



公司简介 Company brief introduction

珠江减速机有限公司创建于八十年代末，是华南地区最大规模的减速机专业制造商，所属珠江减速机有限公司研究所是国内减速机行业研制增、变、减速机的先进机构之一。

珠江人不懈地追求打造品牌产品，用实绩改善减速机的形象概念，至今已荣获国家专利、省市级科技进步成果奖多项，被广东省科技厅评为“广东省民营科技企业”、“广东省高新技术企业”。RV系列等多项产品被列入国家和广东省重点新产品生产项目。

目前，公司拥有员工400多名，高中级技术人员三十多名、其中高级工程师十名，占建面积近十万平方米，各种先进、精密机械设备及检测设备三百余台；生产WP、RV、VF(微型)系列蜗轮蜗杆减速机与R、K、S、F(渐开线)系列硬齿面减速机及特型减速机(如WSH蜗轮蜗杆升降机、JWB无级变速器、FS变速器、绕丝机等)上百个型号、数千个规格，形成了具备向众多行业提供配套减速机及优质服务的能力。产品销售至东南亚国家和两岸三地及国内二十多个省、市、区，销量雄居华南地区同行业前列，品质赢得了市场上的广泛赞誉和认同。

珠江减速机有限公司以“创造二十一世纪新型减速机制造业”为己任，必将以更多更好的优质产品为广大减速机应用行业服务。

Thanks for your choosing the "Qiangzhu" decelerator, just feel the pleasant feeling of high performance speed control. Zhujiang Decelerator Co., Ltd. (formerly Zhujiang Decelerating Machinery Factory), is the largest professional manufacturer of decelerators in South China.

The Research Institute of Zhujiang Decelerator Co., Ltd. specializes in the development of accelerators, speed variators and decelerators. Since its foundation in the 1980s, the company has always been creating famous brand products and improving the new concept of decelerator with performances. The "Qiangzhu" decelerator has won the "TQC" Quality Conformity of the Ministry of Agriculture and the Class II certificate for "Compliance with Metering Assurance System of Guangdong" in succession. By 2004, it has won 6 national patents, a range of provincial and municipal level technological advance prizes, and has been appraised as a "mass-run hi-tech enterprise of Guangdong" by the Science and Technology Administration of Guangdong Province.

At present, the Company owns over 400 employees, over 30 middle/high rank technicians, workshops with a floor area of 100,000m², over 300 sets of advanced precision machinery; and manufactures WP, PV, VF (miniature) series of worm reducers, P, K, S, F (involute) series of hard gear surface decelerators and special decelerators, available in more than 100 models and thousands of specifications. The products are exported to South Asia, Hong Kong, Taiwan and sell in over 20 provinces, municipalities directly under the Central Government and regions nationwide, with a sales volume topping in the industry in South China and the quality widely recognized on the market.

Zhujiang Decelerator Co., Ltd. is creating the new decelerator manufacturing industry to serve a wide range of decelerator applications on a ceaseless path of innovation and development. Welcome customers to call us or come to our company personally for business negotiation. Believe your choice the "Qiangzhu" decelerator!

Master Table of Contents 总目录

Product explanation	性能特点
Technical charts symbols	图表符号说明
Guide for Choosing & User Manual	选用指南及使用说明
A. Notices for type-choosing	A. 选型注意事项
B. Notices for installation and usage	B. 安装与使用注意事项
C. Maintenance notices	C. 维护注意事项
Guide for type-choosing & Radiaal loads	选择机型号计算关系式及径向负载
Solution and reason for the general faults of variator	故障原因及解决办法
Motor coefficient tables	电动机型号参数表
The motor in common use as follow	常用电动机类型代号
RV.VF series Catalog	RV.VF 系列目录
RV Series worm-gear speed reduces	RV系列蜗轮蜗杆减速机
VF Series worm-gear speed reduces	VF系列蜗轮蜗杆减速机

性能特点

RV、VF系列蜗轮蜗杆减速器系按Q/ZJ1-2000技术质量标准设计制造。

产品在符合国家标准GB10085-88圆柱蜗杆蜗轮参数基础之上，采用ZK齿锥面包络蜗轮蜗杆，吸取国内外最先进科技，设计制造的“方箱型”薄壁花纹散热片、采用静力学结构设计的箱体以优质铝合金压铸而成，具有以下优势特征：

- 1) 机械结构紧凑，体积轻巧，小型高效；
- 2) 热交换性能好，散热快；
- 3) 安装简易、联接型式灵活，性能优越，易于维护检修；
- 4) 传动速比大，扭矩大，承受过载能力高；
- 5) 运行平稳，噪音小，经久耐用；
- 6) 适用性强，安全可靠性能大。

该系列产品列入2001年度国家重点开发新产品，2002年度产品被纳入广东省重点新产品生产项目。

产品目前被广泛应用于国内外各类行业生产工艺装备的机械减速装置，是目前现代工业装备实现扭矩、大速比、低噪音、高效率、高稳定性机械减速传动控制装置的最佳选择。

Product explanation

RV、VF Series Worm gear speed reducers is designed and manufactured according to Q/Z J1-2000 technical quality standard.










These series are in compliant with the national standard GB10085-88 cylinder worm turbo parameter and combined with the most advanced technology inside and outside China to design and make Square Chest Wall. This machine with thin wall pattern radiator and design via static structure is cast by compression with high-quality aluminum alloy, which has the advances and features as follows:

- 1) Compact structure, light size, small and high efficiency.
- 2) Good function of heat exchange, rapid heat rejection.
- 3) Easy installation and flexible connecting style. Easy for maintaining and checking.
- 4) Large in both transmission ratio and twisting distance (N.m) resulting to high capacity of bearing and loading.
- 5) Stable operation, little noise, long lasting.
- 6) Widely applicable and liable.

These series are listed in important R&D products in China in 2001 and in Guangdong in 2002.



The products are widely applied in the producing equipments of all kinds of industries inside and outside China. They are the best choices for nowadays modern facilities of mechanical reducing drive control to realize large twisting distance, large gear ratio, little noise, high efficiency and stability.

图表符号说明 Technical charts symbols

 VF-HS 带输入轴的减速机 Gearbox with solid input shaft	 VF/VF-HS 带输入轴的减速机 Gearbox with solid input shaft	 VF-P 带IEC标准电机法兰的减速电机 motor mounting flange	 VF/VF-P 带IEC标准电机法兰的减速电机 motor mounting flange	 IEC标准电机 Electric motor IEC	 结构尺寸参考页 Configuration size consult the page
 RV..F.. 带输入轴的减速机 Gearbox with solid input shaft	 RVE..F.. 带输入轴的减速机 Gearbox with solid input shaft	 RV..FA.. PG+RV RVE..FA.. 带IEC标准电机法兰的减速电机 motor mounting flange			

*表(1) *Table (1)

*表 (2) *Table (2)

A_{cl}	[N]	输入轴 (+/-) 允许负载范围 (***)	Calculated thrust load at gearbox input shaft
A_{c2}	[N]	输出轴 (+/-) 允许负载范围 (***)	Calculated thrust load at gearbox output shaft
A_{n1}	[N]	变速箱输入轴额定负载	Rated thrust load at gearbox input shaft
A_{n2}	[N]	变速箱输出轴额定负载	Rated thrust load at gearbox output shaft
i	-	减速比	Reduction ratio
K	-	效率系数	Acceleration factor of masses
K_r	-	径向负载系数	Radial load stress factor
M_b	[N.m]	煞车器额定扭矩	Rated brake torque
M_1	[N.m]	变速箱输入扭矩	Transmitted torque at gearbox input
M_2, M_2'	[N.m]	变速箱输出扭矩	Transmitted torque at gearbox output
M_{c2}	[N.m]	变速箱输出扭矩范围	Calculated torque at gearbox output
M_{n2}	[N.m]	变速箱额定输出扭矩	Gearbox rated output torque
M_{r2}	[N.m]	变速箱输出必需扭矩	Required torque at gearbox output
n_1, n_1'	[r/min]	输入速率	Angular speed at gearbox input
n_2, n_2'	[r/min]	输出速率	Angular speed at gearbox output
P_1	[kW]	变速箱输入功率	Transmitted power at gearbox input
P_2	[kW]	变速箱输出功率	Transmitted power at gearbox output
P_{c1}	[kW]	变速箱输入功率范围	Calculated power at gearbox input
P_{c2}	[kW]	变速箱输出功率范围	Calculated power at gearbox output
P_n, P_n'	[kW]	电动机额定功率	Motor rated power
P_{n1}	[kW]	变速箱额定输入功率	Gearbox rated input power
P_{n2}	[kW]	变速箱额定输出功率	Gearbox rated output power
F_{rc1}	[N]	变速箱输入轴径向负载范围	Calculated radial load of gearbox input shaft
x_1	[mm]	载入应用距离 (*)	Load application distance (*)
	-	输入负载定位	Load orientation at input
	-	输入轴转动方向 (CW-CCW) (**)	Input shaft rotation direction (CW-CCW) (**)
F_{rc2}	[N]	变速箱输出轴径向负载范围	Calculated radial load of gearbox output shaft
x_2	[mm]	载入应用距离 (*)	Load application distance (*)
	-	输出负载定位	Load orientation at output
	-	输出轴转动方向 (CW-CCW) (**)	Output shaft rotation direction (CW-CCW) (**)
F_{r1}	[N]	变速箱输入轴额定径向负载	Rated radial load of gearbox input shaft
F_{r2}	[N]	变速箱输出轴额定径向负载	Rated radial load of gearbox output shaft
F_{rx1}	[N]	变速箱不同径向负载点的额定输入应用系数	Rated radial load at gearbox input recalculated with respect to different load application points
F_{rx2}	[N]	变速箱不同径向负载点的额定输出应用系数	Rated radial load at gearbox output re-calculated with respect to different load application points
x	[mm]	轴伸的应用距离	Load application distance from shaft shoulder
$s.f$		减速机安全使用系数	Safety factor of reducer
η_D		动态效率	Dynamic efficiency
η_S		静态效率	Static efficiency

(*) x_1-2 是力应用点和轴肩之间的距离

(**) CW=顺时针转动;
CCW=逆时针转动

(***) += 压缩
- = 牵引

(*) Distance x_1-2 is between force application point and shaft shoulder.

(**) CW = clockwise;
CCW = anticlockwise

(***) + = compression
- = traction

选用指南及使用说明

十分感谢您选用本公司产品。

为避免在订货后出现不必要的差错，因此尽可能在订货之前洽询详细资料，并从各方面、各角度加以核对。

选择最适当的机型、掌握正确的安装使用方法。

Guide for Choosing & User Manual.

Thanks for your selecting our product.

To avoid the unnecessary mistakes after ordering, please make as clear as possible about the information before ordering and verify all the aspects as to choose the most suitable type and learn the proper installation method.

A. 选型注意事项

- 1) 根据负载转矩、传动比、输出转速确定所需的减速机型号、电机规格;
- 2) 根据使用情况在安装形式图中确定安装形式及出轴方向;
- 3) 订货时，请按本样本规范的型号表示方法进行书写；用户如有特殊要求（例如：日连续工作12小时以上等），请与本公司联系；
- 4) 本样本中如有改进或更改之处，不另作通知。

A. Notices for type-choosing

- 1) Make sure the needed type and size of reducer and electric machine according to loading torque, transmission ratio, and output rotate speed.
- 2) Confirm the fixing forms and exit-axis direction in the Installation Draw according to the using condition.
- 3) Please note down the exact type of this sample in the ordering form. If you have any special request, please contact our company.
- 4) There is no other notice if any improvement or alternation on this sample.

B. 安装与使用注意事项

- 1) 减速机须安装在平整坚固的底座上，底脚螺栓必须紧固以防震松和产生非正常震动；
- 2) 安装时应调整原动机、减速机与工作机各联接轴伸，以保持同轴度；蜗杆输入转速一般应小于1500r/min；
- 3) 不允许用重锤敲击减速机任何部位；
- 4) 减速机装配电机时，应检查电机接线正常，并在蜗杆头部内孔孔壁及键槽处涂抹黄油，避免装配过紧；
- 5) 使用各类电机直联型减速机时，若电机重量偏大，应设支撑装置；
- 6) 加载试车前，应空载运转半小时左右，确认空载无故障无异常冲击时，方可加载运行；
- 7) 加载试车后，应注意观察减速机的温升、密封、噪音、振动等是否正常；运转两小时后，检查油池温升及最高油温，减速机允许最大温升为60°C，但最高油温不能超过100°C，超温时应停机检查；
- 8) 根据具体使用环境工况须增加透气孔则应增加透气孔。

B. Notices for installation and usage

- 1) Reducer should be fixed on the flat and solid base. Footing screw should be tightened to proof loose and abnormal shake.
- 2) Adjust the connecting shaft extensors of prime mover, reducer and working machine while installing to keep the same axis degree: rotate speed input from worm normally should be less than 1500r/min.
- 3) Heavy hammer should be not allowed for hitting any parts of reducer.
- 4) Connecting lines should be inspected while fitting reducer to electric machine and the inner hole wall and key groove of worm heard should be buttered to avoid too tightness.
- 5) If electric machine is too heavy, supporting device should be equipped when using all direct-attached reducer.
- 6) Before loading trial, no load should be operated for about half an hour. Only if no fault and no abnormal impact on no load are confirmed, loading can be operated.
- 7) Watch carefully if temperatures raise, airproof, noise and tremble is normal on loading trial. Check temperatures raise and maximal oil usage of oil bath after 2 hours operation. The highest temperatures raise is 60°C but the highest oil temperature should not be over 100°C. Stop and check if the temperature is higher.
- 8) Add air hole if there is necessary according to the working conditions.

C. 维护注意事项

- 1) 减速器的环境温度为-10°C~+40°C (如超出此范围请咨询我公司技术部门)；
- 2) 存放或停用了4~6月的减速机，如果油封和箱体之间没有润滑剂，建议更换油封，因油封橡胶老化粘于轴或失去弹性而导致性能下降；
- 3) 应定期用油量指示器检查油量，使其在正确的范围内；润滑油不足可能导致蜗轮快速磨损和效率降低；
- 4) 在高速、高温、重负荷、强制润滑等特殊情况下使用场合，请与本公司洽商。

C. Maintenance notices

- 1) Surrounding temperature should be -10°C~+40°C (In the outside, Consult our technical service department).
- 2) For the reducer of storing or stopping using for 4-6 months, if there is no lubricant between oil seal and chest, oil seal should be changed because aging rubber of oil seal sticks to axis or loses elasticity so that function will be reduced.
- 3) Oil indicator should be used regularly to check oil usage to make sure the normal scope.
- 4) At high speed, heat, heavy burthen, compulsory lubricate etc. special, circumstance bottom usage situation, please with our company's company.

选择机型号计算关系式及径向负载 Guide for type-choosing&Radial loads

$$M_2 = P_x \cdot K_1 \cdot K_2 \quad P_1 = M_x \cdot K_1 \cdot K_2$$

M_x —工作机所需的扭矩(N.m);
 P_x —工作机所需的功率(kW);
 M_2 —减速机输出的扭矩(N.m);
 P_1 —电机功率(kW);
 K_1 —减速机油池润滑系数见表3;
 K_2 —减速机工况使用系数见表4。

$$M_2 = P_x \cdot K_1 \cdot K_2 \quad P_1 = M_x \cdot K_1 \cdot K_2$$

M_x — Twisting Distance (N.m) for working machine
 P_x — Power (kW) for working machine
 M_2 — Twisting Distance (N.m) for reducer output
 P_1 — Power (kW) for electric machine
 K_1 — Oilbath lubricating factor of reducer as the Table 3
 K_2 — Working amendment factor of reducer as the Table 4

表3: 减速机油池润滑系数(K_1) Table 3: Oilbath lubricating factor of reducer (K_1)

圆周速度V m/s	单级 Single Stage		双级 Double Stage	
	间断Discontinuous	连续性Continuous	间断Discontinuous	连续性Continuous
≤2.5	1	1	1	1
>2.2~3.5	1	1.15	1	1.1
>3.5~5	1.05	1.2	1	1.15
>5~7	1.1	1.3	1.05	1.2
>7~10	1.15	1.4	1.1	1.3

表4: 减速机工况使用系数(K_2) Table 4: Working amendment factor of reduce (K_2)

减速器负荷性质 Type of load	每日工作时数 Hours/day					
	每小时间断性操作次数少于10次 Discontinuous Operation Times per Hour ≤ 10			每小时连续性或间断性操作次数大于10次 Discontinuous or Continuous Operation Times per Hour ≥ 10		
	< 2	2~8	8~16	< 2	2~8	8~24
均衡负荷 Uniform	0.8	1	1.25	1	1.25	1.75
中级震荡 Moderate	1	1.25	1.5	1.5	1.75	2
重级震荡 Heavy shocks	1.25	1.5	1.75	1.75	2	2.25

注: 当环境温度为30~40°C时, 应乘以工作情况修正系数1.1~1.2。 Notice: It should multiply the working amendment factor 1.1~1.2 on the temperature of 30~40°C.

输出轴径向负载Fr2 Radial loads on output shaft Fr2

额定径向负载值, 输出轴轴伸可查阅齿轮电机和变速箱选择图表。

输出扭矩范围 M_2 和额定扭矩 M_n , 确定最大负载、负载方位和轴传动装置方向。

如果允许值符合必需值, 请查阅我们技术服务指南中的装载方向和轴旋转传输方向。

输入轴径向负载

变速箱输入轴中心距的计算和输入速率, 标注在变速箱的选择表中。

如果允许值符合必需值, 请查阅我们技术服务指南中的装载方向和轴旋转传输方向。

推力负载 A_{n1-2}

最大允许推力负载按如下工式计算:

$$A_{n1} = Fr_1 \cdot 0.2$$

$$A_{n2} = Fr_2 \cdot 0.2$$

推力负载是否超负荷, 请咨询我公司技术部门。

Rated values of radial loads referred to the mid-point of the output shaft extension are shown in the gearmotor and gearbox selection charts. They are calculated respectively in accordance with transmitted torque M_2 and rated torque M_n and for the worst possible conditions in terms of load orientation and rotation direction. If permitted values are below required values, please consult our Technical Service department indicating exact load orientation and shaft rotation direction.

Radial loads on input shaft Fr1

These values, which are shown in the gearbox selection charts, refer to input speed and are calculated at mid-point of the gearbox

input shaft.

If permitted values are below required values, please consult our Technical Service department indicating exact load orientation and shaft rotation direction.

THRUST LOADS A_{n1-2}

Maximum permitted thrust loads can be calculated as follows:

$$A_{n1} = Fr_1 \cdot 0.2$$

$$A_{n2} = Fr_2 \cdot 0.2$$

In this case too, if thrust loads exceed permitted value, consult our Technical Service department.

径向负载

变速箱输入轴和输出轴的径向负载, 由传动形式决定, 计算计算方式如下:

$$F_{rc1-2} = \frac{2000 \cdot M_{1-2} \cdot K_r}{d}$$

F_{rc1-2} 径向负载(牛顿)
1=输入轴
2=输出轴

M_{1-2} 扭矩(Nm)

d 传动机构的直径(mm)
(链轮, 齿轮, 三角皮带轮)

$K_r=1$ 链轮

$K_r=1.25$ 齿轮

$K_r=1.5-2.5$ 三角皮带轮

如表T5所注明各尺寸应用如下:

a) 轴中心点径向负载 F_{rc1-2} 如T5所示, 其数据表示如下:

$$F_{rc1-2} \leq Fr_{1-2}$$

b) 负载应用距离 x , 如图T6所示, 允许径向负载 Fr_{x1-2} 计算方程式:

$$Fr_{x1-2} = Fr_{1-2} \cdot \frac{a}{b+x}$$

Fr_{x1-2} = 轴中心点允许径向负载

a, b = 变速箱常数(表T7)

x = 轴伸的应用距离(mm)

应用状态检查: $F_{rc1-2} \leq Fr_{x1-2}$

Radial loads

Gearbox input and output shafts can be subjected to radial loads (determined by the type of transmission used) the extent of which can be calculated with the following formula:

$$F_{rc1-2} = \frac{2000 \cdot M_{1-2} \cdot K_r}{d}$$

F_{rc1-2} Radial load (N)
1 = input shaft
2 = output shaft

M_{1-2} Torque (Nm)

d Diameter (mm) of chain-wheel, gear, pulley, etc.

$K_r = 1$ Chain-wheel

$K_r = 1.25$ Gear

$K_r = 1.5-2.5$ V-belt pulley

Depending on the application point as shown in table (T5), the following cases are possible:

a) load F_{rc1-2} applied on shaft mid-point' as indicated in table (T5).

This value can be directly com-

pared with table data by observing condition

$$F_{rc1-2} \leq Fr_{1-2}$$

b) load applied at distance x from shaft shoulder as shown in table (T6).

Conversion to the new permitted radial load value Fr_{1-2} is obtained from the following equation:

$$Fr_{x1-2} = Fr_{1-2} \cdot \frac{a}{b+x}$$

Fr_{1-2} = Permitted radial load on shaft mid-point [N] (shaft loading charts)

a = gearbox constant

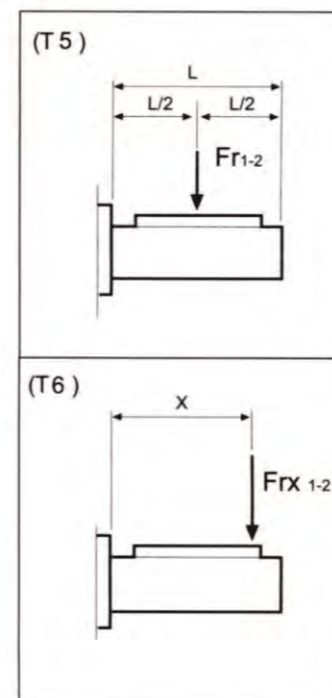
b = gearbox constant

x = Distance of load from shaft shoulder (mm)

(constant values a, b, c are shown in table (T7)).

The following condition must be checked in this case too:

$$F_{rc1-2} \leq Fr_{x1-2}$$



(T7)

型号Type VF- VF/VF	变速常数 Gearbox constants		Fr_2 max [N]
	输出轴 Output shaft		
	a	b	
27	56	44	600
30	60	45	1700
44	71	51	2500
49	99	69	3450
63	132	102	4700
72	139	109	5750
86	147	117	7000
110	171	134	8000
130	182	142	13800
150	198	155	16000

* RV可以参考VF机型相同型号或咨询我公司技术部。
RV Series Coefficient, Consult VF Series or Consult our Technical-Commercial service.

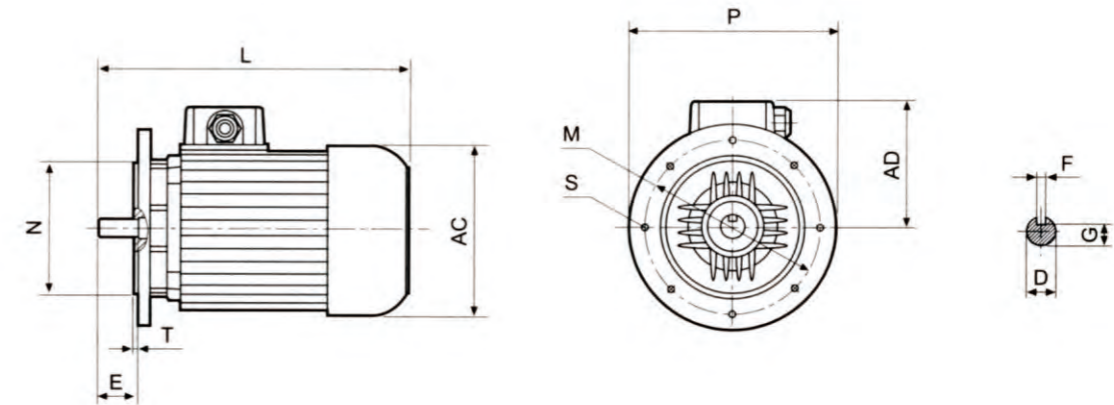
故障原因及解决办法 Solution and reason for the general faults of variator

故障类型 Fault description	故障原因Reasons	解决办法Solutions
过热 Overheating	原动机、减速机、工作机连接不当 超负荷运转 油封过度磨擦 润滑油过少或过多 润滑油杂质多或润滑性差 选型不当 The prime mover, reducer and working machine conjunctions appropriate. Overloading. Oil seal damaged. Lubricant over little or excessive. Lubricant impurity many or the lubricity bad. Choose model not appropriate.	调整至适当位置, 使三者相联轴线同轴 适当调整负荷 在油封唇口处滴润滑油 按油标指示点调整油量 清洗油池, 更换合适新油 更换机型 Adjust appropriate of position, make three conjunction stalk line to keep the same axis. To appropriate adjust loading. In the oil seal lips drop lubricant. Press oil mark to instruction the point adjust oil deal. Wash the inner part clearly, change to fit new oil. Replace model.
振动 Vibration	原动机、减速机、工作机固定不良 蜗轮副齿部磨损或损伤 轴承磨损 螺栓松动 The prime mover *reducer and working machine fix bad. Worm wheel pair the surface of gers wears or hurt. Bearing damaged. Bolt loose.	查出固定不良部位, 正确固紧 更换蜗轮副(需要时本公司配合) 更换轴承 固紧螺栓 Look up to fix the bad part, right tighten. Replace worm wheel pair(Please contact with our company). Replace bearing. Tighten the bolts.
杂音 Noise	轴承损伤或间隙过大 蜗轮副啮合不良 润滑油不足 机体内有异物 Bearing damaged or clearance too large. Worm wheel pair meshed with badly. Lubricant lack. The machine body have eyewinker.	更换轴承 修整齿面或更换蜗轮副(请与本公司联系) 按油标指示点补加润滑油 倒净润滑油带出异物, 重加清洁润滑油 Replace bearing. Finish the surface of gears or replace worm wheel pair(Please contact with our company.) Press oil mark to instruction the point repair to add the lubricant. Remove the lubricant to take out eyewinker, replace to add the clean lubricant.
漏油 Oil leakage	油封唇口磨损 油封档轴颈磨损 油量过多 放油螺塞未旋紧 油标破损 Oil seal lips wear and tear. Oil seal file stalk wear and tear. Oil mcasures excessive. Oil screw loosed. Oil gauge damaged.	更换油封 更换输出轴或输入轴 按油标指示点调整油量 螺纹处加密密封胶, 旋紧螺塞 更换油标 Replace oil seal. Replace output shaft or input shaft(Pliase conneet our compy) Press oil mark to instruction the point adjust oil denl. Screw thread position adds to seal completely the gum, tighten screw. Replace Oil gauge.
蜗轮副齿面 磨损过快 Worm wheel pair the surface of gears wears away quick	超负荷运转 润滑油不符合要求 润滑油不足 未按规定适时换油, 润滑油劣化 运转温度过高 Overloading. Lubricant not accord with the request. Lubricant lack. Have noby rule appropriate of the time change the oil, lubricant depranation. Overheating.	调整至适当负荷 更换合适的润滑油 按油标指示点加足润滑油 按规定要求适时换油 1. 按“过热”故障处理 2. 采取合适措施, 降低环境温度 Adjust the appropriate loading. Replace the appropriate lubricant. Press oiling the mark to instruction point to add the foot lubricant. By rule the request in the time changes the oils. 1. Press "over hot" to break down to handle. 2. Adopt the fit measure, and lower the environment temprerature.

注: 如果发生其他故障无法解决时, 请随时与我们联系, 以便提供咨询服务。
 Note: If occurrence other the breakdown can't solue, please at any time with we contact, for the purpose of offering consnct the service.

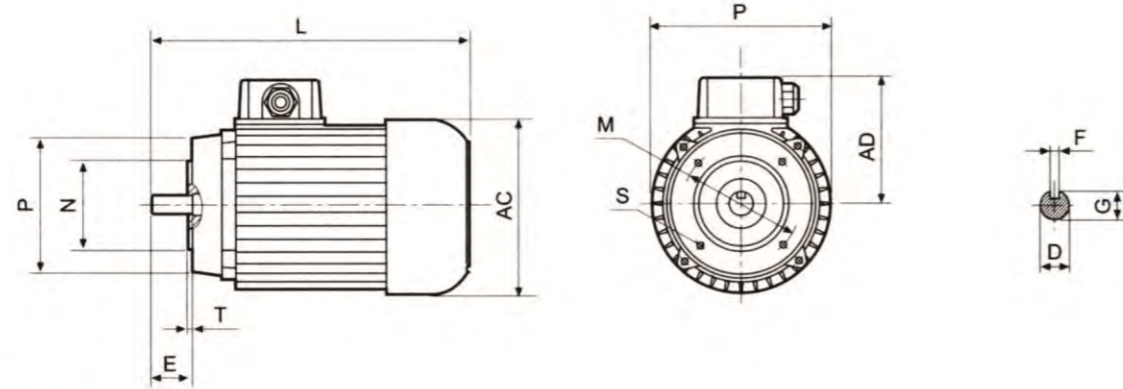
电动机型号参数表 Motor coefficient tables

注: 4级三相异步电动机同步转速1500r/min. 380V. 50HZ
 6级三相异步电动机同步转速1000r/min. 380V. 50HZ
 56~132 机座为铝合金外壳; 160机座为铸铁外壳。
 Note: 4P 3-Phase driving induction motor rotation synchronization speed is 1500rmin.380V.50HZ.
 6P 3-Phase driving induction motor rotation synchronization speed is 1000rmin.380V.50HZ.
 56~132 are aluminum alloy boxes; 160 are cast iron boxes.



