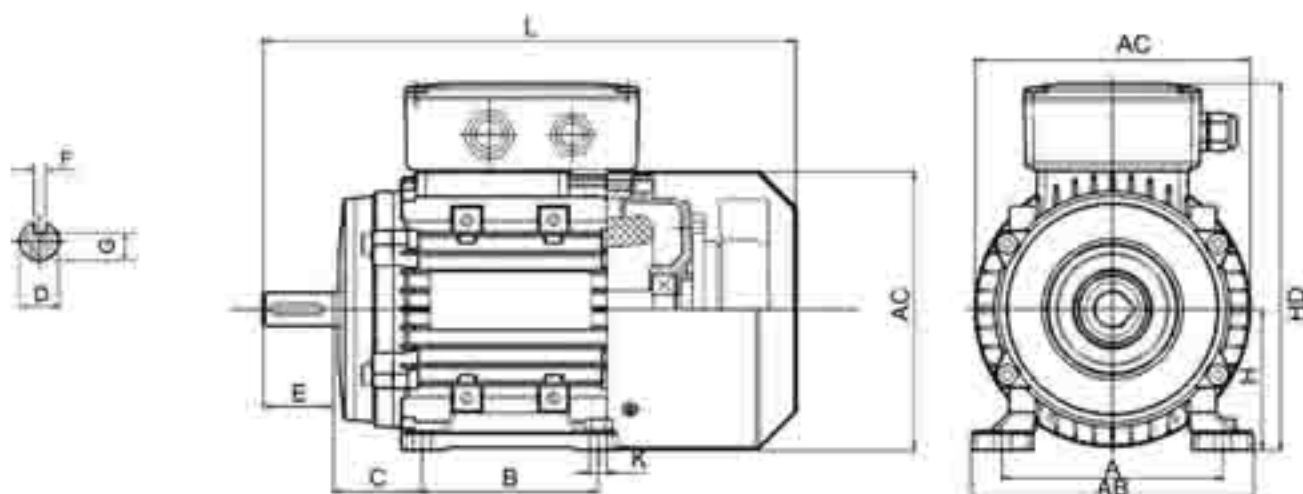
当用变频电源供电在低频时,电动机的起动转矩与额定转矩之比可达1.25倍。


**ESP 变频电动机接线图**

**● ESP变频调速三相异步电动机 Frequency-variable induction motor**

型号 Type	机座号 Frame 规格	额定功率 Rating power		电压 Voltage (V)	额定电流 Rated current (A)
		(HP)	(W)		
ESP6312	63	1/6	120	380/220	0.73
ESP6322		1/4	180		0.88
ESP6314		1/6	120		0.83
ESP6324		1/4	180		0.88
ESP6334		1/3	250		1.03
ESP7112	71	1/2	370	380/220	1.31
ESP7122		3/4	550		1.7
ESP7132		1.0	750		2.1
ESP7114		1/3	250		1.18
ESP7124		1/2	370		1.47
ESP7134		3/4	550		1.91
ESP7116		1/4	180		1.09
ESP7126		1/3	250		1.29
ESP8012	80	1.0	750	380/220	2.1
ESP8022		1.5	1100		2.9
ESP8014		3/4	550		1.91
ESP8024		1.0	750		2.36
ESP8034		1.5	1100		3.1
ESP8016		1/2	370		1.64
ESP8026		3/4	550		2.16
ESP8018		1/4	250		1.21
ESP8028		1/3	370		1.44



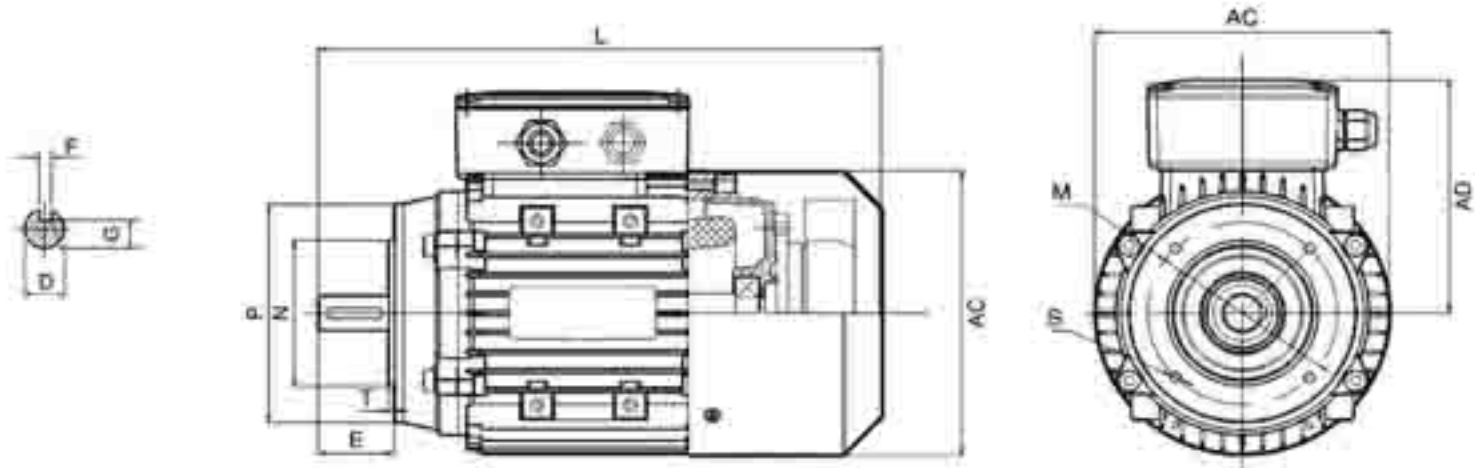
型号 Type	机座号 Frame size	额定功率 Rating power		电压 Voltage (V)	额定电流 Rated current (A)
		(HP)	(W)		
ESP90S2	90	2.0	1500	380/220	3.79
ESP90S4		1.5	1100		3.1
ESP90S8		1.0	750		2.61
ESP90S8		1/2	370		1.73
ESP90L4		2.0	1500		4
ESP90L6		1.5	1100		3.53
ESP90L8		1	750		2.3
ESP100L1-4	100	3.0	2200	380/220	5.55
ESP100L2-4		4.0	3000		7.15
ESP100L-6		2.0	1500		4.35
ESP112M-2	112	5.5	4000	380	8.2
ESP112M-4		5.5	4000		8.8
ESP112M-6		3.0	2200		5.6
ESP132S1-2	132	7.5	5500	380	11
ESP132S2-2		10.0	7500		15
ESP132S-4		7.5	5500		11.6
ESP132M-4		10.0	7500		15.4
ESP132S-6		4.0	3000		7.2
ESP132M1-6		5.5	4000		9.4
ESP132S2-6		7.5	5500		12.6
ESP132S-8		3.0	2200		5.8
ESP132M-8		4.0	3000		7.7



● B3型 机座安装型式 (B3 Mounting position)