B5 型机座安装型式 B5 Mounting position

机座号 Frame size	4级 4P	6级 6P	外型尺寸 Forfilomtry			安装尺寸 Mounted size					轴伸尺寸 Shaft Extension				重量 kg
	KW	KW	AC	AD	L	P	N	T	M	S	E	F	D	G	
56	0.06	-	108	83	204	∅120	∅80	3	∅100	4x∅7	20	3	9	7.2	2.2
	0.09														
63	0.12	-	121	88	211	∅140	∅95	3	∅115	4x∅9	23	4	11	8.5	6.7
	0.18														
71	0.25	0.18	138	93	247	∅160	∅110	3.5	∅130	4x∅10	30	5	14	11	7.5
	0.37	0.25													
80	0.55	0.37	154	108	270	∅200	∅130	3.5	∅165	4x∅10	40	6	19	15.5	18
	0.75	0.55													
90S	1.1	0.75	174	116	312	∅200	∅130	3.5	∅165	4x∅10	50	8	24	20	22
	90L	1.5	1.1	174	116	339	∅200	∅130	3.5	∅165	4x∅10	50	8	24	
100	2.2	1.5	184	137	379	∅250	∅180	4	∅215	4x∅15	60	8	28	24	38
	3														
112	4	2.2	207	143	395	∅250	∅180	4	∅215	4x∅15	60	8	28	24	49
132S	5.5	3	244	165	505	∅300	∅230	4	∅265	4x∅15	80	10	38	33	67
132M	7.5	4	244	165	505	∅300	∅230	4	∅265	4x∅15	80	10	38	33	80
		5.5													
160M	11	7.5	325	255	600	∅350	∅250	5	∅300	4x∅19	110	12	42	37	126
160L	15	11			645										139



B14 型机座安装型式 B14 Mounting position

机座号 Frame size	4级 4P	6级 6P	外型尺寸 Forfilomtry			安装尺寸 Mounted size					轴伸尺寸 Shaft Extension				重量 kg
	KW	KW	AC	AD	L	P	N	T	M	S	E	F	D	G	
56	0.06	-	108	83	204	∅82	∅50	2.5	∅65	M5	20	3	9	7.2	4.6
	0.09														
63	0.12	-	121	88	211	∅90	∅60	2.5	∅75	M5	23	4	11	8.5	6.1
	0.18														
	0.25														
71	0.25	0.18	138	93	247	∅107	∅70	3	∅85	M6	30	5	14	11	8.8
	0.37	0.25													
	0.55														
80	0.55	0.37	154	108	270	∅124	∅80	3	∅100	M6	40	6	19	15.5	14.6
	0.75	0.55													
	1.1														
90S	1.1	0.75	174	116	312	∅145	∅95	3.5	∅115	M8	50	8	24	20	16.7
90L	1.5	1.1	174	116	339	∅152	∅95	3.5	∅115	M8	50	8	24	20	19.1
100	2.2	1.5	184	137	379	∅160	∅110	3.5	∅130	M8	60	8	28	24	26
	3														
112	4	2.2	207	143	395	∅160	∅110	3.5	∅130	M8	60	8	28	24	38

常用电动机类型代号 The motor in common use as follow

Y三相异步电动机
YEJ电磁制动三相异步电动机
YVF变频调速三相异步电动机
YB隔爆型三相异步电动机
YPEJ变频制动三相异步电动机

Y 3-phase driving induction motor
YEJ electromagnetic braking 3-phase driving induction motor
YVF frequency control 3-phase driving induction motor
YB explosion-proo 3-phase driving induction induction motor
YPEJ frequency braking 3-phase driving induction motor

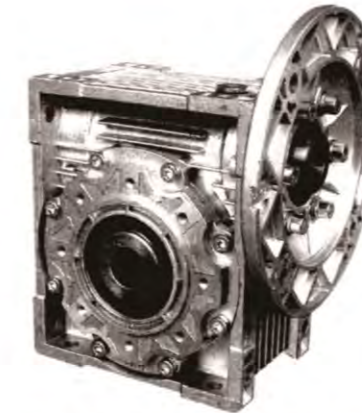
用户需要配单相电机或其他专用电机马达，请提供相关参数或向我司技术部咨询；

If you want to use single phase asynchronous motor or other special motor, please give us the parameter or consult our technical department.

可与“强珠”牌JWB-X无级变速机和R17-R107减速机系列组合使用。

The K, S, R, F series helical gears can be compounded with JWB-X stepless gear and R17-R107 series helical gears.

RV Series Catalog **RV 目录**



RV系列蜗轮蜗杆减速机
RV series worm gear speed reducers

型号 / Type Size of Unit: **RV025~150**
PC063~090+RV..
RVE025/030~090/130
输出转速 / Output Speed: **0.28~280r/min**
输出扭矩 / Output Torque: **2.7~1800N.m**
输入功率 / Motor Power: **0.06~15kW**

RV series worm gear speed reducers	RV系列蜗轮蜗杆减速机
Product structure	012 产品结构
Code for type	012 型号表示式
Demonstration	013 示例
RV series mounting positions	014 RV安装型式
PC+RV series mounting positions	014 PC+RV安装型式
RVE series mounting positions	015 RVE安装型式
Mounting positions of output flange	015 输出法兰安装型式
Positions of Motor junction box	015 电机接线位置
Table 8: Lubrication oil Chosen	015 表8: 润滑油选用表
Table 9: Adding Capacity of lubrication Oil	015 表9: 润滑油注油量(L)
PC+RVCombinations	016 PC+RV组合方式
Design features (PC)	017 PC性能特点
Coupling to electric motor	017 PC与电机连接
Output cover	018 出力盖
Torsion arm	018 扭力臂
PC+RV Dimensions/RVE Dimensions	018 PC+RV安装尺寸/RVE安装尺寸
RV Coefficient tables	019 RV参数表
RV Gearbox dimensions	043 RV安装尺寸图

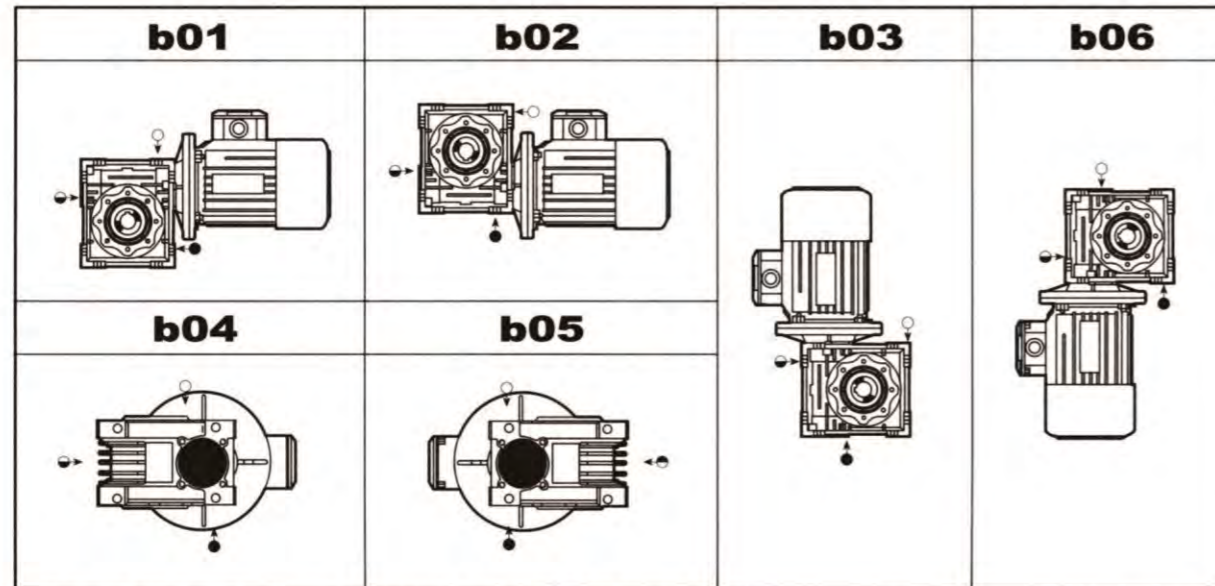
功率参数表 Power Coefficient tables

电机额定功率 [kW] (Motor rated power)	0.06	0.09	0.12	0.18	0.25	0.37	0.55	0.75	1.1
页码 (Page)	019~020	020~021	021~022	023~024	024~026	026~028	028~030	030~032	032~033
电机额定功率 [kW] (Motor rated power)	1.5	2.2	3.0	4.0	5.5	7.5	11.0	15.0	
页码 (Page)	034~035	035~036	036	037	037	038	038	038	

RV..安装尺寸图 RV.. Gearbox dimensions

减速机型号 (Type Size of Unit)	RV025	RV030	RV040	RV050	RV063	RV075	RV090	RV110	RV130	RV150	PC+RV	RVE
页码 (Page)	043	044	045	046	047	048	049	050	051	052	018	018

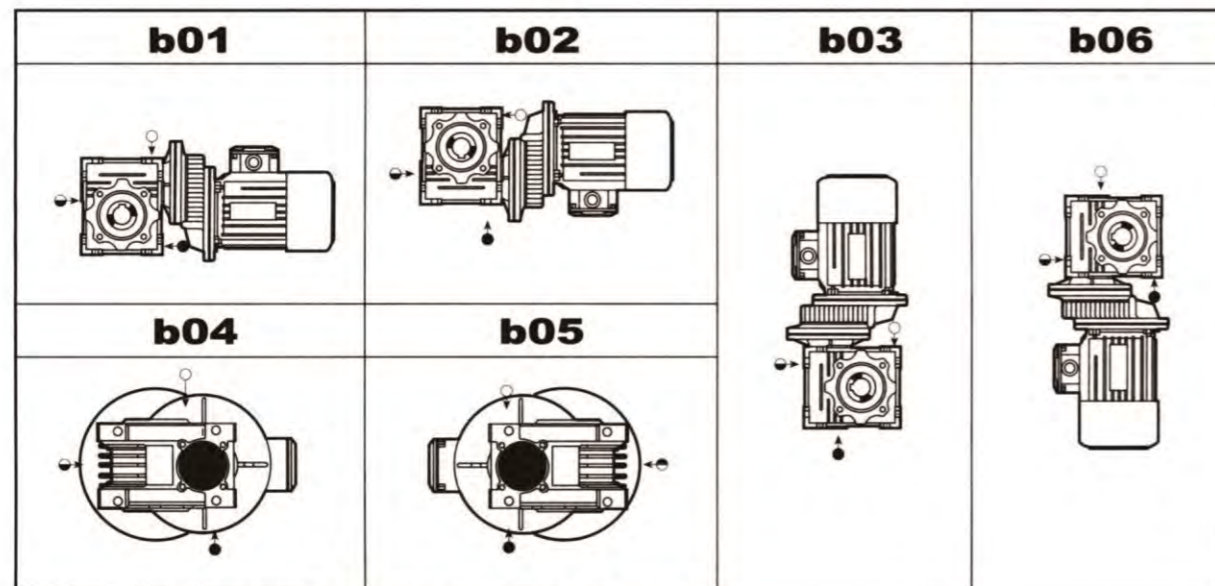
RV 安装形式 RV series mounting positions



○ 加油孔 ◐ 油面计 ● 排油栓 ○ Oil inlet ◐ Oil gage ● Oil drainage plug

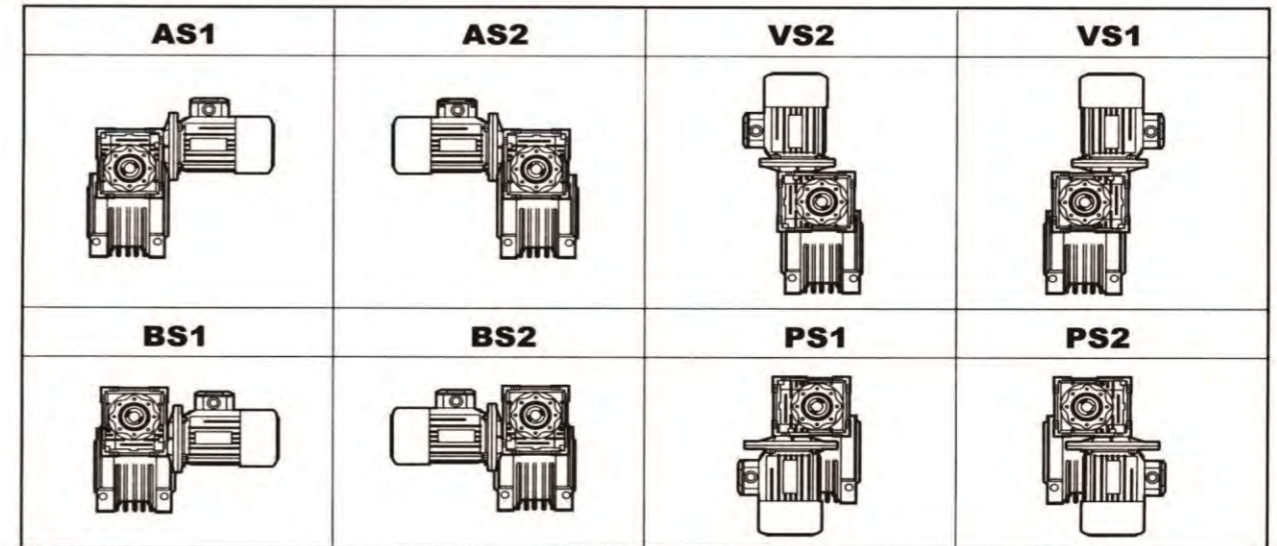
★ 只有型号RV110\RV130\RV150减速机出厂时才配有加油孔、油镜孔和排油孔；其他型号减速机出厂时已按b01安装方式的顶部配置一个油塞孔，以便有需要时更换透气塞。如需要在其他位置安装透气塞，请在购买前提前告知。

PC+RV 安装形式 PC+RV series mounting positions



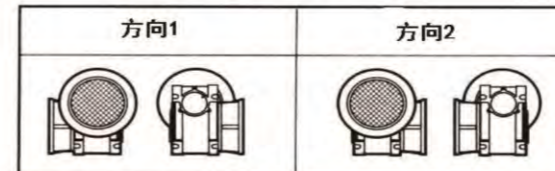
○ 加油孔 ◐ 油面计 ● 排油栓 ○ Oil inlet ◐ Oil gage ● Oil drainage plug

RVE 安装形式 RVE series mounting positions



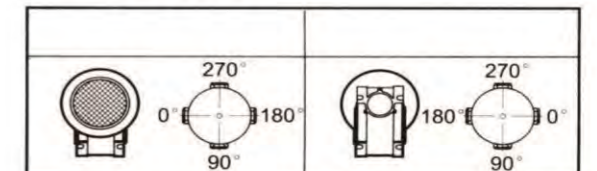
★ RVE加油孔、油面计、排油栓位置请参照RV。 Please refer to left diagram for the oil inlet position of RVE.
★ PS1和PS2联体箱初级端只允许采用B14法兰与电机连接。 For the SP1/SP2 class gear-box configuration, be obtained only by using B14 flange and motor conjunction.
★ 第一级与第二减速机按上图方式组合，如订货时没有特注明，将按照BS1组合方式供货。第二级减速机的实际的安装方式，参照RV安装方式。
The position of the 1st reducer with respect to the 2nd gear reducer on the version. Unless otherwise specified at the time of the order, combination groups are supplied in version BS1. The specified mounting position refers to the 2nd gear reducer. Refer for RV series mounting positions.

输出配件安装型式 Installation direction



★ 如对电机接线盒位置有特别要求，在下单时按图示注明方位。
In the case of specific requirements, when ordering, specify the position of the terminal box as show in the diagram.

电机接线位置 Positions of Motor junction box



注油量 Oil quantity

表8: 润滑油选用表 Table 8: Lubrication oil Chosen

减速机规格 Reducer size	RV030-090		RV110-150	
	合成润滑油 Complex lubrication Oil	矿物润滑油 Mineral lubrication Oil	矿物润滑油 Mineral lubrication Oil	矿物润滑油 Mineral lubrication Oil
环境温度℃ Ambient temperature	-25~+50	-5~+40	-5~+40	-15~+25
ISO VG	ISO VG 320	ISO VG460	ISO VG460	ISO VG 220
AGIP	TELIUM VST320	BLASIA460	BLASIA460	BLASIA 220
SHELL	TIVELA OIL SC320	OMALA OIL460	OMALA OIL460	OMALA OIL220
ESSO	S220	SPARTAN EP460	SPARTAN EP460	SPARTAN EP220
MOBIL	GLYGOYLE30	MOBIL GEAR634	MOBIL GEAR634	MOBILGEAR630
CASTROL	ALPHASYN PG320	ALPHA MAX460	ALPHA MAX460	ALPHA MAX 220
BP	ENERGOL SG-XP320	EMERGOL GR-XP460	EMERGOL GR-XP460	EMERGOL GR-XP220

表9: 润滑油注油量(L) Table 9: Adding Capacity of Lubrication Oil (L)

安装型式 Mounting pos.	规格 Size	RV025	RV030	RV040	RV050	RV063	RV075	RV090	RV110	RV130	RV150	RV250
b01	b01	0.02	0.03	0.08	0.15	0.3	0.55	1	2.2	3.0	7.0	13.5
									2.2	3.0	5.1	-
b04(05)	b04(05)	0.02	0.03	0.08	0.15	0.3	0.55	1	2.0	2.5	5.4	-
									2.4	3.5	7.0	-

★ 减速机RV025-030-040-050-063-075-090-105铝合金箱体，出厂时均已加注合成润滑油，安装方式可参照样本相关页中所示方位。
减速机RV110-130-150均提供了矿物润滑油。
减速机型号RV110-130-150时，必须预先在订货时说明安装位置。否则出厂时只会安装B01位置去提供相应数量的润滑油。
仅型号RV110-130-150的减速机配备排气装置、油镜和排油塞。在安装完毕后，必须拿掉油塞及装上排气装置。

PC+RV 组合 PC+RV Combinations

RV	i	PC 063		PC 071		PC 080			PC 090		
		105 / 11 i = 3	105 / 14 i = 3	120 / 14 i = 3	120 / 19 i = 3	160 / 19 i = 3	160 / 24 i = 3	160 / 28 i = 3	160 / 19 i = 2,42	160 / 24 i = 2,42	160 / 28 i = 2,42
040	25										
	30										
	40										
	50										
	60										
	80										
050	100										
	25										
	30										
	40										
	50										
	60										
063	80										
	100										
	25										
	30										
	40										
	50										
075	60										
	80										
	100										
	25										
	30										
	40										
090	50										
	60										
	80										
	100										
	25										
	30										
110	40										
	50										
	60										
	80										
	100										
	25										
130	30										
	40										
	50										
	60										
	80										
	100										

PC 的设计特点

PC 结构是一种标准组件(模块)的产品, 因此它可与任何配有电机法兰的减速机组合使用, 组合使用时, 各种不同的法兰/输出轴可以参见第050至056页。
前置减速装置主要适用于安装方式为B14的所有马达。
该装置不能单独使用, 只能与减速机配套使用。

Design features(PC)

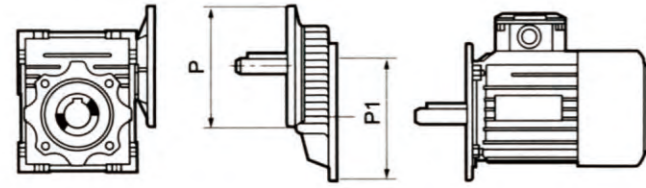
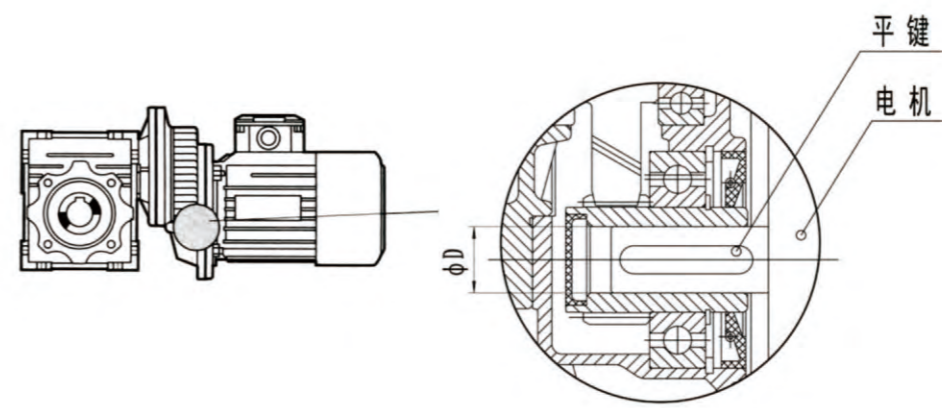
The PC construction is modular and therefore it can be supplied as a separate unit to be mounted on any type of fitted geared motor (PAM). In this connection, the various possibilities of flange/output shafts can be found on page 050 to 056.
Fitting the pre-stage helical module on the main reduction unit is easily done as for any motor of type B14.
The pre-stage unit cannot be used by itself, but only coupled with another reduction unit.

与电机连接

PC模块与电机的配合采用孔轴式连接, 使用人员无需专用工装即可容易的进行装配操作:
1、清洁电机轴头、PC模块的 ϕD 孔;
2、在PC模块 ϕD 孔内表面涂上润滑油;
3、将配键的电机轴头插入PC模块的 ϕD 孔;
4、锁紧电机与PC模块连接的4个螺栓;

Coupling to electric motor

PC unit connects with motor by hole-shaft design, easy mounting but not request special tool:
1.Cleaning motor shaft, ϕD hole of PC unit
2.Coated with lubricating oil in the ϕD hole of PC unit
3.Connecting motor shaft which with key to the ϕD hole of PC unit
4.Locking 4 screw bolts that connect motor with PC unit

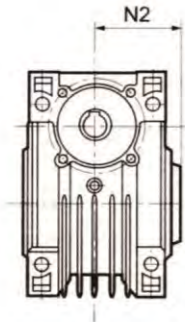


	P1	P
PC 063	63B5-140/11	105/11 (105/14)
PC 071	71B5-160/14	120/14 (120/19)
PC 080	80B5-200/19	160/19 (160/24) (160/28)
PC 090	90B5-200/24	160/24 (160/19) (160/28)

(..) 非标产品
(..) Only on request

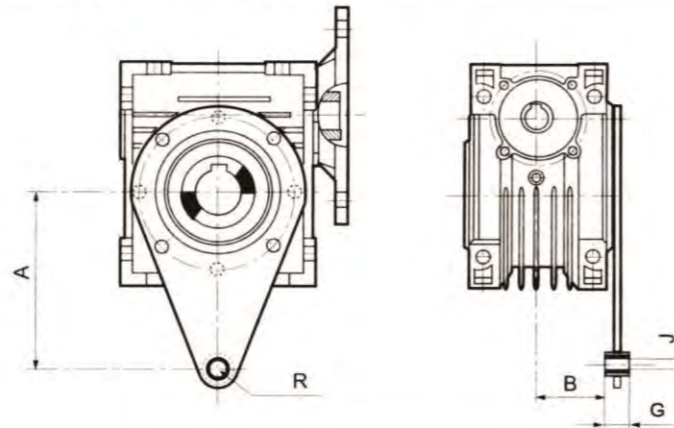


出力盖 Output cover



减速机型号 Worm geared Type	N2
RV025	42
RV030	50
RV040	58
RV050	69
RV063	74
RV075	86
RV090	94
RV110	94
RV130	102
RV150	113

扭力臂 Torsion arm

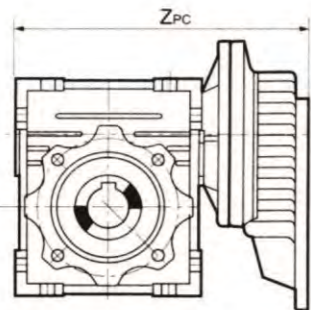


型号Type	A	B	G	J	R
RV025	70	17.5	14	8	15
RV030	85	24	14	8	15
RV040	100	32.5	14	10	18
RV050	100	39	14	10	18
RV063	150	49	14	10	18
RV075	200	48	25	20	30
RV090	200	59.5	25	20	30
RV110	250	64.5	30	25	35
RV130	250	77	30	25	35
RV150	250	86	30	25	35

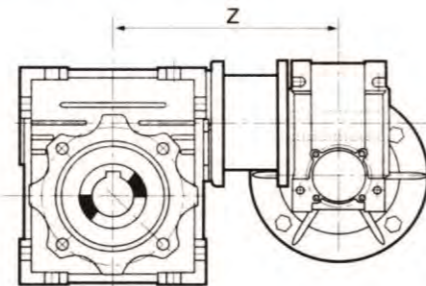
PC+RV安装尺寸/RVE安装尺寸 PC.+RV Dimensions/RVE Dimensions

- 关于输出法兰的尺寸，请参考RV有关图纸；
- 所有空心轴输出的尺寸，请参考RV的相关图纸；
- 所有双出轴、蜗杆的尺寸，请参考RV的相关图纸。

- For the dimensions of the output flanges, please consider the drawing of relevant RV size.
- For the dimensions of the hollow shafts in option, please consider the drawing of relevant RV size.
- For the dimensions of the double extension worm shafts, please consider the drawing of relevant RV size.



PC+RV型号 PC+RV Type	Z _{PC}	PC+RV型号 PC+RV Type	Z _{PC}
PC063+RV040	168	PC080+RV110	361.5
PC063+RV050	188	PC080+RV130	401.5
PC063+RV063	217		
		PC090+RV110	361.5
PC071+RV050	194.5	PC090+RV130	401.5
PC071+RV063	223.5		
PC071+RV075	253.5		
PC071+RV090	287.5		
PC080+RV075	270.5		
PC080+RV090	304.5		








RVE型号 RVE Type	Z	RVE型号 RVE Type	Z	RVE型号 RVE Type	Z
RVE025/030	100	RVE040/075	164.5	RVE063/110	254
RVE025/040	115	RVE040/090	180.5	RVE063/130	274
				RVE063/150	321
RVE030/030	110	RVE050/050	149.5		
RVE030/040	122.5	RVE050/063	164	RVE075/090	216
RVE030/050	131	RVE050/075	179	RVE075/110	249
RVE030/063	145.5	RVE050/090	195	RVE075/130	269
		RVE050/110	232		
RVE040/040	127.5			RVE090/110	253
RVE040/050	137.5	RVE063/075	185	RVE090/130	273
RVE040/063	150.5	RVE063/090	201		

功率参数表 Power coefficient tables

0.06 kW

n2 r/min	M2 N-m	s.f	i	Fr2 N	IEC	IEC	IEC	IEC	
186.7	2.6	4.2	7.5	503	RV025			P5614	043
140.0	3.4	3.5	10	553					
93.3	4.9	2.5	15	633					
70.0	6.1	2.0	20	697					
46.7	8.2	1.6	30	798					
35.0	10	1.3	40	878					
28.0	12	0.9	50	946					
23.3	14	0.7	60	1006					
280.0	1.8	10.1	5	597	RV030			P5614	044
186.7	2.6	6.9	7.5	683					
140.0	3.4	5.4	10	752					
93.3	4.7	3.8	15	861					
70.0	6.0	3.0	20	948					
56.0	7.0	3.0	25	1021					
46.7	8.0	2.5	30	1085					
35.0	9.7	1.9	40	1194					
28.0	11	1.5	50	1286					
23.3	13	1.3	60	1367					
17.5	14	0.9	80	1504					
14.0	25	1.3	100	1620			RVE025/030	P5614	018
9.3	32	0.9	150	1830					
7.0	41	0.7	200	1830					
5.6	44	0.8	250	1830					
4.7	59	1.2	300	3490			RVE025/040	P5614	018
3.5	71	0.9	400	3490					
2.8	82	0.7	500	3490					
2.3	101	0.6	600	3490					
1.9	116	0.5	750	3490					
1.6	143	0.5	900	3490					
1.2	171	0.4	1200	3490					
0.9	197	0.3	1500	3490					
0.8	217	0.3	1800	3490					
0.6	268	0.2	2400	3490					
0.5	324	0.2	3000	3490					
0.4	294	0.1	4000	3490					
0.3	356	0.1	5000	3490					
4.7	57	1.3	300	3490			RVE030/040	P5614	018
3.5	70	0.9	400	3490					
2.8	96	0.6	500	3490					
2.3	104	0.7	600	3490					
1.9	121	0.6	750	3490					
1.6	139	0.5	900	3490					
1.2	166	0.4	1200	3490					
0.9	196	0.4	1500	3490					
0.8	218	0.3	1800	3490					
0.58	261	0.2	2400	3490					
0.4	300	0.2	3200	3490					
0.4	279	0.1	4000	3490					
0.28	338	0.1	5000	3490					






0.06 kW

n2 r/min	M2 N·m	s.f	i	Fr2 N					
1.6	141	1.0	900	4840			RVE030/050	P5614	018
1.2	169	0.7	1200	4840					
0.93	199	0.7	1500	4840					
0.78	222	0.7	1800	4840					
0.6	266	0.5	2400	4840					
0.5	307	0.4	3000	4840					
0.35	288	0.3	4000	4840					
0.29	311	0.3	4800	4840					
0.9	204	1.1	1500	6270			RVE030/063	P5614	018
0.78	225	0.9	1800	6270					
0.58	276	0.8	2400	6270					
0.47	319	0.7	3000	6270					
0.35	306	0.6	4000	6270					
0.28	360	0.4	5000	6270					
0.9	204	1.1	1500	6270			RVE040/063	P5614	018
0.78	225	0.9	1800	6270					
0.58	276	0.8	2400	6270					
0.47	319	0.7	3000	6270					
0.35	306	0.6	4000	6270					
0.28	360	0.4	5000	6270					
0.6	330	1.1	2400	7380			RVE040/075	P5614	018
0.47	377	0.8	3000	7380					
0.35	355	0.7	4000	7380					
0.28	419	0.5	5000	7380					
0.5	406	1.4	3000	8180			RVE040/090	P5614	018
0.35	365	1.3	4000	8180					
0.28	431	1.0	5000	8180					

0.09 kW

186.7	3.9	2.8	7.5	503	RV025			P5624	043
140.0	5.1	2.4	10	553					
93.3	7.3	1.6	15	633					
70.0	9.2	1.3	20	697					
46.7	12	1.1	30	798					
35.0	15	0.9	40	878					
280.0	2.7	6.7	5	597	RV030			P5624	044
186.7	3.9	4.6	7.5	683					
140.0	5.0	3.6	10	752					
93.3	7.1	2.5	15	861					
70.0	9.0	2.0	20	948					
56.0	10	2.0	25	1021					
46.7	12	1.7	30	1085					
35.0	14	1.2	40	1194					
28.0	17	1.0	50	1286					
23.3	19	0.9	60	1367					

0.09 kW

n2 r/min	M2 N·m	s.f	i	Fr2 N					
14.0	38	0.8	100	1620			RVE025/030	P5624	018
9.3	49	0.6	150	1830					
7.0	62	0.5	200	1830					
5.6	66	0.5	250	1830					
4.7	75	0.4	300	1830					
3.5	107	0.3	400	1830					
2.8	115	0.3	500	1830					
2.3	135	0.2	600	1830					
1.9	151	0.2	750	1830					
1.6	178	0.2	900	1830					
1.2	212	0.1	1200	1830					
0.9	247	0.1	1500	1830					
0.78	304	0.1	1800	1830					
0.58	340	0.1	2400	1830					
0.47	405	0.1	3000	1830					
4.7	88	0.8	300	3490			RVE030/040	P5624	018
28.0	19	2.0	50	2475	RV040			P5624	045
23.3	21	1.7	60	2630					
17.5	26	1.3	80	2895					
14.0	29	1.0	100	3118					
3.5	107	1.2	400	4840			RVE030/050	P5624	018
2.8	123	1.0	500	4840					
2.3	159	0.9	600	4840					
1.9	185	0.8	750	4840					
1.6	212	0.7	900	4840					
1.6	200	1.0	900	6270			RVE030/063	P5624	018
1.2	263	0.9	1200	6270					
0.93	305	0.7	1500	6270					
1.6	200	1.0	900	6270			RVE040/063	P5624	018
1.2	263	0.9	1200	6270					
0.93	305	0.7	1500	6270					
0.9	360	1.1	1500	7380			RVE040/075	P5624	018
0.78	404	1.0	1800	7380					
0.58	496	0.7	2400	7380					
0.5	609	0.9	3000	8180			RVE040/090	P5624	018
0.35	548	0.8	4000	8180					

0.12 kW

280.0	3.6	5.1	5	597	RV030			P6314	044
186.7	5.2	3.4	7.5	683					
140.0	6.7	2.7	10	752					
93.3	9.5	1.9	15	861					
70.0	12	1.5	20	948					
56.0	14	1.5	25	1021					
46.7	16	1.3	30	1085					
35.0	19	0.9	40	1194					
28.0	23	0.8	50	1286					



0.12 kW

n2 r/min	M2 N·m	s.f	i	Fr2 N							
46.7	17	2.6	30	2087	RV040					P6314	045
35.0	21	1.9	40	2298							
28.0	25	1.5	50	2475							
23.3	28	1.3	60	2630							
17.5	34	1.0	80	2895							
14.0	38	0.8	100	3118							
18.7	42	1.2	75	2833	PC063+RV040					P6314	018
15.6	46	1.2	90	3011							
11.7	57	0.9	120	3314							
9.3	66	0.7	150	3490							
7.8	74	0.6	180	3490							
23.3	29	2.3	60	3610	RV050					P6314	046
17.5	35	1.9	80	3973							
14.0	40	1.4	100	4280							
9.3	68	1.3	150	4840	PC063+RV050					P6314	018
7.8	75	1.1	180	4840							
5.8	88	0.8	240	4840							
4.7	98	0.7	300	4840							
4.7	119	1.2	300	4840	RVE030/050					P6314	018
3.5	142	0.9	400	4840							
2.8	164	0.7	500	4840							
5.8	92	1.5	240	6270	PC063+RV063					P6314	018
4.7	103	1.2	300	6270							
6.0	101	2.1	150	6270	PC063+RV063					P6326	018
5.0	112	1.8	180	6270							
3.8	131	1.3	240	6270							
3.0	145	1.0	300	6270							
2.8	171	1.3	500	6270	RVE030/063					P6314	018
2.3	208	1.1	600	6270							
2.8	171	1.3	500	6270	RVE040/063					P6314	018
2.3	208	1.1	600	6270							
1.9	241	0.9	750	6270							
1.6	325	1.2	900	7380	RVE040/075					P6314	018
1.2	399	0.9	1200	7380							
0.8	547	0.9	1800	8180	RVE040/090					P6314	018
0.58	695	0.9	2400	8180							
0.5	884	1.2	3000	10320	RVE050/110					P6314	018
0.35	784	1.0	4000	10320							
0.28	928	0.80	5000	10320							

0.18 kW






n2 r/min	M2 N·m	s.f	i	Fr2 N								
280.0	5.3	3.4	5	597	RV030						P6324	044
186.7	7.8	2.3	7.5	683								
140.0	10	1.8	10	752								
93.3	14	1.3	15	861								
56.0	21	1.0	25	1021								
46.7	24	0.8	30	1085								
70.0	19	2.0	20	1824	RV040						P6324	045
56.0	23	1.7	25	1964								
46.7	26	1.7	30	2087								
35.0	32	1.3	40	2298								
28.0	38	1.0	50	2475								
23.3	43	0.8	60	2630								
45.0	29	1.5	20	2113	RV040						P7116	045
36.0	34	1.3	25	2276								
30.0	38	1.3	30	2419								
22.5	47	1.0	40	2662								
18.7	64	0.8	75	2833	PC063+RV040						P6324	018
15.6	70	0.8	90	3011								
11.7	85	0.6	120	3314								
35.0	33	2.3	40	3153	RV050						P6324	046
28.0	39	1.9	50	3397								
23.3	43	1.6	60	3610								
17.5	52	1.2	80	3973								
14.0	60	0.9	100	4280								
18.0	56	1.4	50	3936	RV050						P7116	046
15.0	63	1.1	60	4183								
11.3	75	0.9	80	4604								
18.7	64	1.4	75	3889	PC063+RV050						P6324	018
15.6	71	1.5	90	4132								
11.7	87	1.1	120	4548								
9.3	101	0.9	150	4840								
7.8	113	0.7	180	4840								
5.8	133	0.6	240	4840								
12.0	95	1.2	75	4506	PC071+RV050						P7116	018
10.0	105	1.4	90	4788								
7.5	126	1.0	120	4840								
15.0	66	2.1	60	5467	RV063						P7116	047
11.3	79	1.6	80	6018								
9.0	90	1.4	100	6270								
9.3	103	1.7	150	6270	PC063+RV063						P6324	018
7.8	117	1.4	180	6270								
5.8	139	1.0	240	6270								
4.7	155	0.8	300	6270								













0.18 kW									
n2 r/min	M2 N·m	s.f	i	Fr2 N					
12.0	97	2.2	75	5889	PC071+RV063		P7116		018
10.0	107	2.4	90	6259					
7.5	131	1.8	120	6270					
6.0	152	1.4	150	6270					
5.0	168	1.2	180	6270					
3.8	197	0.9	240	6270					
3.0	218	0.7	300	6270					
3.5	222	1.0	400	6270	RVE030/063		P6324		018
2.8	257	0.8	500	6270					
3.5	222	1.0	400	6270	RVE040/063		P6324		018
2.8	257	0.8	500	6270					
5.0	179	1.7	180	7380	PC071+RVE075		P7116		018
3.8	211	1.2	240	7380					
3.0	235	1.0	300	7380					
2.3	362	1.1	600	7380	RVE040/075		P6324		018
1.9	435	0.9	750	7380					
1.6	487	0.8	900	7380					
1.2	629	1.0	1200	8180	RVE040/090		P6324		018
0.93	735	0.8	1500	8180					
0.8	861	1.5	1800	10320	RVE050/110		P6324		018
0.58	1113	1.1	2400	10320					

0.25 kW									
n2 r/min	M2 N·m	s.f	i	Fr2 N					
280.0	8	4.5	5	1149	RV040		P7114		045
186.7	11	3.6	7.5	1315					
140.0	14	2.8	10	1447					
93.3	21	1.9	15	1657					
70.0	27	1.5	20	1824					
56.0	32	1.2	25	1964					
46.7	36	1.3	30	2087					
35.0	44	0.9	40	2298					
180.0	12	3.5	5	1331	RV040		P7126		045
120.0	17	2.6	7.5	1524					
90.0	22	2.0	10	1677					
60.0	31	1.4	15	1920					
45.0	40	1.1	20	2113					
36.0	48	0.9	25	2276					
30.0	53	0.9	30	2419					
70.0	27	2.7	20	2503	RV050		P7114		046
56.0	32	2.2	25	2696					
46.7	37	2.3	30	2865					
35.0	46	1.7	40	3153					
28.0	54	1.4	50	3397					
23.3	60	1.1	60	3610					
17.5	72	0.9	80	3973					

0.25 kW									
n2 r/min	M2 N·m	s.f	i	Fr2 N					
45.0	40	1.9	20	2900	RV050		P7126		046
36.0	48	1.5	25	3124					
30.0	54	1.7	30	3320					
22.5	67	1.2	40	3654					
18.0	78	1.0	50	3936					
15.0	88	0.8	60	4183					
18.7	91	1.0	75	3889	PC071+RV050		P7114		018
15.6	98	1.1	90	4132					
11.7	121	0.8	120	4548					
28.0	56	2.4	50	4440	RV063		P7114		047
23.3	63	2.0	60	4719					
17.5	78	1.6	80	5193					
14.0	87	1.4	100	5595					
18.0	81	1.8	50	5145	RV063		P7126		047
15.0	92	1.5	60	5467					
11.3	110	1.2	80	6018					
9.0	125	1.0	100	6270					
18.7	91	1.8	75	5083	PC071+RV063		P7114		018
15.6	100	2.0	90	5401					
11.7	125	1.5	120	5945					
9.3	143	1.2	150	6270					
7.8	163	1.0	180	6270					
5.8	192	0.7	240	6270					
4.7	215	0.6	300	6270					
12.0	135	1.6	75	5889	PC071+RV063		P7126		018
10.0	148	1.8	90	6259					
7.5	181	1.3	120	6270					
6.0	211	1.0	150	6270					
17.5	82	2.3	80	6130	RV075		P7114		048
14.0	94	1.9	100	6603					
11.3	117	1.7	80	7103	RV075		P7126		048
9.0	133	1.4	100	7380					
9.3	151	1.7	150	7380	PC071+RV075		P7114		018
7.8	172	1.4	180	7380					
5.8	201	1.1	240	7380					
4.7	230	0.9	300	7380					
12.0	139	2.4	75	6952	PC071+RV075		P7126		018
10.0	155	2.5	90	7380					
7.5	191	1.9	120	7380					
6.0	219	1.5	150	7380					
5.0	248	1.2	180	7380					
3.5	336	1.1	400	7380	RVE040/075		P7114		018
2.8	384	0.8	500	7380					

0.25 kW									
n2 r/min	M2 N·m	s.f	i	Fr2 N					
5.0	263	1.9	180	8180	PC071+RV090			P 7126	018
3.8	318	1.4	240	8180					
3.0	358	1.1	300	8180					
2.3	512	1.2	600	8180	RVE040/090			P 7114	018
1.9	598	0.9	750	8180					
1.6	667	0.8	900	8180					
1.2	943	1.3	1200	10320	RVE050/110			P 7114	018
0.93	1064	1.2	1500	10320					
0.78	1195	1.1	1800	10320					
0.6	1624	1.0	2400	13500	RVE063/130			P 7114	018
0.47	1935	0.8	3000	13500					
0.35	2046	0.6	4000	13500					
0.28	2430	0.5	5000	13500					
0.8	1199	1.8	1800	18000	RVE063/150			P 7114	018
0.6	1446	1.8	2400	18000					
0.5	1713	1.4	3000	18000					
0.4	2026	0.9	4000	18000					
0.3	2251	0.7	5000	18000					

0.37 kW									
n2 r/min	M2 N·m	s.f	i	Fr2 N					
280.0	11	3.0	5	1149	RV040			P 7124	045
186.7	16	2.4	7.5	1315					
140.0	21	1.9	10	1447					
93.3	31	1.3	15	1657					
70.0	39	1.0	20	1824					
56.0	47	0.8	25	1964					
46.7	53	0.8	30	2087					
140.0	22	3.3	10	1987	RV050			P 7124	046
93.3	31	2.4	15	2274					
70.0	40	1.8	20	2503					
56.0	48	1.5	25	2696					
46.7	55	1.5	30	2865					
35.0	68	1.1	40	3153					
28.0	80	0.9	50	3397					
23.3	89	0.8	60	3610					
180.0	17	4.3	5	1827	RV050			P 8016	046
120.0	25	3.3	7.5	2091					
90.0	33	2.5	10	2302					
60.0	47	1.8	15	2635					
45.0	60	1.3	20	2900					
36.0	72	1.0	25	3124					
30.0	80	1.1	30	3320					

0.37 kW									
n2 r/min	M2 N·m	s.f	i	Fr2 N					
35.0	71	2.1	40	4122	RV063			P 7124	047
28.0	83	1.6	50	4440					
23.3	94	1.4	60	4719					
17.5	115	1.1	80	5193					
14.0	129	0.9	100	5595					
45.0	60	2.4	20	3791	RV063			P 8016	047
36.0	74	1.9	25	4084					
30.0	82	2.1	30	4339					
22.5	102	1.6	40	4776					
18.0	120	1.2	50	5145					
15.0	137	1.0	60	5467					
18.7	134	1.2	75	5083	PC071+RV063			P 7124	018
15.6	148	1.4	90	5401					
11.7	185	1.0	120	5945					
9.3	212	0.8	150	6270					
23.3	98	2.0	60	5569	RV075			P 7124	048
17.5	121	1.6	80	6130					
14.0	139	1.3	100	6603					
18.0	126	1.8	50	6073	RV075			P 8016	048
15.0	144	1.5	60	6453					
11.3	173	1.2	80	7103					
9.0	196	1.0	100	7380					
18.7	138	1.8	75	6000	PC071+RV075			P 7124	018
15.6	154	1.9	90	6375					
11.7	191	1.5	120	7017					
9.3	223	1.1	150	7380					
7.8	254	0.9	180	7380					
12.0	206	1.6	75	6952	PC080+RV075			P 8016	018
10.0	230	1.7	90	7380					
7.5	283	1.3	120	7380					
6.0	324	1.0	150	7380					
4.7	405	1.0	300	7380	RVE040/075			P 7124	018
3.5	498	0.7	400	7380					
11.3	185	1.7	80	7859	RV090			P 8016	049
9.0	212	1.3	100	8180					
7.8	268	1.5	180	8180	PC071+RV090			P 7124	018
5.8	321	1.1	240	8180					
4.7	371	0.9	300	8180					
6.0	347	1.6	150	8180	PC080+RV090			P 8016	018
5.0	389	1.3	180	8180					
3.8	471	1.0	240	8180					



0.37 kW

n2 r/min	M2 N·m	s.f	i	Fr2 N					
4.7	402	1.5	300	8180			RVE040/090	P 7124	018
3.5	523	1.2	400	8180					
2.8	611	0.9	500	8180					
2.3	757	0.8	600	8180					
3.8	509	1.6	240	10320			PC080+RV110	P 8016	018
3.0	577	1.3	300	10320					
1.9	950	1.3	750	10320			RVE050/110	P 7124	018
1.6	1079	1.2	900	10320					
1.2	1396	0.8	1200	10320					
0.9	1674	1.1	1500	13500			RVE063/130	P 7124	018
0.78	1887	0.9	1800	13500					
0.8	1775	1.2	1800	18000			RVE063/150	P 7124	018
0.6	2141	1.2	2400	18000					
0.5	2535	0.9	3000	18000					

0.55 kW

280.0	17	2.0	5	1149	RV040			P 7134	045
186.7	24	1.6	7.5	1315					
140.0	32	1.3	10	1447					
93.3	46	0.9	15	1657					
280.0	17	3.7	5	1577	RV050			P 8014	046
186.7	25	2.9	7.5	1805					
140.0	32	2.2	10	1987					
93.3	46	1.6	15	2274					
70.0	59	1.2	20	2503					
56.0	71	1.0	25	2696					
46.7	81	1.0	30	2865					
120.0	38	2.2	7.5	2091	RV050			P 8026	046
90.0	49	1.7	10	2302					
60.0	69	1.2	15	2635					
45.0	89	0.9	20	2900					
70.0	61	2.2	20	3272	RV063			P 8014	047
56.0	73	1.8	25	3524					
46.7	83	1.9	30	3745					
35.0	105	1.4	40	4122					
28.0	124	1.1	50	4440					
23.3	140	0.9	60	4719					
60.0	71	2.2	15	3444	RV063			P 8026	047
45.0	90	1.6	20	3791					
36.0	109	1.3	25	4084					
30.0	123	1.4	30	4339					
22.5	152	1.1	40	4776					
18.7	200	0.8	75	5083	PC071+RV063			P 7134	018
15.6	219	0.9	90	5401					

0.55 kW

n2 r/min	M2 N·m	s.f	i	Fr2 N					
35.0	108	2.0	40	4865	RV075				P 8014 048
28.0	129	1.6	50	5241					
23.3	146	1.4	60	5569					
17.5	180	1.1	80	6130					
14.0	206	0.9	100	6603					
30.0	128	2.0	30	5122	RV075				P 8026 048
22.5	159	1.5	40	5637					
18.0	187	1.2	50	6073					
15.0	214	1.0	60	6453					
18.7	205	1.2	75	6000			PC071+RV075		P 7134 018
15.6	230	1.3	90	6375					
11.7	284	1.0	120	7017					
18.7	205	1.2	75	6000			PC080+RV075		P 8014 018
15.6	230	1.3	90	6375					
11.7	284	1.0	120	7017					
9.3	332	0.8	150	7380					
12.0	306	1.1	75	6952			PC080+RV075		P 8026 018
10.0	341	1.1	90	7380					
17.5	189	1.5	80	6783	RV090				P 8014 049
14.0	221	1.2	100	7306					
18.0	198	2.0	50	6719	RV090				P 8026 049
15.0	224	1.6	60	7140					
11.3	275	1.1	80	7859					
9.0	315	0.9	100	8180					
15.6	240	2.3	90	7054			PC080+RV090		P 8014 018
11.7	297	1.6	120	7764					
9.3	355	1.3	150	8180					
7.8	398	1.0	180	8180					
10.0	357	2.0	90	8174			PC080+RV090		P 8026 018
7.5	441	1.4	120	8180					
6.0	516	1.1	150	8180					
5.0	578	0.9	180	8180					
17.5	201	2.6	80	8571	RV110				P 8014 050
14.0	236	2.0	100	9232					
11.3	294	1.9	80	9931	RV110				P 8016 050
9.0	338	1.5	100	10320					








0.55 kW									
n2 r/min	M2 N·m	s.f	i	Fr2 N					
7.8	425	1.8	180	10320	PC080+RV110		P8014		018
5.8	513	1.3	240	10320					
4.7	597	1.0	300	10320					
7.5	462	2.6	120	10320	PC080+RV110		P8026		018
6.0	552	2.0	150	10320					
5.0	620	1.6	180	10320					
3.8	756	1.1	240	10320					
4.7	639	2.0	300	10320			RVE050/110		P8014 018
3.5	826	1.4	400	10320					
2.8	984	1.1	500	10320					
2.3	1181	1.0	600	10320					
1.9	1411	0.9	750	10320					
3.8	756	1.6	240	13500	PC080+RV130		P8026		018
3.0	858	1.3	300	13500					
2.8	996	1.6	500	13500			RVE063/130		P8014 018
1.9	1471	1.2	750	13500					
1.2	2132	0.8	1200	13500					
0.8	2638	0.8	1800	18000			RVE063/150		P8014 018
0.6	3182	0.8	2400	18000					

0.75 kW								
280.0	23	2.7	5	1577	RV050	P8024		046
186.7	34	2.1	7.5	1805				
140.0	44	1.6	10	1987				
93.3	63	1.2	15	2274				
70.0	81	0.9	20	2503				
93.3	64	2.2	15	2973	RV063	P8024		047
70.0	83	1.6	20	3272				
56.0	100	1.3	25	3524				
46.7	114	1.4	30	3745				
35.0	143	1.0	40	4122				
120.0	52	2.9	7.5	2734	RV063	P90S6		047
90.0	68	2.3	10	3009				
60.0	97	1.6	15	3444				
45.0	123	1.2	20	3791				
36.0	149	0.9	25	4084				
30.0	167	1.0	30	4339				
56.0	102	2.0	25	4160	RV075	P8024		048
46.7	117	2.0	30	4421				
35.0	147	1.5	40	4865				
28.0	177	1.2	50	5241				
23.3	200	1.0	60	5569				

0.75 kW									
n2 r/min	M2 N·m	s.f	i	Fr2 N					
60.0	98	2.4	15	4065	RV075		P90S6		048
45.0	126	1.9	20	4474					
36.0	153	1.4	25	4820					
30.0	174	1.5	30	5122					
22.5	216	1.1	40	5637					
18.7	280	0.9	75	6000	PC080+RV075		P8024		018
15.6	313	1.0	90	6375					
28.0	184	1.8	50	5799	RV090		P8024		049
23.3	212	1.5	60	6163					
17.5	258	1.1	80	6783					
14.0	302	0.9	100	7306					
30.0	179	2.6	30	5667	RV090		P90S6		049
22.5	226	1.8	40	6238					
18.0	271	1.4	50	6719					
15.0	306	1.1	60	7140					
15.6	327	1.7	90	7054	PC080+RV090		P8024		018
11.7	405	1.2	120	7764					
9.3	483	0.9	150	8180					
7.8	543	0.7	180	8180					
17.5	274	1.9	80	8571	RV110		P8024		050
14.0	322	1.5	100	9232					
15.0	325	2.1	60	9023	RV110		P90S6		050
11.3	401	1.4	80	9931					
9.0	462	1.1	100	10320					
11.7	430	2.2	120	9811	PC080+RV110		P8024		018
9.3	506	1.7	150	10320					
7.8	580	1.3	180	10320					
5.8	700	0.9	240	10320					
12.4	393	3.2	73	9614	PC090+RV110		P90S6		018
9.3	508	2.3	96.8	10320					
7.4	607	1.8	121	10320					
6.2	682	1.5	145.2	10320					
4.6	832	1.0	193.6	10320					
4.7	871	1.5	300	10320			RVE050/110		P8024 018
3.5	1126	1.1	400	10320					
11.3	407	2.1	80	12989	RV130		P90S6		051
9.0	470	1.7	100	13500					
5.8	712	1.4	240	13500	PC080+RV130		P8024		018
4.7	813	1.1	300	13500					






0.75 kW







n2 r/min	M2 N·m	s.f	i	Fr2 N						
12.4	399	4.4	73	12575	PC090+RV130				P90S6	018
9.3	508	3.2	96.8	13500						
7.4	607	2.6	121	13500						
6.2	682	2.1	145.2	13500						
4.6	832	1.5	193.6	13500						
3.7	944	1.2	242	13500						
2.8	1358	1.1	500	13500	RVE063/130				P 8024	018
2.3	1631	1.0	600	13500						
1.9	2005	0.9	750	13500						
1.6	2283	0.8	900	13500						
2.8	1291	1.8	500	18000	RVE063/150				P 8024	018
2.3	1529	1.7	600	18000						
1.9	1783	1.3	750	18000						
1.6	2215	0.9	900	18000						
1.2	2680	1.0	1200	18000						







1.1 kW

120.0	76	2.0	7.5	2734	RV063				P90L6	047
90.0	99	1.5	10	3009						
60.0	142	1.1	15	3444						
45.0	180	0.8	20	3791						
186.7	50	2.6	7.5	2359	RV063				P90S4	047
140.0	65	2.0	10	2597						
93.3	93	1.5	15	2973						
70.0	122	1.1	20	3272						
56.0	146	0.9	25	3524						
46.7	167	1.0	30	3745						
90.0	100	2.3	10	3551	RV075				P90L6	048
60.0	144	1.6	15	4065						
45.0	184	1.3	20	4474						
36.0	225	1.0	25	4820						
30.0	256	1.0	30	5122						
93.3	96	2.1	15	3509	RV075				P90S4	048
70.0	123	1.7	20	3862						
56.0	150	1.3	25	4160						
46.7	171	1.3	30	4421						
35.0	216	1.0	40	4865						
36.0	231	1.6	25	5333	RV090				P90L6	049
30.0	263	1.8	30	5667						
22.5	331	1.2	40	6238						
18.0	397	1.0	50	6719						
15.0	448	0.8	60	7140						
35.0	225	1.6	40	5383	RV090				P90S4	049
28.0	270	1.3	50	5799						
23.3	311	1.0	60	6163						

1.1 kW

n2 r/min	M2 N·m	s.f	i	Fr2 N						
22.5	345	2.3	40	7882	RV110				P90L6	050
18.0	414	1.8	50	8491						
15.0	476	1.4	60	9023						
11.3	588	1.0	80	9931						
28.0	281	2.3	50	7328	RV110				P90S4	050
23.3	324	1.9	60	7787						
17.5	402	1.3	80	8571						
14.0	473	1.0	100	9232						
12.4	576	2.2	73	9614	PC090+RV110				P90L6	018
9.3	746	1.6	96.8	10320						
7.4	890	1.2	121	10320						
6.2	1000	1.0	145.2	10320						
19.3	392	2.5	73	8298	PC090+RV110				P90S4	018
14.5	508	1.8	96.8	9133						
11.6	599	1.5	121	9838						
9.6	686	1.1	145.2	10320						
7.2	828	0.8	193.6	10320						
11.3	598	1.4	80	12989	RV130				P90L6	051
9.0	689	1.1	100	13500						
17.5	408	2.1	80	11210	RV130				P90S4	051
14.0	480	1.5	100	12076						
12.4	585	3.0	73	12575	PC090+RV130				P90L6	018
9.3	746	2.2	96.8	13500						
7.4	890	1.7	121	13500						
6.2	1000	1.4	145.2	13500						
4.6	1220	1.0	193.6	13500						
19.3	398	3.5	73	10853	PC090+RV130				P90S4	018
14.5	508	2.6	96.8	11945						
11.6	608	2.0	121	12868						
9.6	686	1.6	145.2	13500						
7.2	843	1.2	193.6	13500						
5.8	962	0.9	242	13500						
4.7	1312	1.3	300	13500	RVE063/130				P90S4	018
3.5	1671	1.0	400	13500						
2.8	1991	0.8	500	13500						
9.3	753	3.1	150	18000	RVE063/150				P90S4	018
7.0	966	2.4	200	18000						
5.6	1175	1.7	250	18000						
4.7	1364	1.7	300	18000						
3.5	1619	1.6	400	18000						
2.8	1893	1.2	500	18000						
2.3	2242	1.2	600	18000						
1.9	2616	0.9	750	18000						

1.5 kW										
n2 r/min	M2 N·m	s.f	i	Fr2 N						
186.7	68	1.9	7.5	2359	RV063			P90L4		047
140.0	89	1.5	10	2597						
93.3	127	1.1	15	2973						
70.0	166	0.8	20	3272						
120.0	105	2.0	7.5	3227	RV075			P90L-6		048
90.0	137	1.7	10	3551						
60.0	196	1.2	15	4065						
140.0	90	2.2	10	3065	RV075			P90L4		048
93.3	130	1.5	15	3509						
70.0	168	1.3	20	3862						
56.0	205	1.0	25	4160						
46.7	233	1.0	30	4421						
90.0	138	2.7	10	3929	RV090			P90L-6		049
60.0	201	2.1	15	4498						
45.0	258	1.5	20	4951						
36.0	314	1.2	25	5333						
30.0	358	1.3	30	5667						
70.0	172	2.1	20	4273	RV090			P90L4		049
56.0	210	1.6	25	4603						
46.7	239	1.7	30	4891						
35.0	307	1.2	40	5383						
28.0	368	0.9	50	5799						
23.3	424	0.8	60	6163						
45.0	264	2.7	20	6256	RV110			P100L-6		050
36.0	322	2.4	25	6739						
30.0	363	2.3	30	7161						
22.5	471	1.7	40	7882						
18.0	565	1.3	50	8491						
15.0	649	1.1	60	9023						
35.0	319	2.2	40	6803	RV110			P90L4		050
28.0	384	1.7	50	7328						
23.3	442	1.4	60	7787						
17.5	548	0.9	80	8571						
19.3	535	1.9	73	8298	PC090+RV110			P90L4		018
14.5	693	1.3	96.8	9133						
11.6	817	1.1	121	9838						
9.6	936	0.8	145.2	10320						
22.5	478	2.3	40	10309	RV130			P100L-6		051
18.0	573	1.8	50	11105						
15.0	659	1.4	60	11801						
11.3	815	1.1	80	12989						
17.5	557	1.5	80	11210	RV130			P90L4		051
14.0	655	1.1	100	12076						

1.5 kW										
n2 r/min	M2 N·m	s.f	i	Fr2 N						
19.3	542	2.6	73	10853	PC090+RV130			P90L4		018
14.5	693	1.9	96.8	11945						
11.6	830	1.5	121	12868						
9.6	936	1.1	145.2	13500						
7.2	1149	0.8	194	13500						
4.7	1789	1.0	300	13500				RVE063/130	P90L4	018
3.5	2279	0.7	400	13500						
9.3	1026	2.3	150	18000				RVE063/150	P90L4	018
7.0	1317	1.8	200	18000						
5.6	1602	1.3	250	18000						
4.7	1860	1.3	300	18000						
3.5	2208	1.2	400	18000						
2.8	2582	0.9	500	18000						
2.3	3057	0.9	600	18000						
2.2 kW										
186.7	100	1.8	7.5	2785	RV075			P100L1-4		048
140.0	132	1.5	10	3065						
93.3	191	1.0	15	3509						
186.7	101	2.9	7.5	3081	RV090			P100L1-4		049
140.0	134	2.3	10	3391						
93.3	194	1.9	15	3882						
70.0	252	1.4	20	4273						
56.0	308	1.1	25	4603						
46.7	351	1.2	30	4891						
120.0	156	2.2	7.5	3570	RV090			P112M-6		049
90.0	203	1.8	10	3929						
60.0	294	1.4	15	4498						
45.0	378	1.0	20	4951						
70.0	255	2.5	20	5399	RV110			P100L1-4		050
56.0	315	2.2	25	5816						
46.7	356	2.0	30	6181						
35.0	468	1.5	40	6803						
28.0	563	1.2	50	7328						
23.3	648	1.0	60	7787						
90.0	205	3.5	10	4965	RV110			P112M-6		050
60.0	298	2.6	15	5684						
45.0	388	1.9	20	6256						
36.0	473	1.6	25	6739						
30.0	532	1.6	30	7161						
35.0	468	2.2	40	8897	RV130			P100L1-4		051
28.0	563	1.7	50	9584						
23.3	648	1.4	60	10185						
17.5	816	1.0	80	11210						



2.2 kW

n2 r/min	M2 N·m	s.f	i	Fr2 N					
36.0	479	2.2	25	8814	RV130				P112M-6 051
30.0	546	2.1	30	9366					
22.5	700	1.6	40	10309					
18.0	840	1.2	50	11105					
15.0	966	1.0	60	11801					
28.0	570	2.5	50	13103	RV150				P100L1-4 052
23.3	657	1.9	60	13924					
17.5	816	1.4	80	15325					
14.0	960	1.0	100	16508					