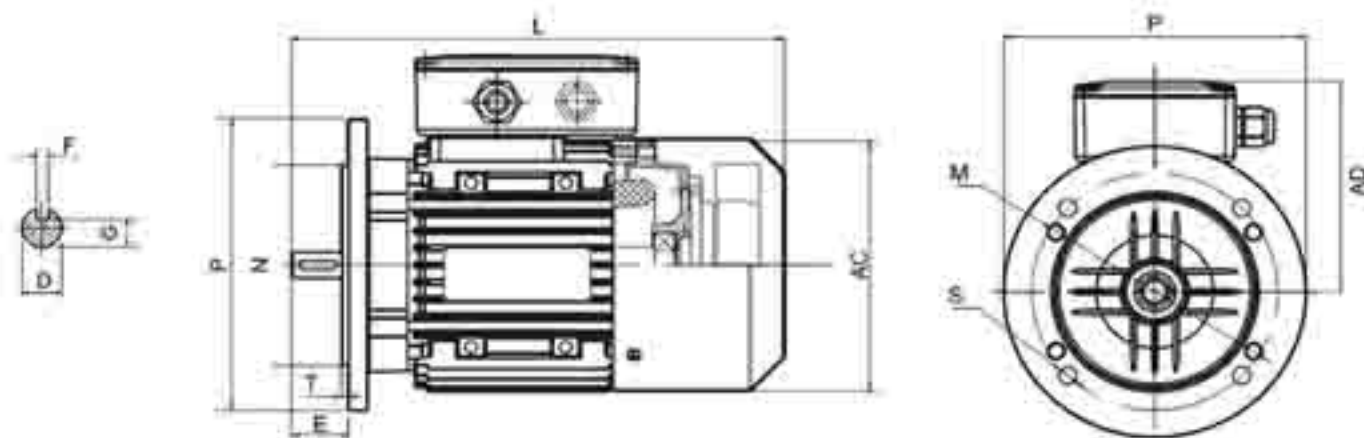
机座号 Frame size	外型尺寸 Forfilometry				安装尺寸 Mounted size					轴伸尺寸 Shaft Extension				重量 kg
	AB	AC	HD	L	A	B	C	H	K	E	F	D	G	
63	125	118	168.5	247.5	100	80	40	63	φ7	23	4	11	8.5	6.5
71	136	138	187	263	112	90	45	71	φ7	30	5	14	11	9.3
80	160	156	208.5	293	125	100	50	80	φ9.5	40	6	19	15.5	14.2
90	181	176	228	350	140	125	56	90	φ9.5	50	8	24	20	15.6
100	202	194	256	395.5	160	140	63	100	φ11	60	8	28	24	27.2
112	226	207	255	435	190	140	70	112	φ12	60	8	28	24	39.4
132	250	244	287	575	216	178	89	132	φ12	80	10	38	33	43.8





● B14 型机座安装型式 (B14 Mounting position)

机座号 Frame size	外型尺寸 Forfilomtry				安装尺寸 Mounted size				轴伸尺寸 Shaft Extension				重量 kg
	AC	AD	L	P	N	T	M	S	E	F	D	G	
63	118	105.5	247.5	φ88	φ60	2.5	φ75	M5	23	4	11	8.5	6.5
71	138	116	263	φ107	φ70	3	φ85	M6	30	5	14	11	9.3
80	156	128.5	293	φ120	φ80	3	φ100	M6	40	6	19	15.5	14.2
90	175	138	350	φ140	φ95	3.5	φ115	M8	50	8	24	20	15.6
100	194	156	395.5	φ152	φ110	3.5	φ130	M8	60	8	28	24	27.2
112	207	143	411	φ160	φ110	3.5	φ130	M8	60	8	28	24	39.4
132	244	287	575	φ200	φ130	4	φ165	M10	80	10	38	33	49.6



● B5 型机座安装型式 (B5 Mounting position)

机座号 Frame size	外型尺寸 Forfilomtry				安装尺寸 Mounted size				轴伸尺寸 Shaft Extension				重量 kg
	AC	AD	L	P	N	T	M	S	E	F	D	G	
63	118	105.5	247.5	φ140	φ95	3	φ115	φ9	23	4	11	8.5	7.1
71	138	116	263	φ160	φ110	3.5	φ130	φ10	30	5	14	11	8.0
80	156	128.5	293	φ200	φ130	3.5	φ165	φ10	40	6	19	15.5	15.0
90	176	138	350	φ200	φ130	3.5	φ165	φ10	50	8	24	20	17.7
100	194	156	395.5	φ250	φ180	4	φ215	φ15	60	8	28	24	31.2
112	207	143	411	φ250	φ180	4	φ215	φ15	60	8	28	24	43.4
132	244	287	573	φ300	φ230	4	φ265	φ15	80	10	38	33	50



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## 10. Other products 其它产品



IW60



N9SK



8SK



S03



8SK



S03