3 kW

186.7	137	1.4	7.5	2785	RV075				P100L2-4 048
140.0	180	1.1	10	3065					
93.3	261	0.8	15	3509					
186.7	138	2.1	7.5	3081	RV090				P100L2-4 049
140.0	182	1.7	10	3391					
93.3	264	1.4	15	3882					
70.0	344	1.0	20	4273					
56.0	420	0.8	25	4603					
46.7	479	0.9	30	4891					
93.3	264	2.5	15	4905	RV110				P100L2-4 050
70.0	348	1.9	20	5399					
56.0	430	1.6	25	5816					
46.7	485	1.5	30	6181					
35.0	638	1.1	40	6803					
28.0	767	0.9	50	7328					
120.0	212	3.1	7.5	4511	RV110				P132S-6 050
90.0	280	2.5	10	4965					
60.0	406	1.9	15	5684					
45.0	528	1.4	20	6256					
56.0	430	2.2	25	7607	RV130				P100L2-4 051
46.7	491	2.1	30	8084					
35.0	638	1.6	40	8897					
28.0	767	1.3	50	9584					
23.3	884	1.0	60	10185					
17.5	1113	0.8	80	11210					
90.0	280	3.4	10	6494	RV130				P132S-6 051
60.0	406	2.6	15	7434					
45.0	535	1.9	20	8182					
36.0	653	1.6	25	8814					
30.0	745	1.6	30	9366					
22.5	955	1.2	40	10309					
28.0	778	1.8	50	13103	RV150				P100L2-4 052
23.3	896	1.4	60	13924					
17.5	1113	1.0	80	15325					
14.0	1310	0.8	100	16508					

4 kW

n2 r/min	M2 N·m	s.f	i	Fr2 N					
186.7	184	1.6	7.5	3081	RV090				P112M-4 049
140.0	243	1.3	10	3391					
93.3	352	1.0	15	3882					
70.0	458	0.8	20	4273					
140.0	243	2.5	10	4285	RV110				P112M-4 050
93.3	352	1.9	15	4905					
70.0	464	1.4	20	5399					
56.0	573	1.2	25	5816					
46.7	647	1.1	30	6181					
120.0	283	2.3	7.5	4511	RV110				P132M1-6 050
90.0	374	1.9	10	4965					
60.0	541	1.4	15	5684					
56.0	573	1.6	25	7607	RV130				P112M-4 056
46.7	655	1.6	30	8084					
35.0	851	1.2	40	8897					
28.0	1023	1.0	50	9584					
23.3	1179	0.8	60	10185					
120.0	287	3.1	7.5	5901	RV130				P132M1-6 051
90.0	374	2.6	10	6494					
60.0	541	2.0	15	7434					
45.0	713	1.5	20	8182					
36.0	870	1.2	25	8814					
28.0	1037	1.4	50	13103	RV150				P112M-4 052
23.3	1195	1.1	60	13924					
17.5	1484	0.8	80	15325					

5.5 kW

186.7	253	2.2	7.5	3893	RV110				P132S-4 050
140.0	334	1.8	10	4285					
93.3	484	1.4	15	4905					
70.0	638	1.0	20	5399					
140.0	334	2.5	10	5605	RV130				P132S-4 051
93.3	490	1.9	15	6416					
70.0	645	1.4	20	7062					
56.0	788	1.2	25	7607					
46.7	900	1.2	30	8084					
35.0	1171	0.9	40	8897					
70.0	645	2.0	20	9654	RV150				P132S-4 052
56.0	788	1.5	25	10400					
46.7	934	1.3	30	11051					
35.0	1171	1.3	40	12163					
28.0	1426	1.0	50	13103					
23.3	1643	0.8	60	13924					



7.5 kW

n2 r/min	M2 N·m	s.f	i	Fr2 N	IEC	IEC	IEC	IEC	IEC
186.7	345	1.6	7.5	3893	RV110			P132M-4	050
140.0	455	1.3	10	4285					
93.3	660	1.0	15	4905					
186.7	349	2.1	7.5	5092	RV130			P132M-4	051
140.0	455	1.8	10	5605					
93.3	668	1.4	15	6416					
70.0	880	1.0	20	7062					
56.0	1074	0.9	25	7607					
46.7	1228	0.8	30	8084					
35.0	1596	0.7	40	8897					
70.0	880	1.5	20	9654	RV150			P132M-4	052
56.0	1074	1.1	25	10400					
46.7	1274	0.9	30	11051					
35.0	1596	1.0	40	12163					

11 kW

n2 r/min	M2 N·m	s.f	i	Fr2 N	IEC	IEC	IEC	IEC	IEC
186.7	512	2.3	7.5	6962	RV150			P160M-4	052
140.0	675	1.8	10	7663					
93.3	990	1.3	15	8771					
70.0	1291	1.0	20	9654					
56.0	1576	0.8	25	10400					

15 kW

n2 r/min	M2 N·m	s.f	i	Fr2 N	IEC	IEC	IEC	IEC	IEC
186.7	698	1.7	7.5	6962	RV150			P160L-4	052
140.0	921	1.3	10	7663					
93.3	1351	0.9	15	8771					
70.0	1760	0.7	20	9654					

RV..FB(FD).. (n1=1400)

IEC	M2 (N.m)	i	P1 (kW)	n2 (r/min)	Fr2 (N)	Fr1 (N)	IEC	IEC	M2 (N.m)	i	P1 (kW)	n2 (r/min)	Fr2 (N)	Fr1 (N)	IEC
RV030	18	5	0.61	280.0	597	150			RV090	290	7.5	6.3	186.7	3081	900
	18	7.5	0.41	186.7	683	150				310	10	5.1	140.0	3391	1082
	18	10	0.32	140.0	752	169				360	15	4.1	93.3	3882	1257
	18	15	0.23	93.3	861	169				355	20	3.1	70.0	4273	1270
	18	20	0.18	70.0	948	190				340	25	2.4	56.0	4603	1270
	21	25	0.18	56.0	1021	210				410	30	2.6	46.7	4891	1270
	20	30	0.15	46.7	1085	210				360	40	1.8	35.0	5383	1270
	18	40	0.11	35.0	1194	210				340	50	1.4	28.0	5799	1270
	17	50	0.09	28.0	1286	210				320	60	1.1	23.3	6163	1270
	16	60	0.08	23.3	1367	210				285	80	0.83	17.5	6783	1270
	13	80	0.05	17.5	1504	210				270	100	0.67	14.0	7306	1270
RV040	34	5	1.1	280.0	1149	250			RV110	552	7.5	12.0	186.7	3893	1200
	40	7.5	0.90	186.7	1315	294				598	10	9.8	140.0	4285	1463
	40	10	0.69	140.0	1447	331				656	15	7.5	93.3	4905	1604
	40	15	0.48	93.3	1657	331				644	20	5.6	70.0	5399	1700
	39	20	0.37	70.0	1824	350				679	25	4.7	56.0	5816	1700
	38	25	0.30	56.0	1964	350				725	30	4.5	46.7	6181	1700
	45	30	0.31	46.7	2087	350				702	40	3.3	35.0	6803	1700
	41	40	0.23	35.0	2298	350				660	50	2.6	28.0	7328	1700
	39	50	0.18	28.0	2475	350				616	60	2.1	23.3	7787	1700
	36	60	0.15	23.3	2630	350				515	80	1.4	17.5	8571	1700
	33	80	0.12	17.5	2895	350				483	100	1.1	14.0	9232	1700
	29	100	0.09	14.0	3118	350			RV130	750	7.5	16.1	186.7	5092	1500
RV050	62	5	2.0	280.0	1577	350				820	10	13.5	140.0	5605	1845
	71	7.5	1.6	186.7	1805	401				920	15	10.3	93.3	6416	2070
	72	10	1.2	140.0	1987	490				910	20	7.8	70.0	7062	2100
	74	15	0.88	93.3	2274	490				930	25	6.5	56.0	7607	2100
	73	20	0.68	70.0	2503	490				1040	30	6.4	46.7	8084	2100
	70	25	0.54	56.0	2696	490				1050	40	4.9	35.0	8897	2100
	84	30	0.57	46.7	2865	490				980	50	3.8	28.0	9584	2100
	76	40	0.42	35.0	3153	490				900	60	3.1	23.3	10185	2100
	73	50	0.34	28.0	3397	490				840	80	2.3	17.5	11210	2100
	68	60	0.28	23.3	3610	490				740	100	1.7	14.0	12076	2100
	65	80	0.22	17.5	3973	490			RV150	1200	7.5	25.8	186.7	6962	1950
	55	100	0.16	14.0	4280	490				1240	10	20.2	140.0	7663	2267
RV063	128	7.5	2.8	186.7	2359	500				1250	15	13.9	93.3	8771	2285
	130	10	2.2	140.0	2597	571				1300	20	11.1	70.0	9654	2674
	140	15	1.6	93.3	2973	615				1200	25	8.4	56.0	10400	2800
	135	20	1.2	70.0	3272	667				1200	30	7.1	46.7	11051	2800
	130	25	1.0	56.0	3524	700				1550	40	7.3	35.0	12163	2800
	160	30	1.1	46.7	3745	700				1400	50	5.4	28.0	13103	2800
	145	40	0.76	35.0	4122	700				1260	60	4.2	23.3	13924	2800
	135	50	0.60	28.0	4440	700				1150	80	3.1	17.5	15325	2800
	130	60	0.51	23.3	4719	700				1000	100	2.3	14.0	16508	2800
	122	80	0.39	17.5	5193	700									
	118	100	0.34	14.0	5595	700									
RV075	185	7.5	4.1	186.7	2785	700									
	195	10	3.2	140.0	3065	830									
	200	15	2.3	93.3	3509	851									
	210	20	1.9	70.0	3862	980									
	200	25	1.5	56.0	4160	980									
	230	30	1.5	46.7	4421	980									
	220	40	1.1	35.0	4865	980									
	210	50	0.89	28.0	5241	980									
	200	60	0.75	23.3	5569	980									
	190	80	0.58	17.5	6130	980									
	180	100	0.48	14.0	6603	980									



RV..FB(FD).. (n1=900)							
	M2 (N.m)	i	P1 (kW)	n2 (r/min)	Fr2 (N)	Fr1 (N)	
RV030	20	5	0.44	180.0	692	175	044
	20	7.5	0.30	120.0	792	175	
	20	10	0.24	90.0	871	197	
	20	15	0.17	60.0	997	197	
	20	20	0.13	45.0	1098	210	
	23	25	0.14	36.0	1183	210	
	21	30	0.11	30.0	1257	210	
	20	40	0.09	22.5	1383	210	
	18	50	0.07	18.0	1490	210	
	17	60	0.06	15.0	1583	210	
	15	80	0.04	11.3	1743	210	
	RV040	40	5	0.87	180.0	1331	
44		7.5	0.65	120.0	1524	319	
44		10	0.50	90.0	1677	350	
45		15	0.36	60.0	1920	350	
44		20	0.28	45.0	2113	350	
43		25	0.23	36.0	2276	350	
49		30	0.23	30.0	2419	350	
45		40	0.17	22.5	2662	350	
42		50	0.14	18.0	2868	350	
39		60	0.11	15.0	3047	350	
35		80	0.09	11.3	3354	350	
32		100	0.07	9.0	3490	350	
RV050	75	5	1.6	180.0	1827	400	046
	84	7.5	1.2	120.0	2091	448	
	84	10	0.94	90.0	2302	490	
	84	15	0.67	60.0	2635	490	
	77	20	0.48	45.0	2900	490	
	75	25	0.39	36.0	3124	490	
	90	30	0.42	30.0	3320	490	
	82	40	0.31	22.5	3654	490	
	77	50	0.25	18.0	3936	490	
	72	60	0.21	15.0	4183	490	
	68	80	0.16	11.3	4604	490	
	56	100	0.12	9.0	4840	490	
RV063	151	7.5	2.2	120.0	2734	580	047
	153	10	1.7	90.0	3009	661	
	155	15	1.2	60.0	3444	670	
	148	20	0.91	45.0	3791	700	
	137	25	0.69	36.0	4084	700	
	175	30	0.79	30.0	4339	700	
	160	40	0.58	22.5	4776	700	
	145	50	0.45	18.0	5145	700	
	138	60	0.37	15.0	5467	700	
	128	80	0.29	11.3	6018	700	
	124	100	0.25	9.0	6270	700	
	RV075	215	7.5	3.1	120.0	3227	
230		10	2.5	90.0	3551	975	
235		15	1.8	60.0	4065	980	
235		20	1.4	45.0	4474	980	
215		25	1.1	36.0	4820	980	
260		30	1.1	30.0	5122	980	
240		40	0.83	22.5	5637	980	
220		50	0.65	18.0	6073	980	
210		60	0.54	15.0	6453	980	
200		80	0.43	11.3	7103	980	
190		100	0.36	9.0	7380	980	
RV090		340	7.5	4.8	120.0	3570	1040
	370	10	4.0	90.0	3929	1270	
	420	15	3.1	60.0	4498	1270	
	390	20	2.3	45.0	4951	1270	
	370	25	1.8	36.0	5333	1270	
	460	30	1.9	30.0	5667	1270	
	410	40	1.4	22.5	6238	1270	
	390	50	1.1	18.0	6719	1270	
	350	60	0.86	15.0	7140	1270	
	315	80	0.63	11.3	7859	1270	
	280	100	0.49	9.0	8180	1270	
	RV110	650	7.5	9.2	120.0	4511	1390
713		10	7.6	90.0	4965	1700	
759		15	5.6	60.0	5684	1700	
725		20	4.1	45.0	6256	1700	
759		25	3.5	36.0	6739	1700	
840		30	3.5	30.0	7161	1700	
794		40	2.5	22.5	7882	1700	
748		50	2.0	18.0	8491	1700	
682		60	1.6	15.0	9023	1700	
567		80	1.1	11.3	9931	1700	
515		100	0.84	9.0	10320	1700	
RV130		880	7.5	12.3	120.0	5901	1740
	960	10	10.3	90.0	6494	2100	
	1060	15	7.8	60.0	7434	2100	
	1040	20	5.8	45.0	8182	2100	
	1050	25	4.8	36.0	8814	2100	
	1170	30	4.7	30.0	9366	2100	
	1100	40	3.5	22.5	10309	2100	
	1050	50	2.7	18.0	11105	2100	
	940	60	2.1	15.0	11801	2100	
	860	80	1.6	11.3	12989	2100	
	780	100	1.2	9.0	13500	2100	
	RV150	1400	7.5	19.5	120.0	8067	2270
1480		10	15.7	90.0	8878	2700	
1450		15	10.5	60.0	10163	2645	
1380		25	6.3	36.0	12050	2800	
1400		30	5.4	30.0	12805	2800	
1800		40	5.7	22.5	14094	2800	
1600		50	4.1	18.0	15182	2800	
1440		60	3.2	15.0	16133	2800	
1300		80	2.4	11.3	17757	2800	
1150		100	1.8	9.0	18000	2800	

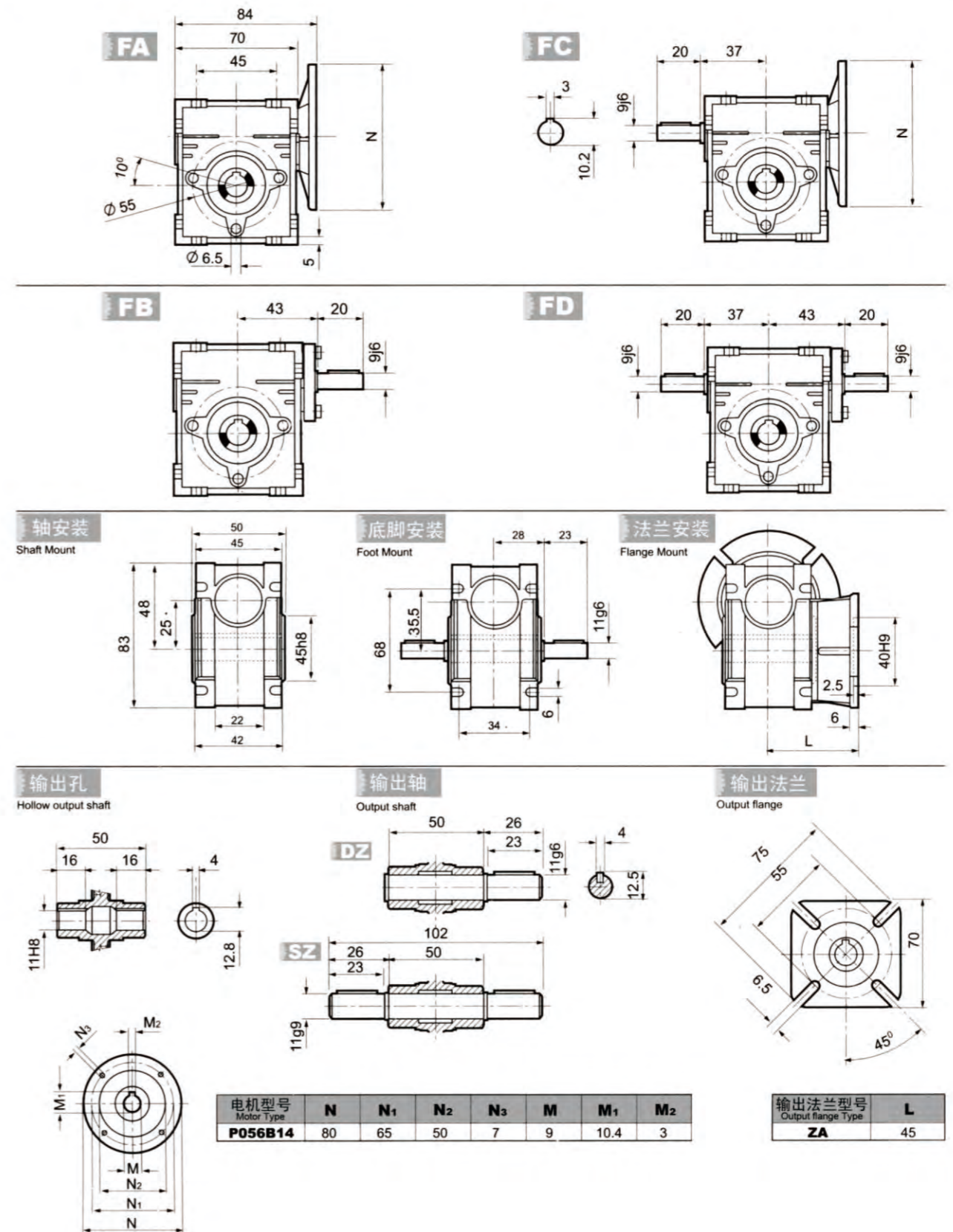
RV..FB(FD).. (n1=500)							
	M2 (N.m)	i	P1 (kW)	n2 (r/min)	Fr2 (N)	Fr1 (N)	
RV030	24	5	0.30	100.0	841	210	044
	24	7.5	0.21	66.7	963	210	
	24	10	0.16	50.0	1060	210	
	24	15	0.12	33.3	1213	210	
	23	20	0.09	25.0	1336	210	
	29	25	0.10	20.0	1439	210	
	26	30	0.08	16.7	1529	210	
	23	40	0.06	12.5	1683	210	
	21	50	0.05	10.0	1813	210	
	19	60	0.04	8.3	1830	210	
	17	80	0.03	6.3	1830	210	
	RV040	49	5	0.60	100.0	1619	
54		7.5	0.45	66.7	1853	350	
54		10	0.35	50.0	2040	350	
55		15	0.26	33.3	2335	350	
52		20	0.19	25.0	2570	350	
49		25	0.15	20.0	2769	350	
58		30	0.16	16.7	2942	350	
53		40	0.12	12.5	3238	350	
49		50	0.10	10.0	3488	350	
46		60	0.08	8.3	3490	350	
40		80	0.06	6.3	3490	350	
36		100	0.05	5.0	3490	350	
RV050	92	5	1.1	100.0	2222	490	046
	103	7.5	0.86	66.7	2544	490	
	103	10	0.67	50.0	2800	490	
	103	15	0.47	33.3	3205	490	
	93	20	0.33	25.0	3528	490	
	91	25	0.28	20.0	3800	490	
	108	30	0.29	16.7	4038	490	
	98	40	0.22	12.5	4445	490	
	91	50	0.17	10.0	4788	490	
	83	60	0.14	8.3	4840	490	
	75	80	0.11	6.3	4840	490	
	65	100	0.09	5.0	4840	490	
RV063	184	7.5	1.5	66.7	3325	700	047
	185	10	1.2	50.0	3660	700	
	187	15	0.85	33.3	4190	700	
	178	20	0.63	25.0	4611	700	
	164	25	0.48	20.0	4967	700	
	200	30	0.54	16.7	5279	700	
	185	40	0.40	12.5	5810	700	
	173	50	0.32	10.0	6259	700	
	160	60	0.26	8.3	6270	700	
	137	80	0.19	6.3	6270	700	
	128	100	0.16	5.0	6270	700	
	RV075	260	7.5	2.1	66.7	3925	
270		10	1.7	50.0	4320	980	
280		15	1.2	33.3	4945	980	
285		20	0.98	25.0	5443	980	
255		25	0.73	20.0	5863	980	
300		30	0.77	16.7	6231	980	
280		40	0.58	12.5	6858	980	
250		50	0.44	10.0	7380	980	
240		60	0.37	8.3	7380	980	
215		80	0.29	6.3	7380	980	
210		100	0.24	5.0	7380	980	
RV090		410	7.5	3.3	66.7	4343	1270
	435	10	2.7	50.0	4780	1270	
	490	15	2.1	33.3	5472	1270	
	470	20	1.6	25.0	6022	1270	
	440	25	1.2	20.0	6487	1270	
	550	30	1.4	16.7	6894	1270	
	480	40	0.95	12.5	7588	1270	
	450	50	0.75	10.0	8174	1270	
	400	60	0.59	8.3	8180	1270	
	365	80	0.45	6.3	8180	1270	
	330	100	0.35	5.0	8180	1270	
	RV110	794	7.5	6.4	66.7	5488	1700
851		10	5.2	50.0	6040	1700	
909		15	3.9	33.3	6914	1700	
863		20	2.8	25.0	7610	1700	
909		25	2.4	20.0	8198	1700	
1000		30	2.4	16.7	8711	1700	
932		40	1.7	12.5	9588	1700	
880		50	1.4	10.0	10320	1700	
781		60	1.1	8.3	10320	1700	
662		80	0.76	6.3	10320	1700	
599		100	0.59	5.0	10320	1700	
RV130		1080	7.5	8.6	66.7	7178	2100
	1160	10	7.1	50.0	7900	2100	
	1300	15	5.5	33.3	9043	2100	
	1230	20	4.0	25.0	9953	2100	
	1200	25	3.2	20.0	10722	2100	
	1400	30	3.3	16.7	11394	2100	
	1300	40	2.4	12.5	12540	2100	
	1220	50	1.9	10.0	13500	2100	
	1070	60	1.5	8.3	13500	2100	
	970	80	1.1	6.3	13500	2100	
	860	100	0.85	5.0	13500	2100	
	RV150	1700	7.5	13.5	66.7	9812	2800
1780		10	10.7	50.0	10800	2800	
1730		15	7.2	33.3	12363	2800	
1820		20	5.9	25.0	13607	2800	
1630		25	4.3	20.0	14658	2800	
1670		30	3.8	16.7	15576	2800	
2120		40	3.9	12.5	17144	2800	
1870		50	2.9	10.0	18000	2800	
1680		60	2.3	8.3	18000	2800	
1530		80	1.7	6.3	18000	2800	
1350		100	1.3	5.0	18000	2800	



RVE..FB(FD).. (n1=1400)

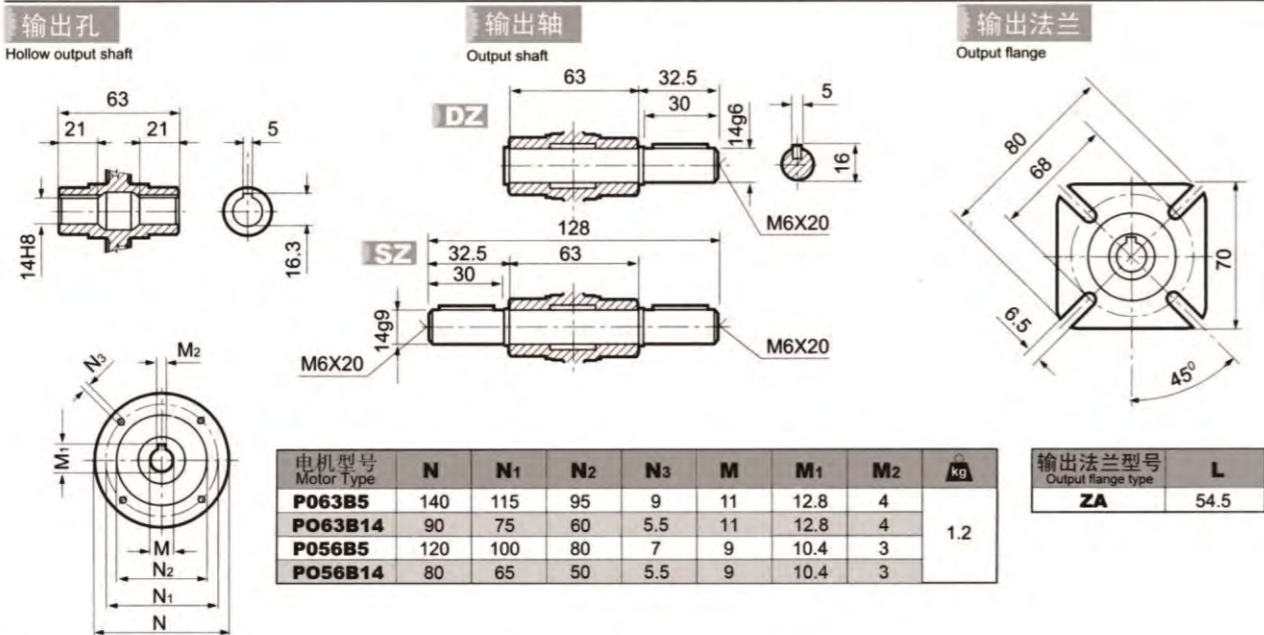
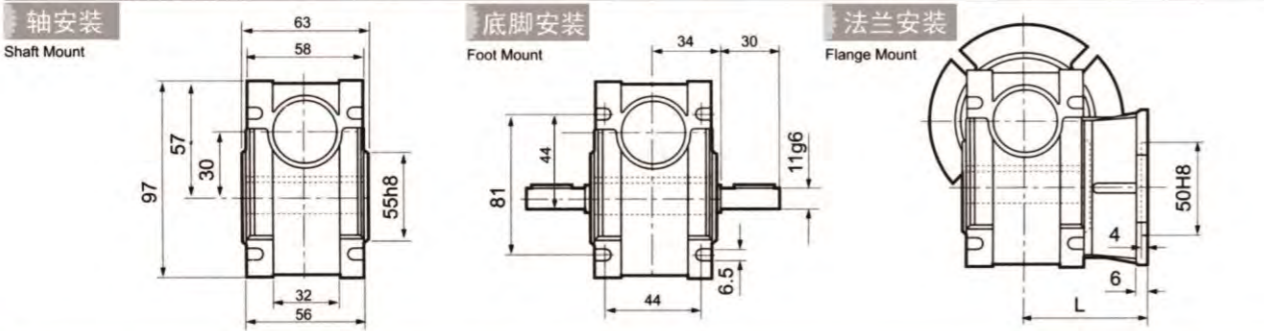
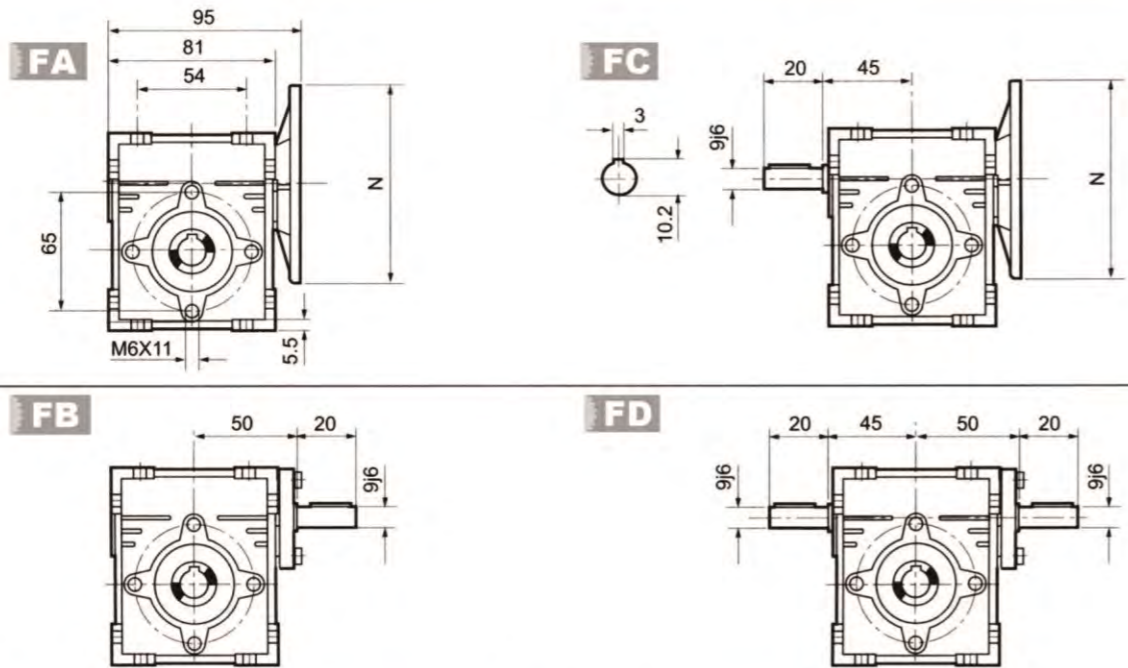
RV	M2 (N.m)	i	P1 (kW)	n2 (r/min)	Fr2 (N)	Fr1 (N)	018	RV	M2 (N.m)	i	P1 (kW)	n2 (r/min)	Fr2 (N)	Fr1 (N)	018
RVE030/040	73	300	0.08	4.7	3490	210	018	RVE040/090	610	300	0.56	4.7	8180	350	018
	65	400	0.06	3.5	3490	210	610		400	0.43	3.5	8180	350		
	61	500	0.04	2.8	3490	210	560		500	0.34	2.8	8180	350		
	73	600	0.04	2.3	3490	210	610		600	0.30	2.3	8180	350		
	73	750	0.04	1.9	3490	210	560		750	0.23	1.9	8180	350		
	73	900	0.03	1.6	3490	210	505		900	0.19	1.6	8180	350		
	65	1200	0.02	1.2	3490	210	610		1200	0.17	1.2	8180	350		
	73	1500	0.02	0.9	3490	210	560		1500	0.14	0.93	8180	350		
	73	1800	0.02	0.8	3490	210	505		1800	0.11	0.78	8180	350		
	65	2400	0.01	0.58	3490	210	610		2400	0.11	0.58	8180	350		
	65	3200	0.01	0.4	3490	210	560		3000	0.08	0.47	8180	350		
	33	4000	0.01	0.4	3490	210	460		4000	0.08	0.35	8180	350		
	29	5000	0.01	0.28	3490	210	410		5000	0.06	0.28	8180	350		
RVE030/050	145	300	0.15	4.7	4840	210	018	RVE050/110	1265	300	1.1	4.7	10320	490	018
	124	400	0.10	3.5	4840	210	1185		400	0.79	3.5	10320	490		
	120	500	0.09	2.8	4840	210	1100		500	0.61	2.8	10320	490		
	145	600	0.08	2.3	4840	210	1185		600	0.55	2.3	10320	490		
	145	750	0.07	1.9	4840	210	1265		750	0.49	1.9	10320	490		
	145	900	0.06	1.6	4840	210	1265		900	0.43	1.6	10320	490		
	124	1200	0.04	1.2	4840	210	1185		1200	0.31	1.2	10320	490		
	145	1500	0.04	0.93	4840	210	1265		1500	0.30	0.93	10320	490		
	145	1800	0.04	0.78	4840	210	1265		1800	0.26	0.78	10320	490		
	124	2400	0.03	0.6	4840	210	1185		2400	0.19	0.58	10320	490		
	120	3000	0.02	0.5	4840	210	1100		3000	0.15	0.47	10320	490		
	82	4000	0.02	0.35	4840	210	819		4000	0.13	0.35	10320	490		
	82	4800	0.02	0.29	4840	210	746		5000	0.10	0.28	10320	490		
RVE030/063	230	300	0.24	4.7	6270	210	018	RVE063/130	1760	300	1.5	4.7	13500	700	018
	230	400	0.19	3.5	6270	210	1650		400	1.1	3.5	13500	700		
	216	500	0.15	2.8	6270	210	1550		500	0.86	2.8	13500	700		
	230	600	0.13	2.3	6270	210	1650		600	0.76	2.3	13500	700		
	216	750	0.11	1.9	6270	210	1760		750	0.66	1.9	13500	700		
	198	900	0.09	1.6	6270	210	1760		900	0.58	1.6	13500	700		
	230	1200	0.08	1.2	6270	210	1650		1200	0.43	1.2	13500	700		
	216	1500	0.06	0.93	6270	210	1760		1500	0.39	0.93	13500	700		
	198	1800	0.05	0.78	6270	210	1760		1800	0.35	0.78	13500	700		
	230	2400	0.05	0.58	6270	210	1650		2400	0.25	0.58	13500	700		
	216	3000	0.04	0.47	6270	210	1550		3000	0.20	0.47	13500	700		
	172	4000	0.03	0.35	6270	210	1220		4000	0.15	0.35	13500	700		
	150	5000	0.02	0.28	6270	210	1100		5000	0.11	0.28	13500	700		
RVE040/075	390	300	0.36	4.7	7380	350	018	RVE063/150	2340	150	3.4	9.3	18000	700	018
	360	400	0.27	3.5	7380	350	2340		200	2.7	7.0	18000	700		
	320	500	0.21	2.8	7380	350	2050		250	1.9	5.6	18000	700		
	390	600	0.19	2.3	7380	350	2340		300	1.9	4.7	18000	700		
	390	750	0.16	1.9	7380	350	2670		400	1.8	3.5	18000	700		
	390	900	0.14	1.6	7380	350	2330		500	1.4	2.8	18000	700		
	360	1200	0.11	1.2	7380	350	2670		600	1.3	2.3	18000	700		
	390	1500	0.10	0.93	7380	350	2330		750	0.98	1.9	18000	700		
	390	1800	0.09	0.78	7380	350	2100		900	0.71	1.6	18000	700		
	360	2400	0.07	0.58	7380	350	2670		1200	0.75	1.2	18000	700		
	320	3000	0.05	0.47	7380	350	2100		1800	0.44	0.8	18000	700		
	250	4000	0.04	0.35	7380	350	2670		2400	0.46	0.6	18000	700		
	230	5000	0.03	0.28	7380	350	2330		3000	0.34	0.5	18000	700		
							1880	4000	0.23	0.4	18000	700			
							1650	5000	0.18	0.3	18000	700			

RV025 型安装尺寸图 RV025 Gearbox dimensions

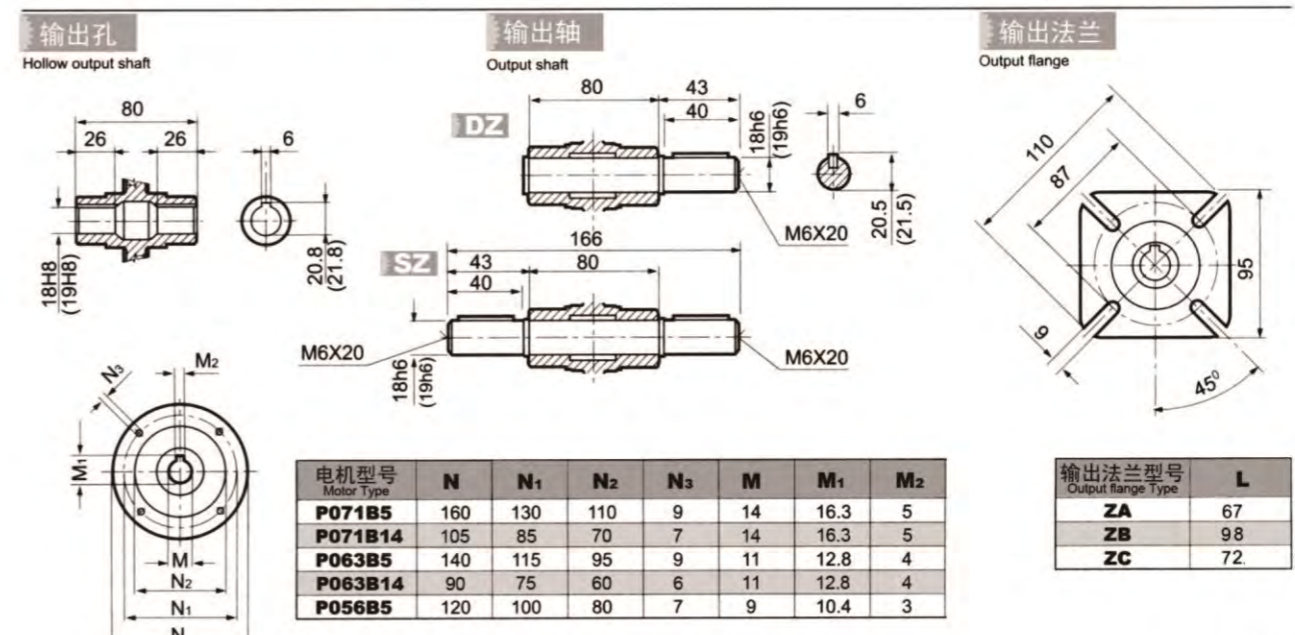
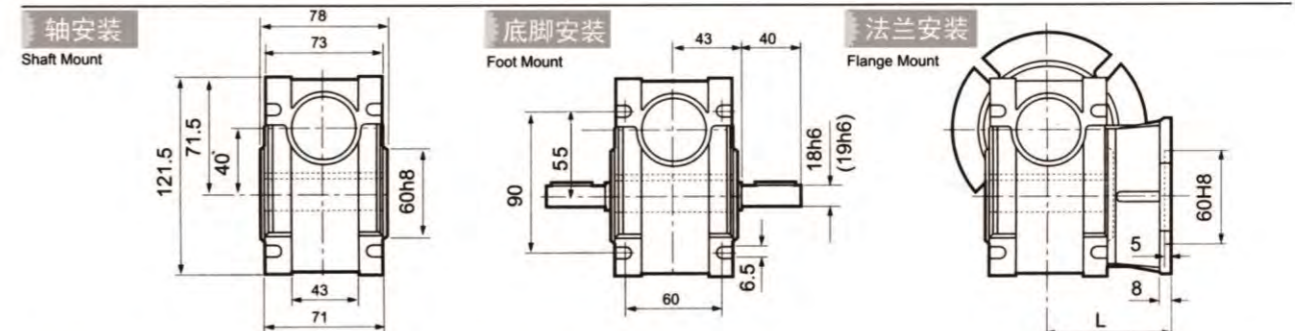
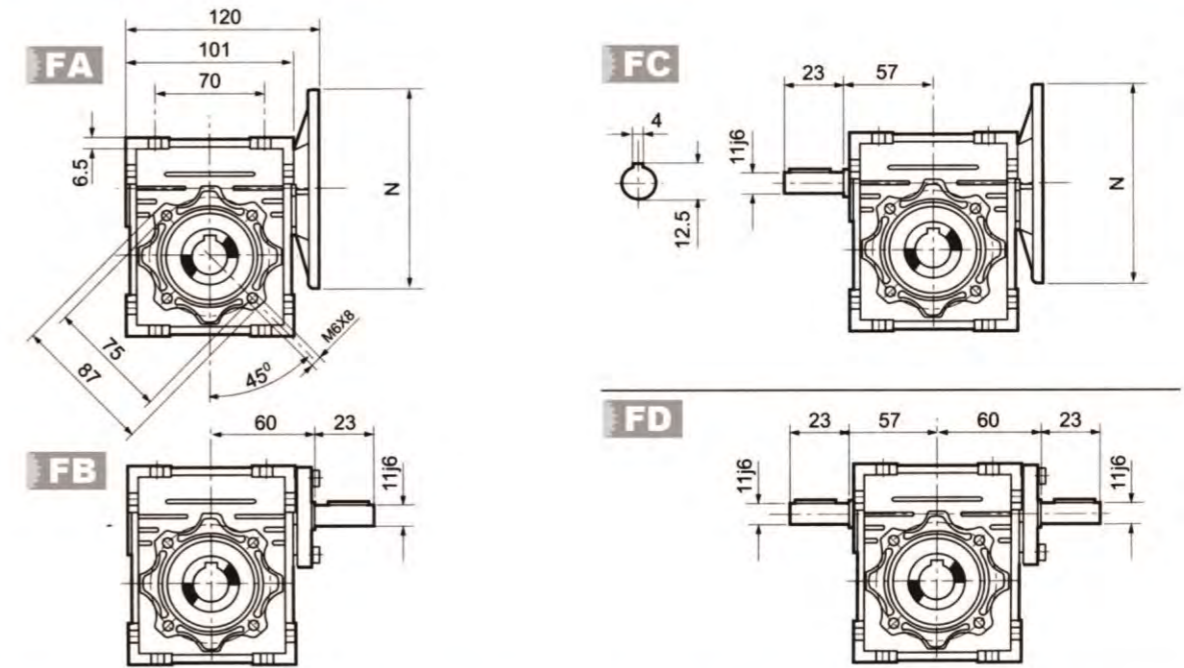




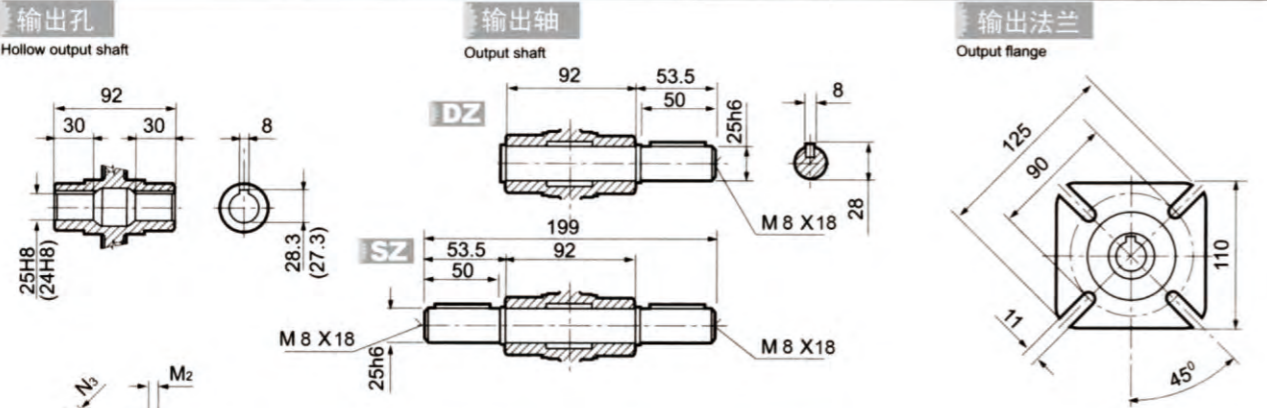
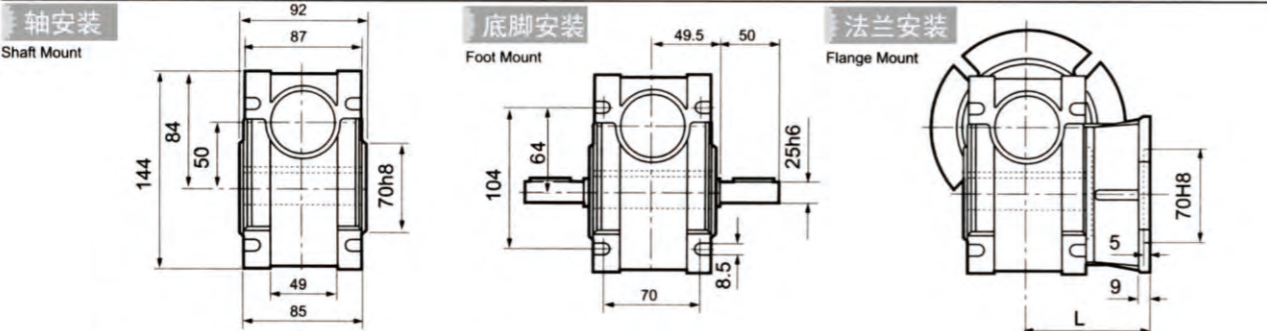
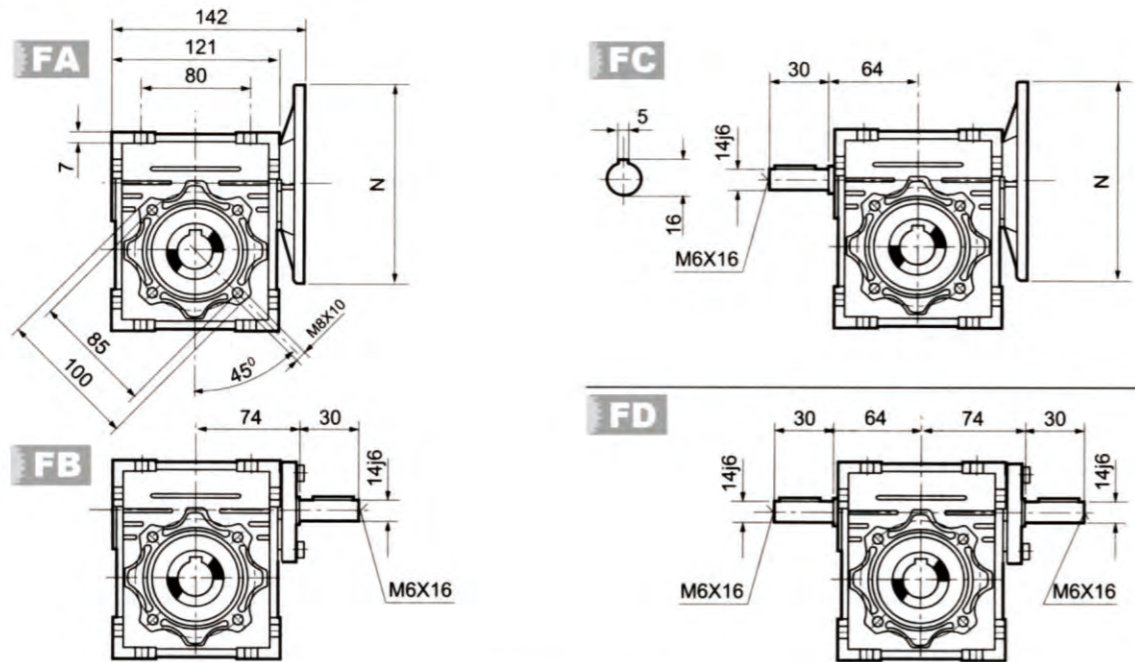
RV030 型安装尺寸图 RV030 Gearbox dimensions



RV040 型安装尺寸图 RV040 Gearbox dimensions



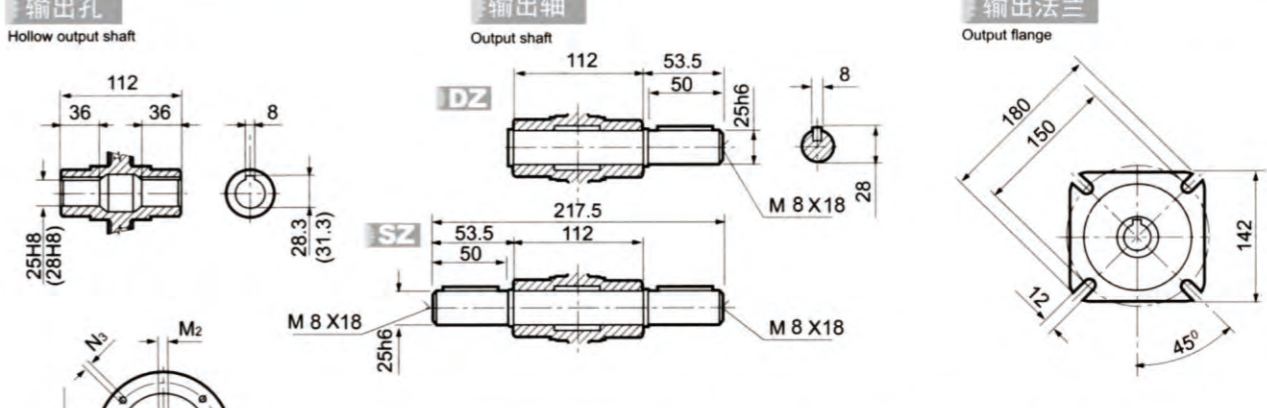
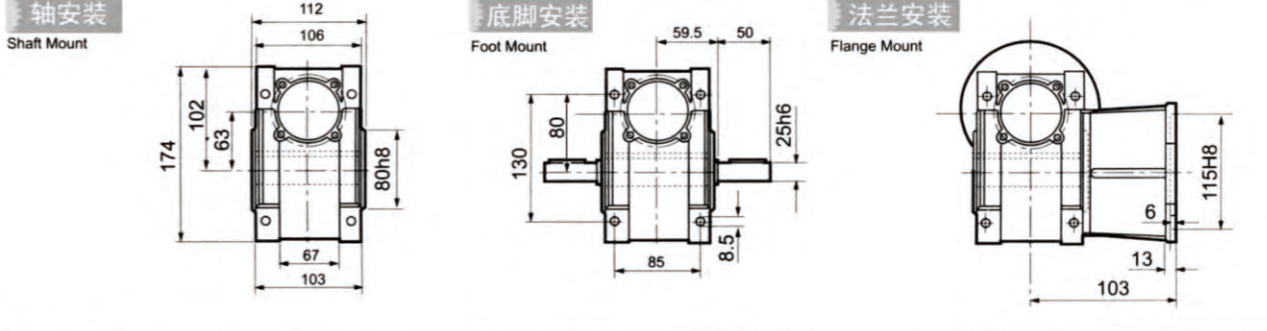
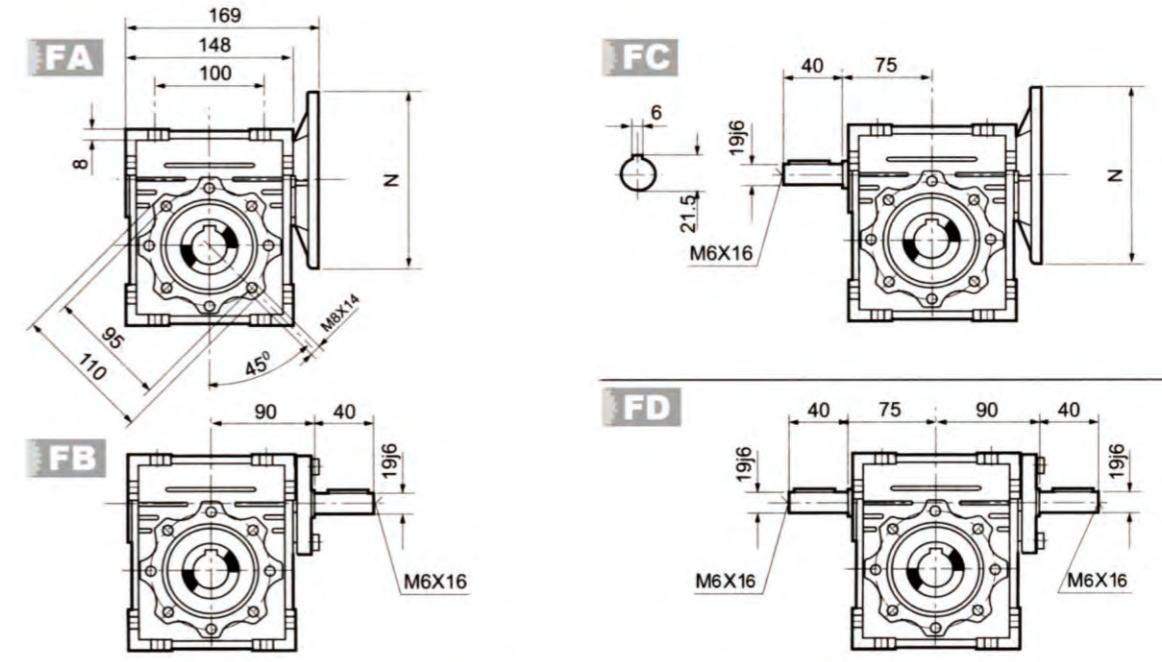
RV050 型安装尺寸图 RV050 Gearbox dimensions



电机型号 Motor Type	N	N ₁	N ₂	N ₃	M	M ₁	M ₂	3.5
P080B5	200	165	130	11	19	21.8	6	
P080B14	120	100	80	7	19	21.8	6	
P071B5	160	130	110	9	14	16.3	5	
P071B14	105	85	70	7	14	16.3	5	
P063B5	140	115	95	9	11	12.8	4	

输出法兰型号 Output flange Type	L
ZA	90

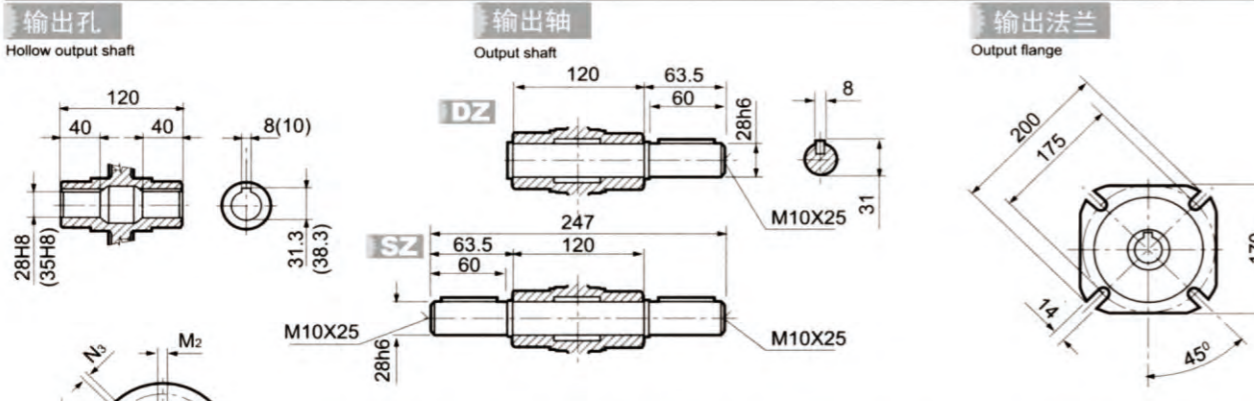
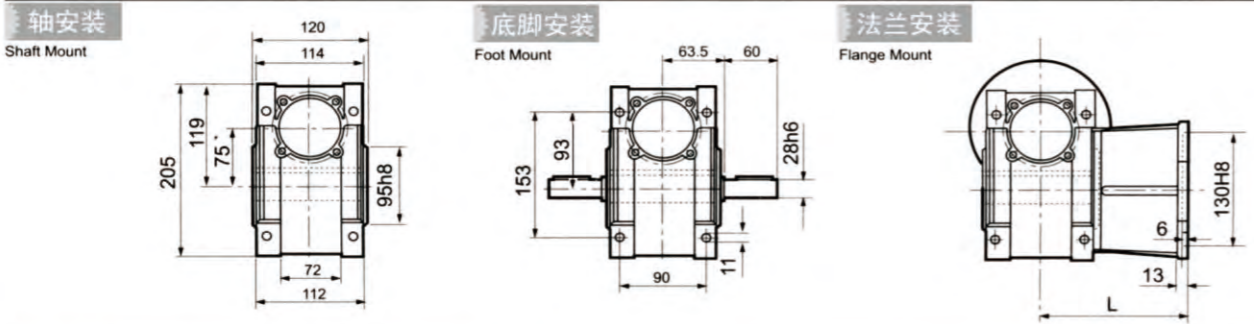
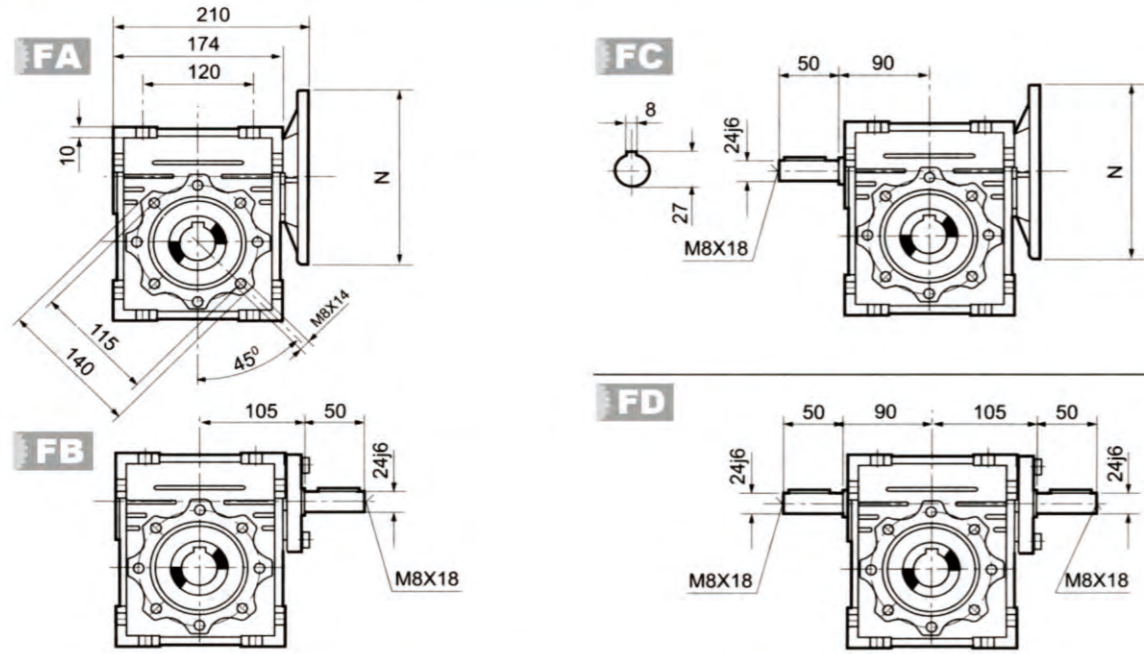
RV063 型安装尺寸图 RV063 Gearbox dimensions



电机型号 Motor Type	N	N ₁	N ₂	N ₃	M	M ₁	M ₂
P090B5	200	165	130	11	24	27.3	8
P090B14	140	115	95	9	24	27.3	8
P080B5	200	165	130	11	19	21.8	6
P080B14	120	100	80	7	19	21.8	6
P071B5	160	130	110	9	14	16.3	5
P071B14	105	85	70	7	14	16.3	5

输出法兰型号 Output flange Type	L
ZA	82
ZB	103

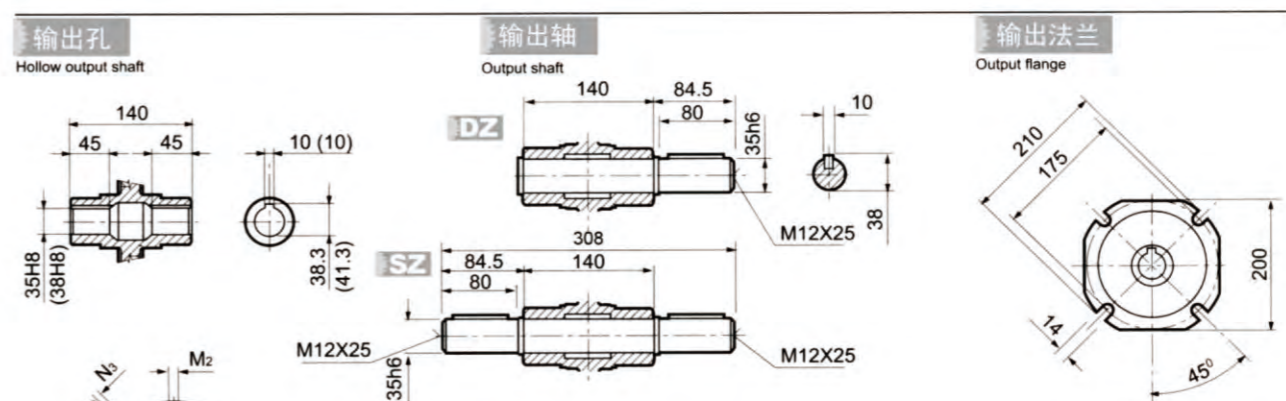
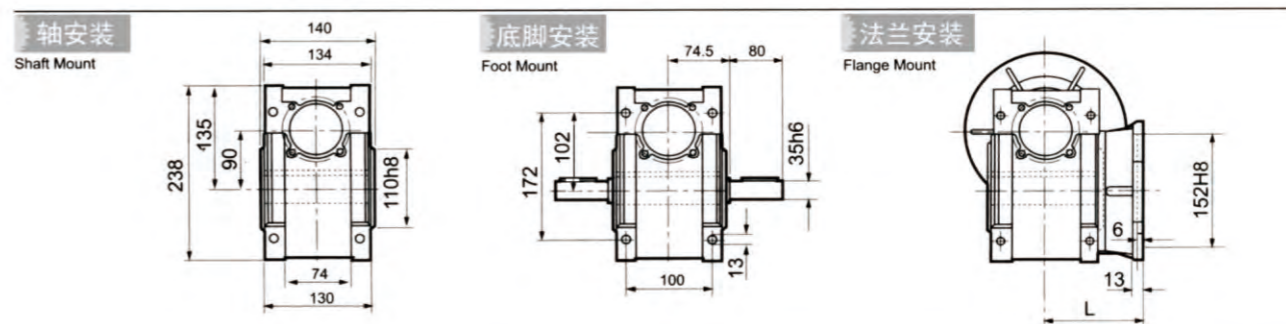
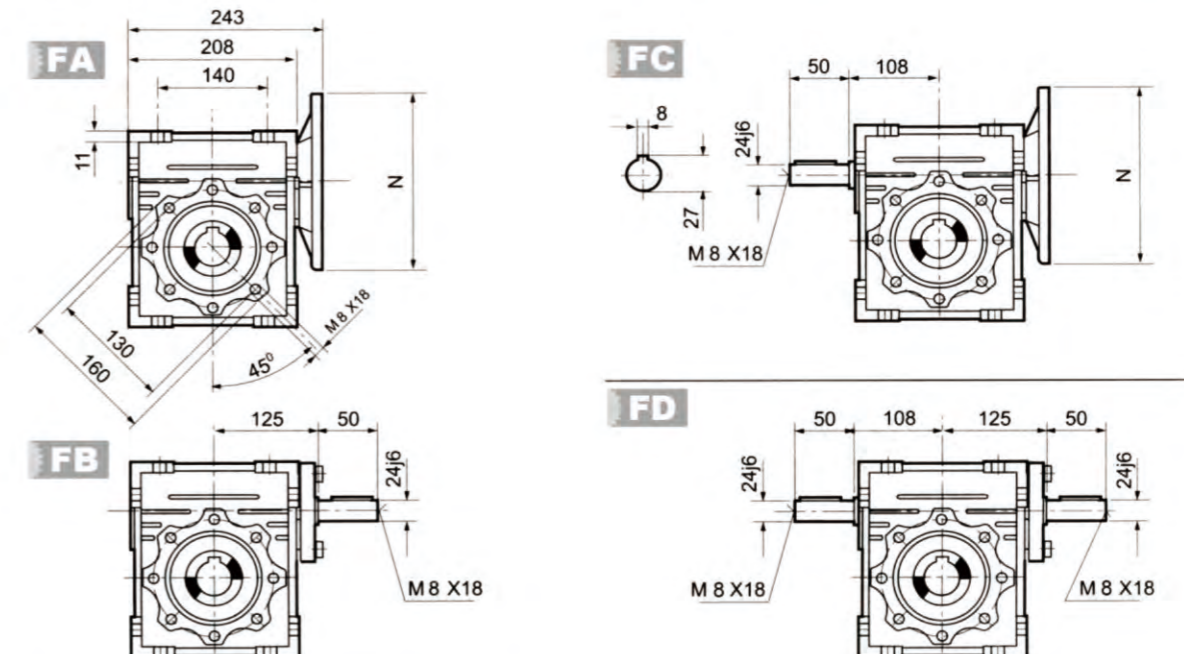
RV075 型安装尺寸图 RV075 Gearbox dimensions



电机型号 Motor Type	N	N ₁	N ₂	N ₃	M	M ₁	M ₂
P100/112B5	250	215	180	13.5	28	31.3	8
P100/112B14	160	130	110	9	28	31.3	8
P090B5	200	165	130	11	24	27.3	8
P090B14	140	115	95	9	24	27.3	8
P080B5	200	165	130	11	19	21.8	6
P080B14	120	100	80	7	19	21.8	6
P071B5	160	130	110	9	14	16.3	5

输出法兰型号 Output flange Type	L
ZA	111

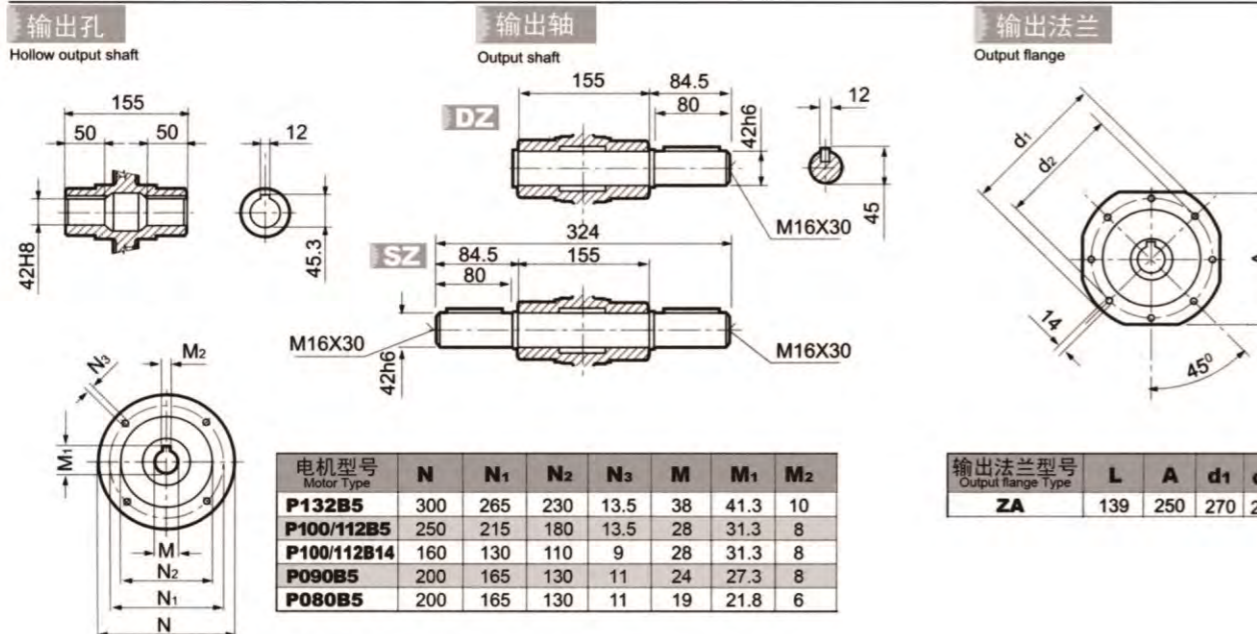
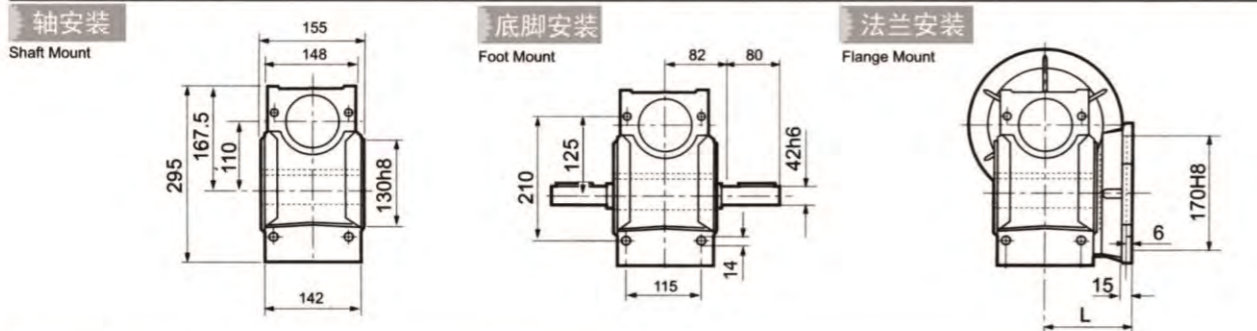
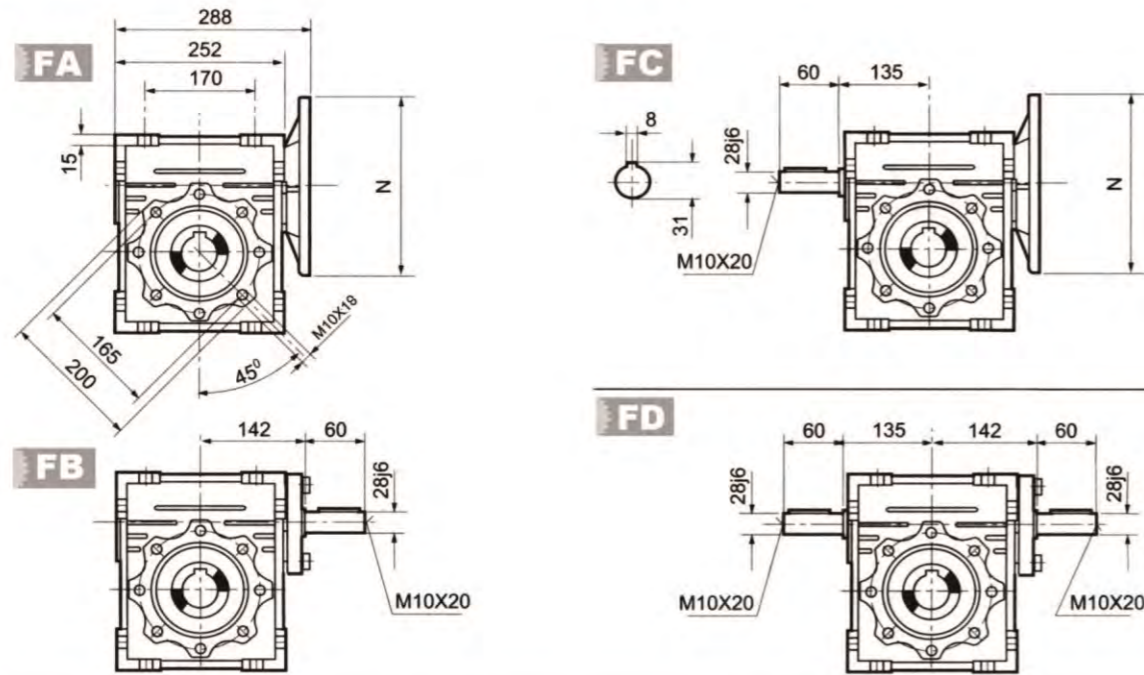
RV090 型安装尺寸图 RV090 Gearbox dimensions



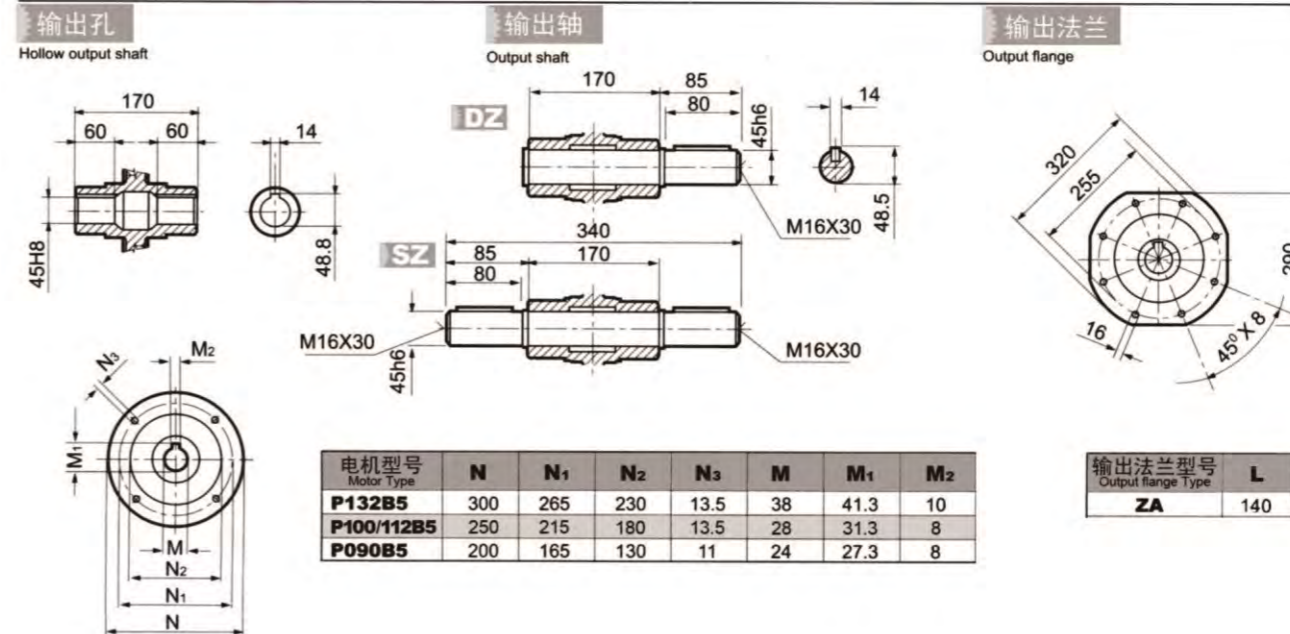
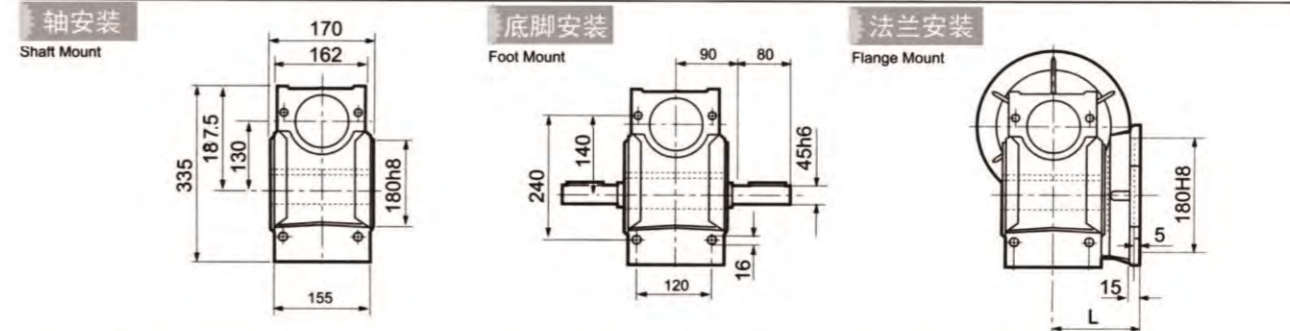
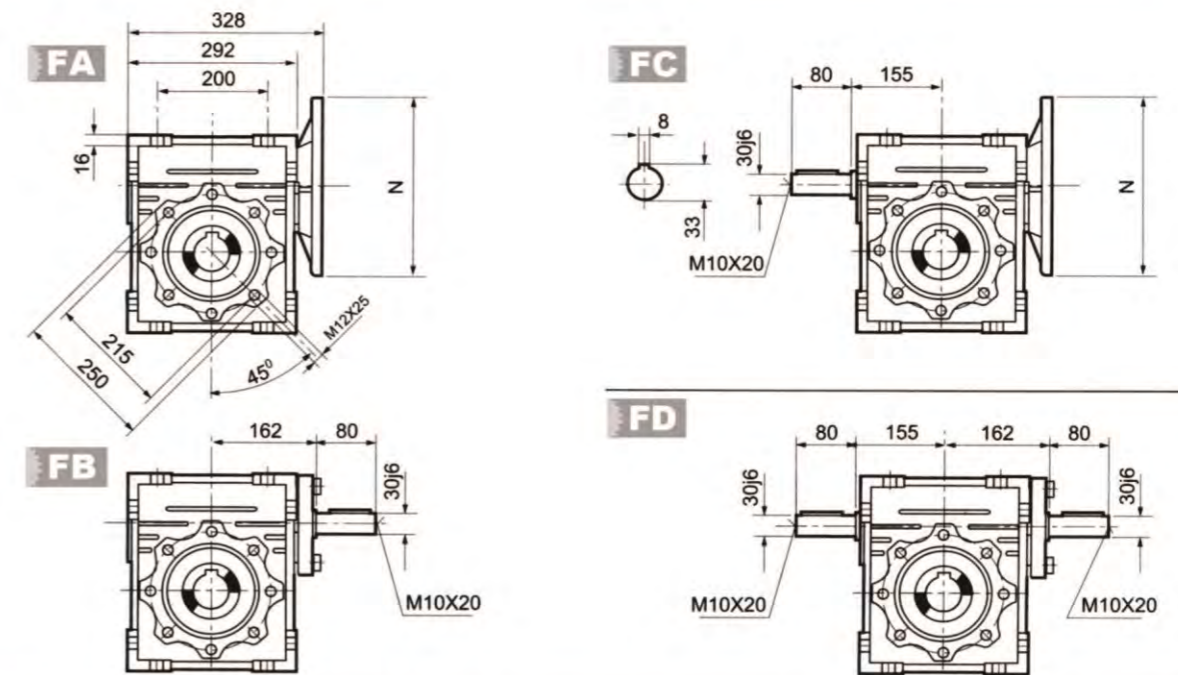
电机型号 Motor Type	N	N ₁	N ₂	N ₃	M	M ₁	M ₂
P100/112B5	250	215	180	13.5	28	31.3	8
P100/112B14	160	130	110	9	28	31.3	8
P090B5	200	165	130	11	24	27.3	8
P090B14	140	115	95	9	24	27.3	8
P080B5	200	165	130	11	19	21.8	6
P080B14	120	100	80	7	19	21.8	6

输出法兰型号 Output flange Type	L
ZA	111

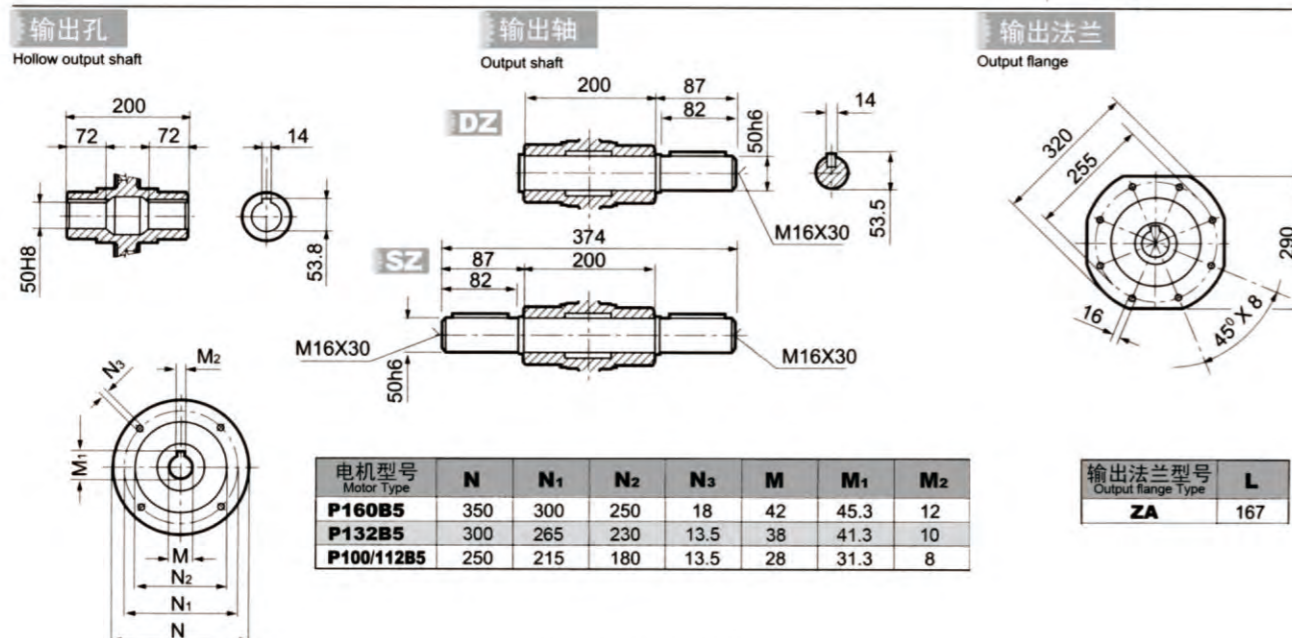
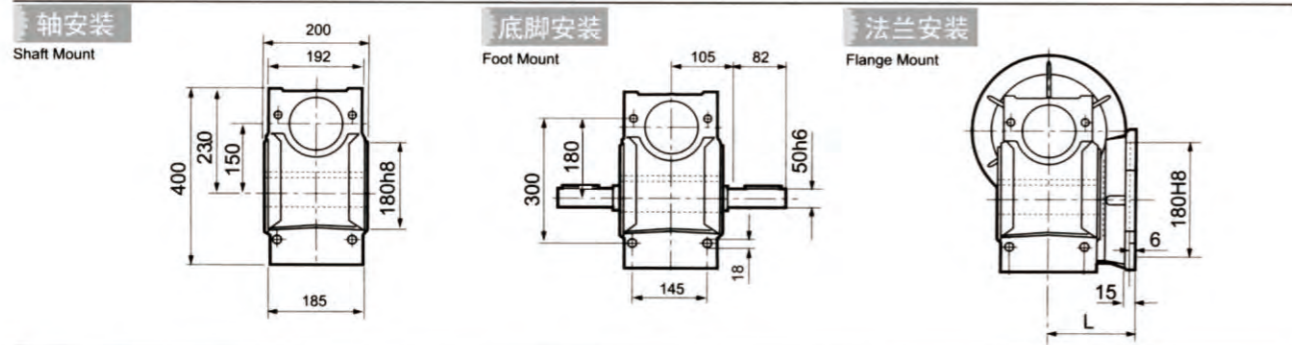
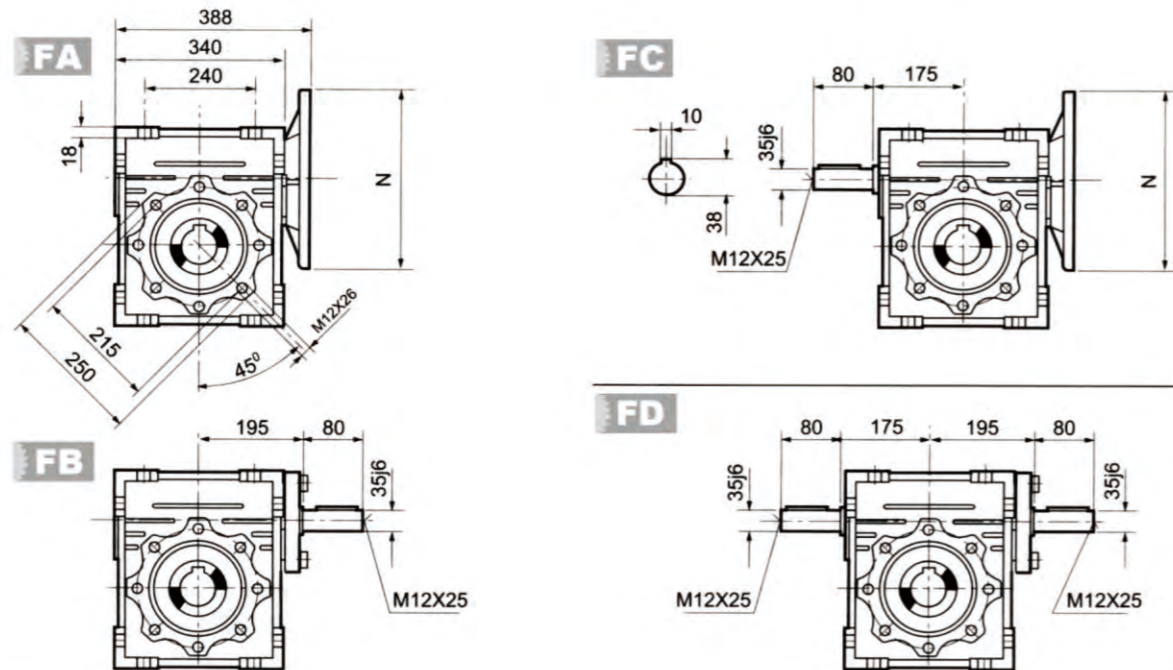
RV110 型安装尺寸图 RV110 Gearbox dimensions



RV130 型安装尺寸图 RV130 Gearbox dimensions



RV150 型安装尺寸图 RV150 Gearbox dimensions



VF Series Catalog VF 目录



VF series worm gear speed reducers
VF系列蜗轮蜗杆减速机
型号 / Type Size of Unit: **VF30~150**
VF/VF30/44~VF/VF86/150
VFR44~VFR150
输出转速 / Output Speed: **30~400r/min**
输出扭矩 / Output Torque: **11~2700N.m**
功率 / Motor Power: **0.04~15kW**

VF series worm gear speed reducers	VF系列蜗轮蜗杆减速机
Product structure 054	产品结构
Code for type 054	型号表示式
VF series mounting positions 055-056	VF系列安装型式
VF/VF series mounting positions 057-058	VF/VF系列安装型式
Do not arrange VF/VF 30/63 gearboxes 059	非固定安装型式VF/VF 30/63
Oil quantity / Life lubricated 059	加油量 / 润滑油添加量 (L)
VF-VF/VF Power coefficient tables 060-079	VF-VF/VF功率参数表
Ratio distribution for VF/VF series gearboxes Ratio 080-081	VF/VF系列减速机速比
VF-VF/VF Gearbox dimensions 082-100	VF-VF/VF减速机尺寸
RB,RBO OPTIONS 101	选项
Accessories VF-VFR-VF/VF 102	VF-VF/VF 附件

VF-VFR-VF/VF 功率参数表 VF-VFR-VF/VF Power coefficient tables

电机额定功率 (Motor rated power) [kW]	0.04	0.06	0.09	0.12	0.18	0.25	0.37	0.55	0.75
页码 (Page)	060	060	060-061	061-062	062-063	063-065	065-066	066-067	067-068
电机额定功率 (Motor rated power) [kW]	1.1	1.5	2.2	3.0	4.0	5.5	7.5	11.0	15.0
页码 (Page)	068-069	069	070	070-071	071	071-072	072	072	072

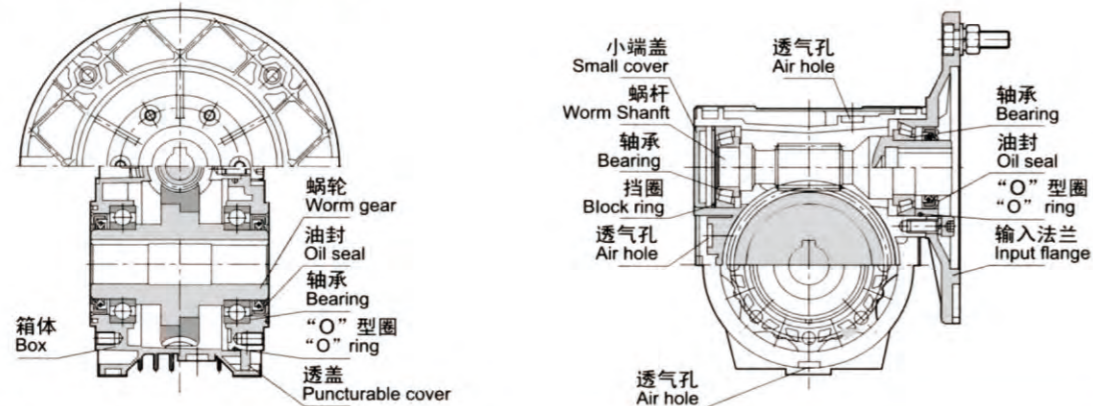
减速机尺寸 Gearbox dimensions

VF减速机型号 Type Size of Unit	30	44	49	63	72	86	110	130	150	HS
页码 (Page)	082	083	084	085	086	087	088	089	090	099
VF/VF减速机型号 Type Size of Unit	30/44	30/49	30/63	44/72	44/86	49/110	63/130	86/150	-	HS
页码 (Page)	091	092	093	094	095	096	097	098	-	100

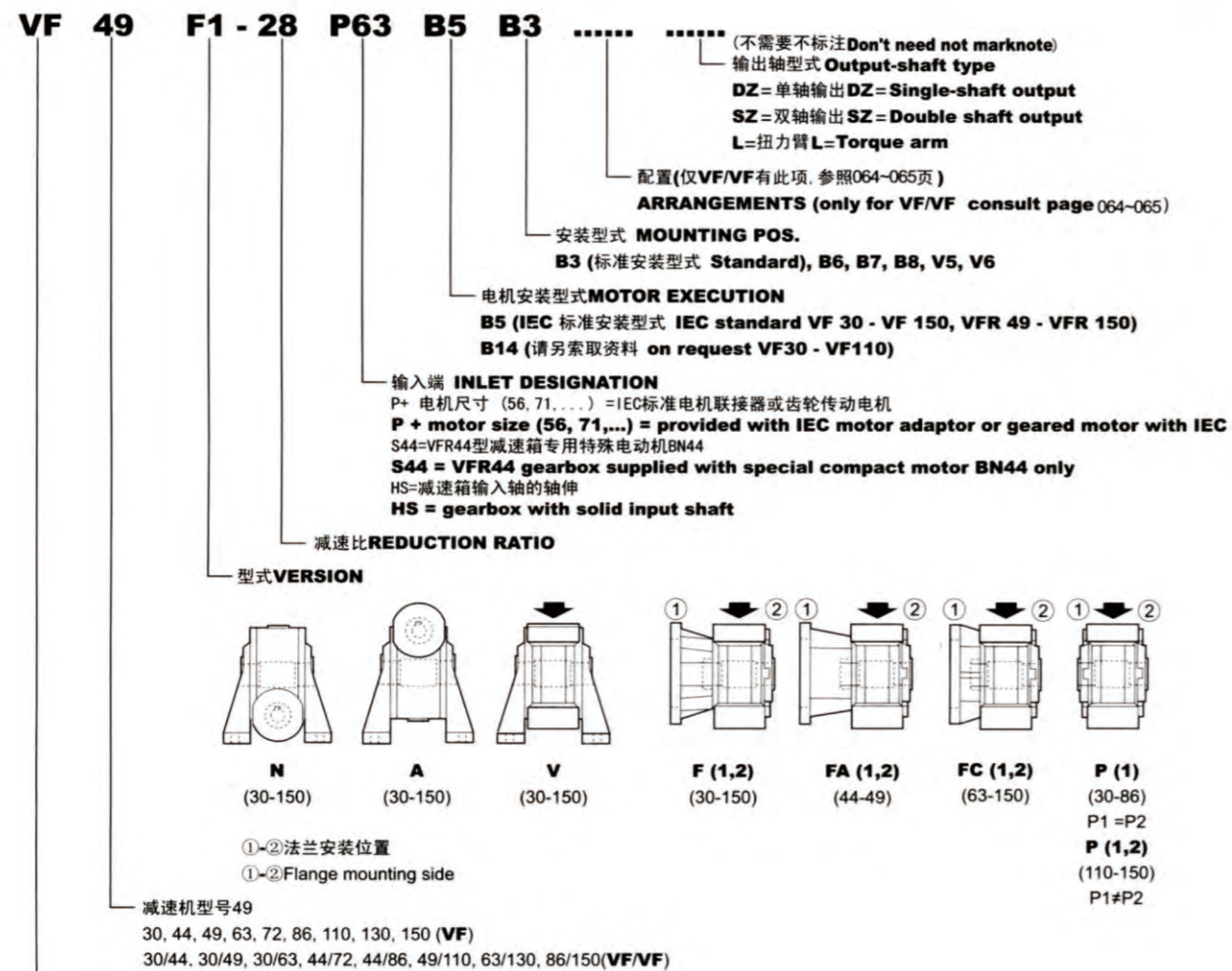
VF系列蜗轮蜗杆减速机 VF series worm gear speed reducers

产品结构 Product structure

* VF30~VF72为铝合金箱体, VF86~VF150为铸铁箱体。
* VF30~VF72 are aluminum alloy boxes. VF86~VF150 are cast iron boxes.



型号表示式 Code for type



减速机类型 GEARBOX TYPE: VF

VF = 蜗轮蜗杆减速机 Worm gearbox VF/VF = 组合减速机 Combined gearbox

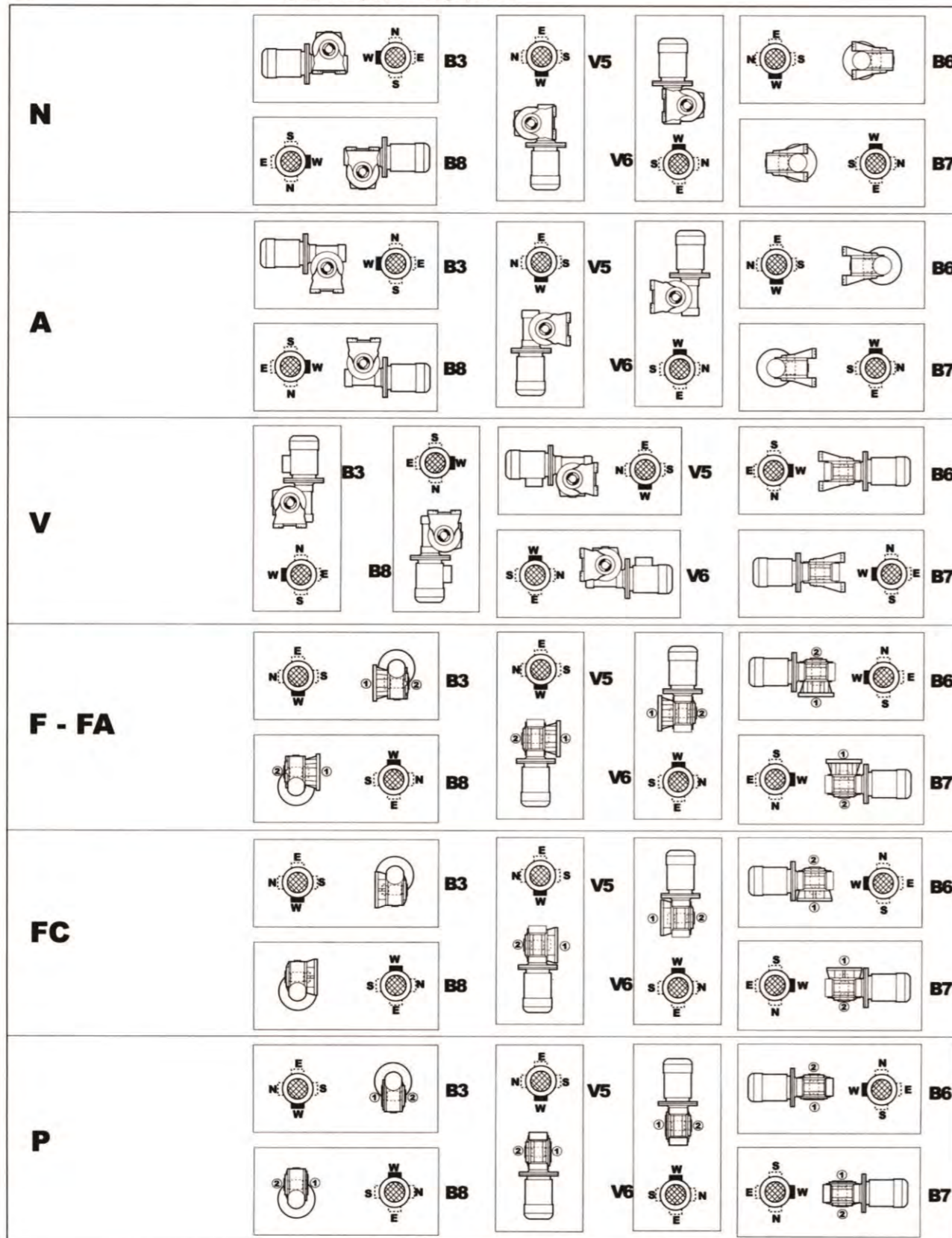
VF 系列安装型式 Mounting position VF series

(T1)	① ② 法兰安装位置 Flange position		
N			
A			
V			
F - FA			
FC			
P			

VF 系列安装型式 Mounting position VF series

(T2)

①② 法兰安装位置 Flange position



VF/VF 系列安装型式 Mounting position VF/VF series

除非另有说明，产品将按下列固定位置供给。

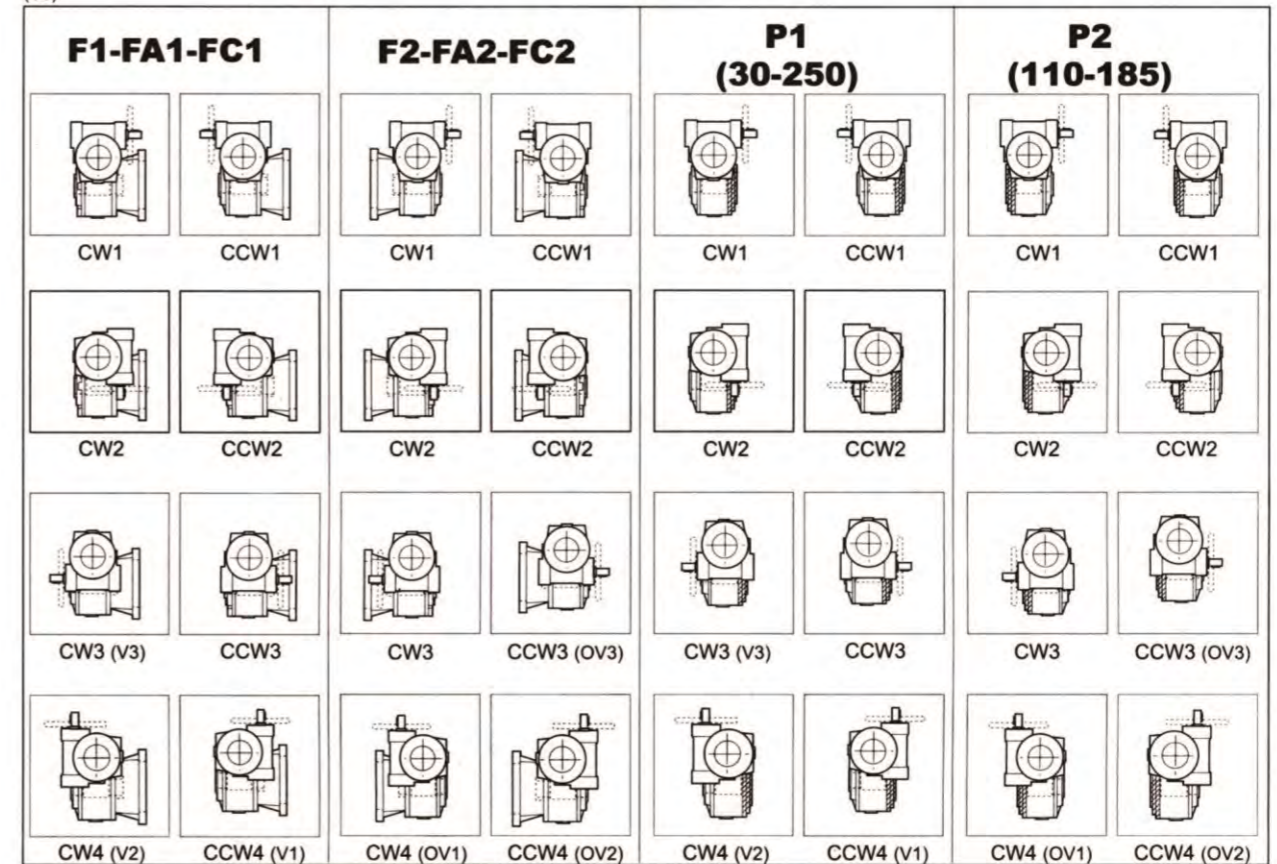
轴-装配封盖

VF/VF series mounting position

Unless otherwise specified, the mounting positions here mentioned will be supplied.

轴-装配封盖

(T5)



(T6)

型号 Type	型式 Version	CW1(1) CCW1(2)	CCW1(1) CW1(2)	CW2(1) CCW2(2)	CCW2(1) CW2(2)	CW3(1) CCW3(2)	CCW3(1) CW3(2)	CW4(1) CCW4(2)	CCW4(1) CW4(2)
VF/VF 30/44_P	F-FA	63B14	63B14	63B14	63B14	63B14	63B14	63B14	63B14
	P								
VF/VF 30/49_P	F-FA	63B14	63B14	63B14	63B14	63B14	63B14	63B14	63B14
	P								
VF/VF 30/63_P	F	63B5-63B14	63B5-63B14	63B5-63B14	63B5-63B14	63B5-63B14	63B5-63B14	63B5-63B14	63B5-63B14
	FC								
	P								
VF/VF 44/72_P	F	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14
	FC			71B5-71B14	71B5-71B14				
	P								
	F								
VF/VF 44/86_P	FC	71B5-71B14	71B5-71B14	63B5-71B14	63B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14
	P								
	F								
VF/VF 49/110_P	FC	#	80B5-80B14	#	#	80B5-80B14	#	80B5-80B14	80B5-80B14
	P	80B5-80B14		#	#		80B5-80B14		
	F								
VF/VF 63/130_P	FC	#	90B5-90B14	71B5-90B14	71B5-90B14	90B5-90B14	#	90B5_90B14	90B5_90B14
	P	90B5-90B14							
VF/VF 86/150_P	F								
	FC	112B5-112B14	112B5-112B14	71B5-90B14	71B5-90B14	112B5-112B14	112B5-112B14	112B5-112B14	112B5-112B14
	P								

请咨询我公司技术部门 Consult our Technical-Commercial service

关于组合型减速机VF/VF, 此版本固定选项说明如图例。选项选择在图表(T5)和(T7)中。

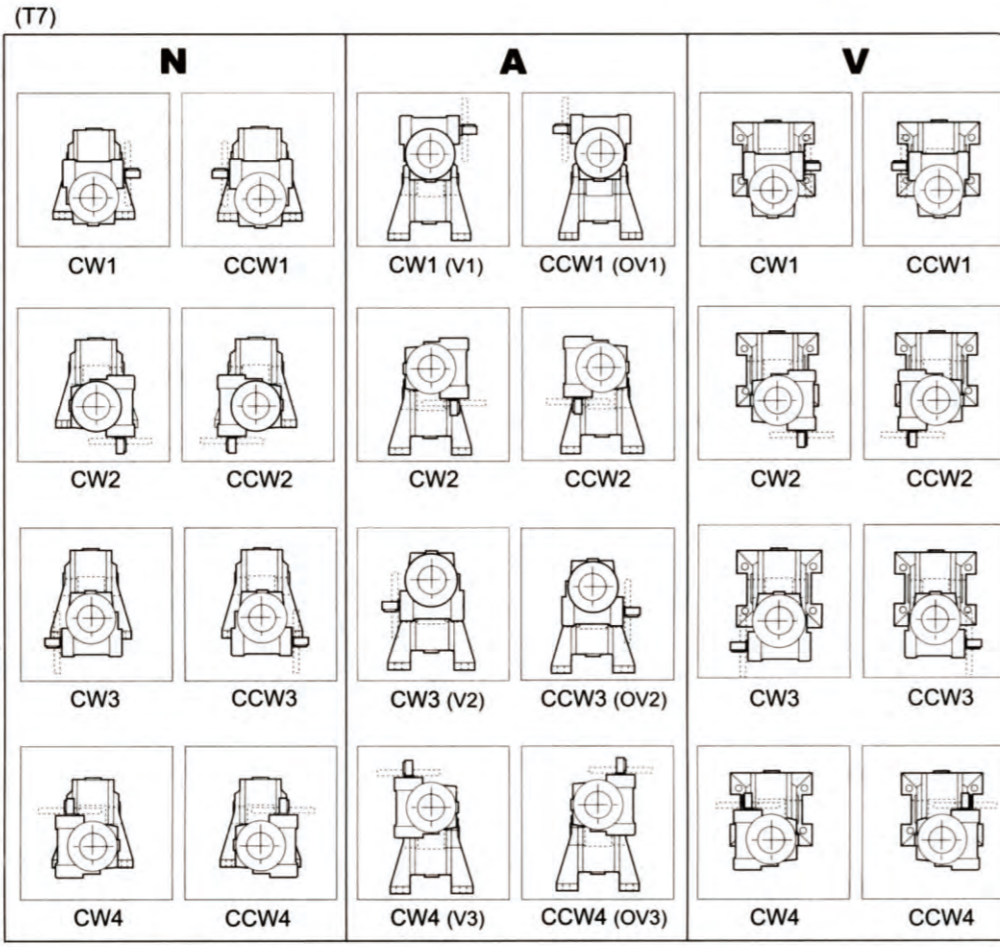
关于HS结构(减速机), 所有固定选项都有说明。关于P结构(减速机设计适合于IEC标准装置)某些固定选项只能使用IEC标准相同尺寸的凸缘电机(B5或B14)或标明在表格(T5)和(T6)中。

ARRANGEMENTS

For the VF/VF combined gearboxes, in addition to the version, the mounting option must be also specified. Select your option from those shown in tables (T5) and (T7).

For the HS configuration (gearbox), all the mounting options shown are available.

For the P configuration (gearbox designed for IEC installation), certain mounting options can be obtained only by using IEC flanges (B5 or B14) of the same size or smaller than those shown in tables (T5) and (T6).



(T8)

型号 Type	型式 Version	CW1	CCW1	CW2	CCW2	CW3	CCW3	CW4	CCW4	
VF/VF 30/44_P	N	63B14	63B14	63B14	63B14	63B14	63B14	63B14	63B14	
	A									
	V									
VF/VF 30/49_P	N	63B14	63B14	63B14	63B14	63B14	63B14	63B14	63B14	
	A									
	V									
VF/VF 30/63_P	N	63B5-63B14	63B5-63B14	63B5-63B14	63B5-63B14	56B5-63B14	56B5-63B14	56B5-63B14	56B5-63B14	
	A			56B5-63B14	56B5-63B14	63B5-63B14	63B5-63B14	56B5-63B14	56B5-63B14	56B5-63B14
	V			63B5-63B14	63B5-63B14	63B5-63B14	63B5-63B14	63B5-63B14	63B5-63B14	63B5-63B14
VF/VF 44/72_P	N	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	
	A			71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14
	V			71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14
VF/VF 44/86_P	N	63B5-71B14	63B5-71B14	71B5-71B14	71B5-71B14	-	-	71B5-71B14	71B5-71B14	
	A			71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14
	V			71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14	71B5-71B14
VF/VF 49/110_P	N	71B5-80B14	71B5-80B14	80B5-80B14	80B5-80B14	80B14	80B14	63B5-80B14	63B5-80B14	
	A			80B5-80B14	80B5-80B14	80B5-80B14	80B5-80B14	80B5-80B14	80B5-80B14	80B5-80B14
	V			80B5-80B14	80B5-80B14	80B5-80B14	80B5-80B14	80B5-80B14	80B5-80B14	80B5-80B14
VF/VF 63/130_P	N	71B5-90B14	71B5-90B14	90B5-90B14	90B5-90B14	#	#	71B5-90B14	71B5-90B14	
	A			71B5-90B14	71B5-90B14	90B5-90B14	90B5-90B14	90B5-90B14	90B5-90B14	90B5-90B14
	V			90B5-90B14	90B5-90B14	90B5-90B14	90B5-90B14	90B5-90B14	90B5-90B14	90B5-90B14
VF/VF 86/150_P	N	112B5-112B14	112B5-112B14	112B5-112B14	112B5-112B14	71B5-112B14	71B5-112B14	71B5-112B14	71B5-112B14	
	A			112B5-112B14	112B5-112B14	112B5-112B14	112B5-112B14	112B5-112B14	112B5-112B14	112B5-112B14
	V			112B5-112B14	112B5-112B14	112B5-112B14	112B5-112B14	112B5-112B14	112B5-112B14	112B5-112B14

#. 请咨询我公司技术部门 Consult our Technical Service

(T9) 非固定安装型式 VF/VF 30/63减速机的说明
Do not arrange VF/VF 30/63 gearboxes in the mounting positions listed below.

型号 Type	型式 Version	不允许安装型式 Non-allowed mounting positions
VF/VF 30/63	N	V6
	A	V6
	V	B3
	F	V6
	FC	V6
	P	V6





附: 加油量 Oil quantity (L)

T18

型号 Type	型式 Version	输入 Input	安装型式 Mounting positions					
			B3	V6	V5	B8	B6	B7
VF 30	N-A-V-F-P	HS - P	0.045	0.045	0.045	0.045	0.045	0.045
VF 44	N-A-V-F-FA-P		0.075	0.075	0.075	0.075	0.075	0.075
VF 49	N-A-V-F-FA-P		0.120	0.120	0.120	0.120	0.120	0.120
VF 63	N-A-V-F-FC-P		0.320	0.320	0.320	0.320	0.320	0.320
VF 72	N-A-V-F-FC-P		0.500	0.500	0.500	0.500	0.500	0.500
VF 86	N-A-V-F-FC-P		0.870	0.870	0.870	0.870	0.870	0.870
VF 110	N	HS - P	1.7	2.7	2.5	2.4	1.9	1.9
	A-F-FC-P	HS	2.8	2.6	2.6	1.7	1.9	1.9
	A-F-FC-P	P	2.4	2.6	2.6	1.7	1.9	1.9
	V	HS - P	2.7	1.9	2.4	2.5	1.9	1.9
VF 130	N	HS - P	2.3	3.4	3.2	3.0	2.5	2.5
	A-F-FC-P	HS	3.9	3.3	3.3	2.3	2.5	2.5
	A-F-FC-P	P	3.0	3.3	3.3	2.3	2.5	2.5
	V	HS - P	3.4	2.5	3.0	3.1	2.5	2.5
VF 150	N	HS - P	3.0	4.0	3.8	4.3	3.5	3.5
	A-F-FC-P	HS	4.5	3.9	3.9	3.0	3.5	3.5
	A-F-FC-P	P	4.3	3.9	3.9	3.0	3.5	3.5
	V	HS - P	4.0	3.0	4.3	3.6	3.5	3.5

功率参数表 Power coefficient tables

0.04 kW

n2 r/min	M2 N.m	s.f	i	Fr2 N				
0.30	179	1.2	2700	5000	-	VF/NF 30/63_2700	P56 5616 *	093
0.36	183	1.2	2280	5000	-	VF/NF 30/63_2280	P56 5616 *	093
0.54	122	1.8	1520	5000	-	VF/NF 30/63_1520	P56 5616 *	093
0.68	105	2.1	1200	5000	-	VF/NF 30/63_1200	P56 5616 *	093
0.91	91	2.4	900	5000	-	VF/NF 30/63_900	P56 5616 *	093
1.1	80	2.7	720	5000	-	VF/NF 30/63_720	P56 5616 *	093
1.4	72	3.1	570	5000	-	VF/NF 30/63_570	P56 5616 *	093
1.8	66	3.3	450	5000	-	VF/NF 30/63_450	P56 5616 *	093
2.6	45	4.9	315	5000	-	VF/NF 30/63_315	P56 5616 *	093
3.4	38	5.8	240	5000	-	VF/NF 30/63_240	P56 5616 *	093
11.7	11	1.5	70	1650	VF 30-70	-	P56 5616 *	082
13.7	10	2.0	60	1650	VF 30-60	-	P56 5616 *	082
20.5	8	2.6	40	1650	VF 30-40	-	P56 5616 *	082
27.3	6	3.4	30	1620	VF 30-30	-	P56 5616 *	082
41	5	4.1	20	1420	VF 30-20	-	P56 5616 *	082
55	4	5.2	15	1300	VF 30-15	-	P56 5616 *	082
82	3	6.5	10	1140	VF 30-10	-	P56 5616 *	082
117	2	9.0	7	1010	VF 30-7	-	P56 5616 *	082





0.06 kW

0.59	209	1.0	2280	5000	-	VF/NF 30/63_2280	P56 5614 *	093
0.68	210	1.0	1200	5000	-	VF/NF 30/63_1200	P56 5626 *	093
0.88	157	1.3	1520	5000	-	VF/NF 30/63_1520	P56 5614 *	093
1.1	125	1.6	1200	5000	-	VF/NF 30/63_1200	P56 5614 *	093
1.5	114	1.8	900	5000	-	VF/NF 30/63_900	P56 5614 *	093
1.9	114	1.8	720	5000	-	VF/NF 30/63_720	P56 5614 *	093
2.4	96	2.1	570	5000	-	VF/NF 30/63_570	P56 5614 *	093
3.0	78	2.6	450	5000	-	VF/NF 30/63_450	P56 5614 *	093
3.4	75	2.9	240	5000	-	VF/NF 30/63_240	P56 5626 *	093
4.3	57	3.5	315	5000	-	VF/NF 30/63_315	P56 5614 *	093
13.7	20	1.0	60	1650	VF 30_60	-	P56 5626 *	082
19.1	14	1.0	70	1600	VF 30_70	-	P56 5614 *	082
22.3	13	1.5	60	1600	VF 30_60	-	P56 5614 *	082
27.3	13	1.7	30	1550	VF 30_30	-	P56 5626 *	082
34	10	1.9	40	1650	VF 30_40	-	P56 5614 *	082
41	10	2.0	20	1360	VF 30_20	-	P56 5626 *	082
45	8	2.4	30	1340	VF 30_30	-	P56 5614 *	082
55	8	2.6	15	1250	VF 30_15	-	P56 5626 *	082
67	6	2.9	20	1180	VF 30_20	-	P56 5614 *	082
89	5	3.7	15	1080	VF 30_15	-	P56 5614 *	082
134	3	4.6	10	950	VF 30_10	-	P56 5614 *	082
191	3	6.4	7	840	VF 30_7	-	P56 5614 *	082

0.09 kW

0.32	576	1.6	2800	8000	-	VF/NF 49/110_2800	P63 6316	096
0.42	569	0.9	2116	7000	-	VF/NF 44/86_2116	P63 6316	095
0.43	509	1.9	2070	8000	-	VF/NF 49/110_2070	P63 6316	096
0.48	506	1.0	1840	7000	-	VF/NF 44/86_1840	P63 6316	095
0.54	480	2.0	1656	8000	-	VF/NF 49/110_1656	P63 6316	096
0.64	379	1.3	1380	7000	-	VF/NF 44/86_1380	P63 6316	095
0.66	360	2.6	1350	8000	-	VF/NF 49/110_1350	P63 6316	096
0.74	364	0.9	1200	5750	-	VF/NF 44/72_1200	P63 6316	094
0.82	309	3.1	1080	8000	-	VF/NF 49/110_1080	P63 6316	093
0.88	235	0.9	1520	5000	-	VF/NF 30/63_1520	P56 5624 *	093
0.97	324	1.0	920	5750	-	VF/NF 44/72_920	P63 6316	094
0.97	325	1.5	920	7000	-	VF/NF 44/86_920	P63 6316	095
0.99	250	0.9	900	5000	-	VF/NF 30/63_900	P63 6316	093

0.09 kW

n2 r/min	M2 N.m	s.f	i	Fr2 N				
1.1	188	1.1	1200	5000	-	VF/NF 30/63_1200	P56 5624 *	093
1.2	222	1.0	720	5000	-	VF/NF 30/63_720	P63 6316	093
1.3	265	1.2	700	5750	-	VF/NF 44/72_700	P63 6316	094
1.3	253	2.0	700	7000	-	VF/NF 44/86_700	P63 6316	095
1.5	171	1.2	900	5000	-	VF/NF 30/63_900	P56 5624 *	093
1.7	208	1.5	525	5750	-	VF/NF 44/72_525	P63 6316	094
1.7	198	2.5	525	7000	-	VF/NF 44/86_525	P63 6316	095
1.9	171	1.2	720	5000	-	VF/NF 30/63_720	P56 5624 *	093
2.2	162	2.0	400	5750	-	VF/NF 44/72_400	P63 6316	094
2.2	157	3.2	400	7000	-	VF/NF 44/86_400	P63 6316	095
2.4	145	1.4	570	5000	-	VF/NF 30/63_570	P56 5624 *	093
3.0	132	2.4	300	5750	-	VF/NF 44/72_300	P63 6316	094
3.0	118	1.7	450	5000	-	VF/NF 30/63_450	P56 5624 *	093
3.6	127	2.5	250	5750	-	VF/NF 44/72_250	P63 6316	094
3.7	101	1.0	240	3450	-	VF/NF 30/49_240	P63 6316	092
3.7	105	2.1	240	5000	-	VF/NF 30/63_240	P63 6316	093
4.3	85	2.3	315	5000	-	VF/NF 30/63_315	P56 5624 *	093
5.6	72	2.8	240	5000	-	VF/NF 30/63_240	P56 5624 *	093
8.9	41	1.3	100	3300	VF 49_100	-	P63 6316	084
11.1	36	1.6	80	3300	VF 49_80	-	P63 6316	084
12.7	34	1.1	70	2300	VF 44_70	-	P63 6316	083
12.7	34	1.8	70	3300	VF 49_70	-	P63 6316	084
14.8	31	1.4	60	2300	VF 44_60	-	P63 6316	083
14.8	31	2.1	60	3300	VF 49_60	-	P63 6316	084
19.3	26	1.9	46	2300	VF 44_46	-	P63 6316	083
19.8	26	2.8	45	3300	VF 49_45	-	P63 6316	084
22.3	20	1.0	60	1600	VF 30_60	-	P56 5624 *	082
24.7	22	3.4	36	3300	VF 49_36	-	P63 6316	084
25.4	22	2.3	35	2300	VF 44_35	-	P63 6316	083
29.7	18	1.2	30	1440	VF 30_30	-	P63 6316	082
32	18	2.7	28	2300	VF 44_28	-	P63 6316	082
34	15	1.2	40	1410	VF 30_40	-	P56 5624 *	082
45	14	3.1	20	2300	VF 44_20	-	P63 6316	083
45	13	1.6	30	1290	VF 30_30	-	P56 5624 *	082
59	11	1.9	15	1170	VF 30_15	-	P63 6316	082
67	9	1.9	20	1140	VF 30_20	-	P56 5624 *	082
89	7	2.5	15	1050	VF 30_15	-	P56 5624 *	082
134	5	3.1	10	920	VF 30_10	-	P56 5624 *	082
191	4	4.2	7	820	VF 30_7	-	P56 5624 *	082

0.12 kW

0.31	786	1.2	2800	8000	-	VF/NF 49/110_2800	P63 6326	096
0.48	560	1.6	2800	8000	-	VF/NF 49/110_2800	P63 6314	096
0.53	655	1.5	1656	8000	-	VF/NF 49/110_1656	P63 6326	096
0.64	509	0.9	2116	7000	-	VF/NF 44/86_2116	P63 6314	095
0.65	487	1.8	2070	8000	-	VF/NF 49/110_2070	P63 6314	096
0.73	467	1.0	1840	7000	-	VF/NF 44/86_1840	P63 6314	095
0.82	415	2.2	1656	8000	-	VF/NF 49/110_1656	P63 6314	096
0.98	373	1.2	1380	7000	-	VF/NF 44/86_1380	P63 6314	095
1.0	339	2.7	1350	8000	-	VF/NF 49/110_1350	P63 6314	096
1.3	287	3.1	1080	8000	-	VF/NF 49/110_1080	P63 6314	096
1.5	311	1.0	920	5750	-	VF/NF 44/72_920	P63 6314	094
1.5	311	1.4	920	7000	-	VF/NF 44/86_920	P63 6314	095
1.5	226	0.9	900	5000	-	VF/NF 30/63_900	P63 6314	093
1.9	226	0.9	720	5000	-	VF/NF 30/63_720	P63 6314	093
1.9	249	1.2	700	5750	-	VF/NF 44/72_700	P63 6314	094
1.9	233	1.9	700	7000	-	VF/NF 44/86_700	P63 6314	095
2.4	191	1.0	570	5000	-	VF/NF 30/63_570	P63 6314	093
2.6	196	1.5	525	5750	-	VF/NF 44/72_525	P63 6314	094
2.6	187	2.4	525	7000	-	VF/NF 44/86_525	P63 6314	095
3.0	156	1.3	450	5000	-	VF/NF 30/63_450	P63 6314	093



0.12 kW

n2 r/min	M2 N.m	s.f	i	Fr2 N				
3.4	156	1.9	400	5750	-	VF/NF 44/72_400	P63 6314	094
3.4	140	3.2	400	7000	-	VF/NF 44/86_400	P63 6314	095
3.6	144	1.5	240	5000	-	VF/NF 30/63_240	P63 6326	093
4.3	107	0.9	315	3450	-	VF/NF 30/49_315	P63 6314	092
4.3	113	1.8	315	5000	-	VF/NF 30/63_315	P63 6314	091
4.5	129	2.3	300	5750	-	VF/NF 44/72_300	P63 6314	094
5.4	120	2.5	250	5750	-	VF/NF 44/72_250	P63 6314	094
5.6	91	1.0	240	3450	-	VF/NF 30/49_240	P63 6314	092
5.6	96	2.1	240	5000	-	VF/NF 30/63_240	P63 6314	093
8.7	55	0.9	100	3300	VF 49_100	-	P63 6326	096
10.9	50	1.2	80	3300	VF 49_80	-	P63 6326	084
13.5	40	1.2	100	3150	VF 49_100	-	P63 6314	084
14.5	43	1.1	60	2300	VF 44_60	-	P63 6326	083
16.9	35	1.5	80	3150	VF 49_80	-	P63 6314	084
19.3	33	0.9	70	3300	VF 44_70	-	P63 6314	083
19.3	32	1.7	70	3150	VF 49_70	-	P63 6314	084
22.5	30	1.3	60	2300	VF 44_60	-	P63 6314	083
22.5	30	2.0	60	3150	VF 49_60	-	P63 6314	084
29.0	24	0.9	30	1360	VF 30_30	-	P63 6326	082
29.3	25	1.6	46	2300	VF 44_46	-	P63 6314	083
30	24	2.7	45	3040	VF 49_45	-	P63 6314	084
34	20	0.9	40	1360	VF 30_40	-	P63 6314	082
38	20	3.4	36	2830	VF 49_36	-	P63 6314	084
39	20	1.9	35	2300	VF 44_35	-	P63 6314	083
45	17	1.2	30	1250	VF 30_30	-	P63 6314	082
48	17	2.3	28	2300	VF 44_28	-	P63 6314	083
58	15	1.4	15	1130	VF 30_15	-	P63 6326	082
62	14	2.7	14	2150	VF 44_14	-	P63 6326	083
68	12	1.5	20	1110	VF 30_20	-	P63 6314	082
68	13	3.0	20	2100	VF 44_20	-	P63 6314	083
90	10	1.9	15	1020	VF 30_15	-	P63 6314	082
96	10	3.0	14	1870	VF 44_14	-	P63 6314	083
124	8	2.4	7	900	VF 30_7	-	P63 6326	082
135	7	2.3	10	900	VF 30_10	-	P63 6314	082
193	5	3.2	7	810	VF 30_7	-	P63 6314	082

0.18 kW

0.28	985	1.9	3200	13800	-	VF/NF 63/130_3200	P71 7116	097
0.30	1396	1.9	2944	16000	-	VF/NF 86/150_2944	P71 7116	098
0.35	1046	1.8	2560	13800	-	VF/NF 63/130_2560	P71 7116	097
0.48	853	1.1	2800	8000	-	VF/NF 49/110_2800	P63 6324	096
0.49	1286	2.1	1840	16000	-	VF/NF 86/150_1840	P71 7116	098
0.50	905	2.0	1800	13800	-	VF/NF 63/130_1800	P71 7116	097
0.54	955	1.0	1656	8000	-	VF/NF 49/110_1656	P71 7116	096
0.59	881	2.1	1520	13800	-	VF/NF 63/130_1520	P71 7116	097
0.64	741	1.2	2070	8000	-	VF/NF 49/110_2070	P63 6324	096
0.65	1062	2.5	1380	16000	-	VF/NF 86/150_1380	P71 7116	098
0.75	744	2.5	1200	13800	-	VF/NF 63/130_1200	P71 7116	097
0.80	632	1.4	1656	8000	-	VF/NF 49/110_1656	P63 6324	096
0.93	644	2.9	960	13800	-	VF/NF 63/130_960	P71 7116	097
0.97	764	3.5	920	16000	-	VF/NF 86/150_920	P71 7116	098
0.99	517	1.7	1350	8000	-	VF/NF 49/110_1350	P63 6324	096
1.2	540	3.4	760	13800	-	VF/NF 63/130_760	P71 7116	097
1.2	437	2.1	1080	8000	-	VF/NF 49/110_1080	P63 6324	096
1.4	474	1.0	920	7000	-	VF/NF 44/86_920	P63 6324	095
1.7	393	1.3	525	7000	-	VF/NF 44/86_525	P71 7116	095
1.8	371	2.4	720	8000	-	VF/NF 49/110_720	P63 6324	096
1.9	355	1.3	700	7000	-	VF/NF 44/86_700	P63 6324	095
2.2	322	1.0	400	5750	-	VF/NF 44/72_400	P71 7116	094
2.2	312	1.6	400	7000	-	VF/NF 44/86_400	P71 7116	095

0.18 kW

n2 r/min	M2 N.m	s.f	i	Fr2 N				
2.2	344	2.8	400	8000	-	VF/NF 49/110_400	P71 7116	096
2.5	284	3.2	540	8000	-	VF/NF 49/110_540	P63 6324	096
2.5	299	1.0	525	5750	-	VF/NF 44/72_525	P63 6324	094
2.5	284	1.6	525	7000	-	VF/NF 44/86_525	P63 6324	095
3.0	263	1.2	300	5750	-	VF/NF 44/72_300	P71 7116	094
3.0	245	2.0	300	7000	-	VF/NF 44/66_300	P71 7116	093
3.0	273	3.5	300	8000	-	VF/NF 49/110_300	P71 7116	096
3.3	237	1.3	400	5750	-	VF/NF 44/72_400	P63 6324	094
3.3	213	2.1	400	7000	-	VF/NF 44/86_400	P63 6324	095
3.9	232	2.2	230	7000	-	VF/NF 44/86_230	P71 7116	095
4.2	172	1.2	315	5000	-	VF/NF 30/63_315	P63 6324	093
4.4	196	1.5	300	5750	-	VF/NF 44/72_300	P63 6324	094
4.4	174	2.6	300	7000	-	VF/NF 44/86_300	P63 6324	095
5.3	183	1.6	250	5750	-	VF/NF 44/72_250	P63 6324	094
5.5	146	1.4	240	5000	-	VF/NF 30/63_240	P63 6324	093
5.8	161	2.8	230	7000	-	VF/NF 44/86_230	P63 6324	095
9.0	86	1.4	100	5000	VF 63_100	-	P71 7116	085
9.0	92	1.5	100	5500	VF 72_100	-	P71 7116	086
9.0	104	2.3	100	6600	VF 86_100	-	P71 7116	087
11.2	78	1.5	80	5000	VF 63_80	-	P71 7116	085
11.2	81	1.8	80	5500	VF 72_80	-	P71 7116	086
11.2	89	3.0	80	6600	VF 86_80	-	P71 7116	087
14.0	68	1.9	64	5200	VF 63_64	-	P71 7116	085
14.9	61	1.0	60	3000	VF 49_60	-	P71 7116	084
14.9	68	2.6	60	5500	VF 72_60	-	P71 7116	086
16.6	54	1.0	80	3150	VF 49_80	-	P63 6324	084
17.9	60	3.2	50	5500	VF 72_50	-	P71 7116	086
19.0	49	1.1	70	3150	VF 49_70	-	P63 6314	084
19.9	54	2.8	45	5000	VF 63_45	-	P71 7116	085
22.2	45	0.9	60	2300	VF 44_60	-	P63 6314	083
22.2	45	1.3	60	3150	VF 49_60	-	P63 6324	084
23.6	47	3.4	38	5000	VF 63_38	-	P71 7116	085
28.9	37	1.0	46	2500	VF 44_46	-	P63 6324	083
29.6	37	1.8	45	2300	VF 49_45	-	P63 6324	084
32	36	1.4	28	2290	VF 44_28	-	P71 7116	083
37	31	2.2	36	2760	VF 49_36	-	P63 6324	084
38	31	1.3	35	2430	VF 44_35	-	P63 6324	083
48	26	1.5	28	2270	VF 44_28	-	P63 6324	083
48	26	2.9	28	2560	VF 49_28	-	P63 6324	084
55	23	2.7	24	2430	VF 49_24	-	P63 6324	084
67	19	1.0	20	1040	VF 30_20	-	P63 6324	082
67	20	2.0	20	2040	VF 44_20	-	P63 6324	083
74	18	3.3	18	2230	VF 49_18	-	P63 6324	084
89	15	1.2	15	960	VF 30_15	-	P63 6324	082
95	15	2.0	14	1830	VF 44_14	-	P63 6324	083
133	10	1.5	10	860	VF 30_10	-	P63 6324	082
133	11	2.7	10	1640	VF 44_10	-	P63 6324	083
190	8	2.1	7	770	VF 30_7	-	P63 6324	082

0.25 kW

0.28	1376	1.3	3200	13800	-	VF/NF 63/130_3200	P71 7126	097
0.30	1950	1.4	2944	16000	-	VF/NF 86/150_2944	P71 7126	098
0.43	935	1.9	3200	13800	-	VF/NF 63/130_3200	P71 7114	097
0.47	1379	1.9	2944	16000	-	VF/NF 86/150_2944	P71 7114	098
0.54	1018	1.8	2560	13800	-	VF/NF 63/130_2560	P71 7114	097
0.64	1484	1.8	1380	16000	-	VF/NF 86/150_1380	P71 7126	098
0.66	996	0.9	2070	8000	-	VF/NF 49/110_2070	P71 7114	096
0.74	1039	1.8	1200	13800	-	VF/NF 63/130_1200	P71 7126	097
0.75	1203	2.2	1840	16000	-	VF/NF 86/150_1840	P71 7114	098
0.76	881	2.0	1800	13800	-	VF/NF 63/130_1800	P71 7114	097



0.25 kW

n2 r/min	M2 N.m	s.f	i	Fr2 N				
0.83	848	1.1	1656	8000	-	VF/VF 49/110_1656	P71 7114	096
0.90	833	2.2	1520	13800	-	VF/VF 63/130_1520	P71 7114	097
0.97	1067	2.5	920	16000	-	VF/VF 86/150_920	P71 7126	098
1.0	1003	2.6	1380	16000	-	VF/VF 86/150_1380	P71 7114	098
1.0	694	1.3	1350	8000	-	VF/VF 49/110_1350	P71 7114	096
1.1	705	2.6	1200	13800	-	VF/VF 63/130_1200	P71 7114	097
1.2	754	2.5	760	13800	-	VF/VF 63/130_760	P71 7126	097
1.3	587	1.5	1080	8000	-	VF/VF 49/110_1080	P71 7114	096
1.3	875	3.1	690	16000	-	VF/VF 86/150_690	P71 7126	098
1.4	619	2.9	960	13800	-	VF/VF 63/130_960	P71 7114	097
1.6	546	1.7	540	8000	-	VF/VF 49/110_540	P71 7126	096
1.7	550	0.9	525	7000	-	VF/VF 44/86_525	P71 7126	095
1.8	515	3.5	760	13800	-	VF/VF 63/130_760	P71 7114	097
1.9	498	1.8	720	8000	-	VF/VF 49/110_720	P71 7114	096
2.0	477	0.9	700	7000	-	VF/VF 44/86_700	P71 7114	095
2.5	382	2.4	540	8000	-	VF/VF 49/110_540	P71 7114	096
2.6	382	1.2	525	7000	-	VF/VF 44/86_525	P71 7114	095
3.0	368	0.9	300	5750	-	VF/VF 44/72_300	P71 7126	094
3.0	381	2.5	300	8000	-	VF/VF 49/110_300	P71 7126	096
3.4	318	0.9	400	5750	-	VF/VF 44/72_400	P71 7114	094
3.4	286	1.6	400	7000	-	VF/VF 44/86_400	P71 7114	095
3.4	314	2.9	400	8000	-	VF/VF 49/110_400	P71 7124	096
3.9	324	1.5	230	7000	-	VF/VF 44/86_230	P71 7126	095
3.9	316	3.0	230	8000	-	VF/VF 49/110_230	P71 7126	096
4.6	263	1.1	300	5750	-	VF/VF 44/72_300	P71 7114	097
4.6	234	1.9	300	7000	-	VF/VF 44/86_300	P71 7114	095
5.5	246	1.2	250	5750	-	VF/VF 44/72_250	P71 7114	094
6.0	216	2.1	230	7000	-	VF/VF 44/86_230	P71 7114	095
8.9	121	1.0	100	5000	VF 63_100	-	P71 7126	085
8.9	129	1.1	100	5500	VF 72_100	-	P71 7126	086
8.9	145	1.7	100	6600	VF 86_100	-	P71 7126	087
11.1	109	1.1	80	5000	VF 63_80	-	P71 7126	085
11.1	114	1.3	80	5500	VF 72_80	-	P71 7126	086
11.1	124	2.2	80	6600	VF 86_80	-	P71 7126	087
13.8	87	1.3	100	4700	VF 63_100	-	P71 7114	085
13.8	92	1.4	100	5250	VF 72_100	-	P71 7114	086
13.8	101	2.3	100	6300	VF 86_100	-	P71 7114	087
17.2	76	1.5	80	4700	VF 63_80	-	P71 7114	085
17.2	81	1.9	80	5250	VF 72_80	-	P71 7114	086
17.2	88	2.9	80	6300	VF 86_80	-	P71 7114	087
19.8	71	1.0	45	3150	VF 49_45	-	P71 7126	084
21.5	67	1.8	64	4700	VF 63_64	-	P71 7114	085
22.9	60	1.0	60	3150	VF 49_60	-	P71 7114	084
22.9	66	2.4	60	5250	VF 72_60	-	P71 7114	086
23.4	66	2.4	38	4800	VF 63_38	-	P71 7126	085
27.5	58	2.9	50	5250	VF 72_50	-	P71 7114	086
31	49	1.3	45	2850	VF 49_45	-	P71 7114	084
31	52	2.5	45	4550	VF 63_45	-	P71 7114	085
32	50	1.0	28	2300	VF 44_28	-	P71 7126	083
36	46	3.1	38	4320	VF 63_38	-	P71 7114	085
38	42	1.6	36	2670	VF 49_36	-	P71 7114	084
39	41	0.9	35	2300	VF 44_35	-	P71 7114	083
45	40	1.1	20	2190	VF 44_20	-	P71 7126	083
49	35	1.1	28	2190	VF 44_28	-	P71 7114	083
49	35	2.1	28	2480	VF 49_28	-	P71 7114	084
57	31	2.0	24	2360	VF 49_24	-	P71 7114	084
64	29	1.3	14	1980	VF 44_14	-	P71 7126	083
64	29	2.4	14	2260	VF 49_14	-	P71 7126	084
69	27	1.5	20	1970	VF 44_20	-	P71 7114	083
76	24	2.4	18	2170	VF 49_18	-	P71 7114	084

0.25 kW

n2 r/min	M2 N.m	s.f	i	Fr2 N				
89	22	1.8	10	1780	VF 44_10	-	P71 7126	083
89	22	2.9	10	2040	VF 49_10	-	P71 7126	084
98	20	1.5	14	1770	VF 44_14	-	P71 7114	083
98	20	3.3	14	2010	VF 49_14	-	P71 7114	084
127	16	2.4	7	1590	VF 44_7	-	P71 7126	083
138	15	2.0	10	1590	VF 44_10	-	P71 7114	083
196	10	2.8	7	1420	VF 44_7	-	P71 7114	083

0.37 kW

0.31	2823	1.0	2944	16000	-	VF/VF 86/150_2944	P80 8016	098
0.43	1389	1.3	3200	13800	-	VF/VF 63/130_3200	P71 7124	097
0.47	2048	1.3	2944	16000	-	VF/VF 86/150_2944	P71 7124	098
0.54	1512	1.2	2560	13800	-	VF/VF 63/130_2560	P71 7124	097
0.60	1782	1.0	1520	13800	-	VF/VF 63/130_1520	P80 8016	097
0.66	2148	1.3	1380	16000	-	VF/VF 86/150_1380	P80 8016	098
0.74	1787	1.5	1840	16000	-	VF/VF 86/150_1840	P71 7124	098
0.76	1309	1.4	1800	13800	-	VF/VF 63/130_1800	P71 7124	097
0.90	1237	1.5	1520	13800	-	VF/VF 63/130_1520	P71 7124	097
0.99	1489	1.7	1380	16000	-	VF/VF 86/150_1380	P71 7124	098
1.0	1031	0.9	1350	8000	-	VF/VF 49/110_1350	P71 7124	096
1.1	1047	1.7	1200	13800	-	VF/VF 63/130_1200	P71 7124	097
1.3	873	1.0	1080	8000	-	VF/VF 49/110_1080	P71 7124	096
1.3	1267	2.1	690	16000	-	VF/VF 86/150_690	P80 8016	098
1.4	920	2.0	960	13800	-	VF/VF 63/130_960	P71 7124	096
1.5	1069	2.4	920	16000	-	VF/VF 86/150_920	P71 7124	098
1.7	790	1.2	540	8000	-	VF/VF 49/110_540	P80 8016	096
1.7	1062	2.5	529	16000	-	VF/VF 86/150_529	P80 8016	098
1.8	765	2.4	760	13800	-	VF/VF 63/130_760	P71 7124	097
1.9	740	1.2	720	8000	-	VF/VF 49/110_720	P71 7124	096
2.0	894	2.9	690	16000	-	VF/VF 86/150_690	P71 7124	098
2.3	619	2.9	600	13800	-	VF/VF 63/130_600	P71 7124	097
2.5	567	1.6	540	8000	-	VF/VF 49/110_540	P71 7124	096
2.6	756	3.4	529	16000	-	VF/VF 86/150_529	P71 7124	098
3.0	552	1.7	300	8000	-	VF/VF 49/110_300	P80 8016	096
3.4	425	1.1	400	7000	-	VF/VF 44/86_400	P71 7124	095
3.4	466	1.9	400	8000	-	VF/VF 49/110_400	P71 7124	096
4.0	457	2.1	230	8000	-	VF/VF 49/110_230	P80 8016	096
4.6	347	1.3	300	7000	-	VF/VF 44/86_300	P71 7124	095
4.6	374	2.4	300	8000	-	VF/VF 49/110_300	P71 7124	096
6.0	321	1.4	230	7000	-	VF/VF 44/86_230	P71 7124	095
6.0	309	2.9	230	8000	-	VF/VF 49/110_230	P71 7124	096
9.1	210	1.1	100	7000	VF 86_100	-	P80 8016	072
9.1	221	2.2	100	7700	VF 110_100	-	P80 8016	088
11.4	165	0.9	80	5500	VF 72_80	-	P80 8016	086
11.4	180	1.5	80	7000	VF 86_80	-	P80 8016	087
11.4	189	2.7	80	7700	VF 110_80	-	P80 8016	088
13.7	129	0.9	100	4700	VF 63_100	-	P71 7124	085
13.7	137	1.0	100	5250	VF 72_100	-	P71 7124	086
13.7	150	1.5	100	6300	VF 86_100	-	P71 7124	087
14.2	162	3.3	64	7700	VF 110_64	-	P80 8016	088
15.2	137	1.3	60	5500	VF 72_60	-	P80 8016	086
17.1	113	1.0	80	4700	VF 63_80	-	P71 7124	085
17.1	120	1.3	80	5250	VF 72_80	-	P71 7124	086
17.1	130	2.0	80	6300	VF 86_80	-	P71 7124	087
19.8	121	2.7	46	6720	VF 86_46	-	P80 8016	087
21.4	99	1.2	64	4700	VF 63_64	-	P71 7124	085
21.4	111	2.5	64	6300	VF 86_64	-	P71 7124	087
22.8	97	1.6	60	5250	VF 72_60	-	P71 7124	086
24.5	100	2.8	56	6390	VF 86_56	-	P71 7124	087
27.4	86	2.0	50	5250	VF 72_50	-	P71 7124	086
30	73	0.9	45	2680	VF 49_45	-	P71 7124	084
30	77	1.7	45	4390	VF 63_45	-	P71 7124	085
36	68	2.1	38	4180	VF 63_38	-	P71 7124	085



0.37 kW

n2 r/min	M2 N.m	s.f	i	Fr2 N				
36	73	3.0	25	5200	VF 72_25	-	P80 8016	086
38	62	1.1	36	2530	VF 49_36	-	P71 7124	084
46	56	2.5	30	3890	VF 63_30	-	P71 7124	085
49	51	1.4	28	2360	VF 49_28	-	P71 7124	084
57	46	1.4	24	2250	VF 49_24	-	P71 7124	084
57	48	2.8	24	3640	VF 63_24	-	P71 7124	085
65	42	1.7	14	1940	VF 49_14	-	P80 8016	084
69	40	1.0	20	1870	VF 44_20	-	P71 7124	083
72	39	3.3	19	3400	VF 63_19	-	P71 7124	085
76	36	1.6	18	2080	VF 49_18	-	P71 7124	084
91	32	2.0	10	1930	VF 49_10	-	P80 8016	084
98	29	1.0	14	1690	VF 44_14	-	P71 7124	083
98	29	2.2	14	1940	VF 49_14	-	P71 7124	084
137	22	1.3	10	1520	VF 44_10	-	P71 7124	083
137	22	2.7	10	1750	VF 49_10	-	P71 7124	084
196	16	1.9	7	1360	VF 44_7	-	P71 7124	083
196	16	3.5	7	1570	VF 49_7	-	P71 7124	084

0.55 kW

0.48	2979	0.9	2944	16000	-	VF/VF 86/150_2944	P80 8014	098
0.76	2600	1.0	1840	16000	-	VF/VF 86/150_1840	P80 8014	098
0.78	1904	0.9	1800	13800	-	VF/VF 63/130_1800	P80 8014	097
0.92	1800	1.0	1520	13800	-	VF/VF 63/130_1520	P80 8014	097
1.0	2167	1.2	1380	16000	-	VF/VF 86/150_1380	P80 8014	098
1.2	1523	1.2	1200	13800	-	VF/VF 63/130_1200	P80 8014	097
1.3	1883	1.4	690	16000	-	VF/VF 86/150_690	P80 8026	098
1.5	1338	1.3	960	13800	-	VF/VF 63/130_960	P80 8014	097
1.5	1554	1.7	920	16000	-	VF/VF 86/150_920	P80 8014	098
1.7	1579	1.7	529	16000	-	VF/VF 86/150_529	P80 8026	098
1.8	1112	1.6	760	13800	-	VF/VF 63/130_760	P80 8014	097
2.0	1300	2.0	690	16000	-	VF/VF 86/150_690	P80 8014	098
2.3	1034	0.9	400	8000	-	VF/VF 49/110_400	P80 8026	096
2.3	900	2.0	600	13800	-	VF/VF 63/130_600	P80 8014	097
2.6	825	1.1	540	8000	-	VF/VF 49/110_540	P80 8014	096
2.6	1100	2.4	529	16000	-	VF/VF 86/150_529	P80 8014	098
3.0	820	1.2	300	8000	-	VF/VF 49/110_300	P80 8026	096
3.0	953	2.7	460	16000	-	VF/VF 86/150_460	P80 8014	098
3.5	678	1.3	400	8000	-	VF/VF 49/110_400	P80 8014	096
3.5	660	2.7	400	13800	-	VF/VF 63/130_400	P80 8014	097
4.0	680	1.4	230	8000	-	VF/VF 49/110_230	P80 8026	096
4.1	753	3.5	345	16000	-	VF/VF 86/150_345	P80 8014	098
4.7	544	1.7	300	8000	-	VF/VF 49/110_300	P80 8014	096
5.0	521	3.5	280	13800	-	VF/VF 63/130_280	P80 8014	097
6.1	450	2.0	230	8000	-	VF/VF 49/110_230	P80 8014	096
9.1	329	1.5	100	7700	VF 110_100	-	P80 8026	088
11.4	268	1.0	80	5500	VF 86_80	-	P80 8026	087
11.4	282	1.8	80	7700	VF 110_80	-	P80 8026	088
14.0	218	1.1	100	6300	VF 86_100	-	P80 8014	087
14.0	233	2.0	100	7350	VF 110_100	-	P80 8014	088
15.2	204	0.9	60	5500	VF 72_60	-	P80 8026	086
17.5	174	0.9	80	5250	VF 72_80	-	P80 8014	086
17.5	189	1.3	80	6300	VF 86_80	-	P80 8014	087
17.5	198	2.4	80	7350	VF 110_80	-	P80 8014	088
19.8	181	1.8	46	6450	VF 86_46	-	P80 8026	087
19.8	189	3.2	46	9820	VF 110_46	-	P80 8026	088
20.2	161	0.9	45	4580	VF 63_45	-	P80 8026	085
21.9	161	1.7	64	6300	VF 86_64	-	P80 8014	087
21.9	168	3.0	64	7350	VF 110_64	-	P80 8014	088
23.3	142	1.1	60	5250	VF 72_60	-	P80 8014	086
23.9	143	1.1	38	4280	VF 63_38	-	P80 8026	085
25.0	145	1.9	56	6130	VF 86_56	-	P80 8014	087

0.55 kW

n2 r/min	M2 N.m	s.f	i	Fr2 N				
28.0	126	1.4	50	5250	VF 72_50	-	P80 8014	086
30	119	1.3	30	4030	VF 63_30	-	P80 8026	085
30	124	2.5	46	5780	VF 86_46	-	P80 8014	087
31	111	1.2	45	4120	VF 63_45	-	P80 8014	085
35	105	1.8	40	5140	VF 72_40	-	P80 8014	086
35	111	2.9	40	5550	VF 86_40	-	P80 8014	087
37	98	1.4	38	3930	VF 63_38	-	P80 8014	085
40	105	2.9	23	5280	VF 86_23	-	P80 8026	087
46	92	3.4	20	5060	VF 86_20	-	P80 8026	087
47	82	1.7	30	3680	VF 63_30	-	P80 8014	085
47	83	2.4	30	4730	VF 72_30	-	P80 8014	086
50	75	1.0	28	2170	VF 49_28	-	P80 8014	084
56	73	2.6	25	4480	VF 72_25	-	P80 8014	087
58	68	0.9	24	2080	VF 49_24	-	P80 8014	084
58	69	1.9	24	3460	VF 63_24	-	P80 8014	085
65	63	1.1	14	1960	VF 49_14	-	P80 8026	084
70	60	3.2	20	4190	VF 72_20	-	P80 8014	086
74	57	2.3	19	3240	VF 63_19	-	P80 8014	085
78	53	1.1	18	1930	VF 49_18	-	P80 8014	084
91	47	1.4	10	1800	VF 49_10	-	P80 8026	084
93	46	2.8	15	3030	VF 63_15	-	P80 8014	085
100	43	1.5	14	1810	VF 49_14	-	P80 8014	084
140	32	1.9	10	1650	VF 49_10	-	P80 8014	084
200	23	2.4	7	1480	VF 49_7	-	P80 8014	084

0.75 kW

1.2	2077	0.9	1200	13800	-	VF/VF 63/130_1200	P80 8024	097
1.3	2596	1.0	690	16000	-	VF/VF 86/150_690	P90 90S6	098
1.5	1824	1.0	960	13800	-	VF/VF 63/130_960	P80 8024	097
1.5	2120	1.2	920	16000	-	VF/VF 86/150_920	P80 8024	098
1.7	2177	1.2	529	16000	-	VF/VF 86/150_529	P90 90S6	098
1.8	1517	1.2	760	13800	-	VF/VF 63/130_760	P80 8024	097
2.0	1773	1.5	690	16000	-	VF/VF 86/150_690	P80 8024	098
2.3	1227	1.5	600	13800	-	VF/VF 63/130_600	P80 8024	097
2.6	1500	1.7	529	16000	-	VF/VF 86/150_529	P80 8024	098
3.0	1300	2.0	460	16000	-	VF/VF 86/150_460	P80 8024	098
3.5	925	1.0	400	8000	-	VF/VF 49/110_400	P80 8024	096
3.5	900	2.0	400	13800	-	VF/VF 63/130_400	P80 8024	097
4.1	1026	2.5	345	16000	-	VF/VF 86/150_345	P80 8024	098
4.7	742	1.2	300	8000	-	VF/VF 49/110_300	P80 8024	096
4.7	886	2.9	300	16000	-	VF/VF 86/150_300	P80 8024	098
5.0	711	2.5	280	13800	-	VF/VF 63/130_280	P80 8024	097
6.1	614	1.5	230	8000	-	VF/VF 49/110_230	P80 8024	096
9.0	454	1.1	100	7700	VF 110_100	-	P90 90S6	088
9.0	470	1.7	100	13200	VF 130_100	-	P90 90S6	089
11.3	388	1.3	80	7700	VF 110_80	-	P90 90S6	088
11.3	407	2.3	80	13200	VF 130_80	-	P90 90S6	089
14.0	317	1.5	100	7700	VF 110_100	-	P80 8024	088
14.1	346	3.0	64	13200	VF 130_64	-	P90 90S6	089
17.5	258	1.0	80	6500	VF 86_80	-	P80 8024	087
17.5	270	1.7	80	7350	VF 110_80	-	P80 8024	088
19.6	249	1.3	46	6130	VF 86_46	-	P90 90S6	087
19.6	260	2.3	46	7700	VF 110_46	-	P90 90S6	088
21.9	219	1.3	64	6100	VF 86_64	-	P80 8024	087
21.9	229	2.2	64	7350	VF 110_64	-	P80 8024	088
22.5	210	1.0	40	5370	VF 72_40	-	P90 90S6	086
25.0	198	1.4	56	5880	VF 86_56	-	P80 8024	087
25.0	206	2.9	56	7350	VF 110_56	-	P80 8024	088
28.0	171	1.0	50	5230	VF 72_50	-	P80 8024	086
30	169	1.8	46	5560	VF 86_46	-	P80 8024	087
30	174	3.3	46	7350	VF 110_46	-	P80 8024	088



0.75 kW

n2 r/min	M2 N.m	s.f	i	Fr2 N				
35	143	1.3	40	4920	VF 72_40	-	P80 8024	086
35	151	2.1	40	5350	VF 86_40	-	P80 8024	087
37	134	1.0	38	3690	VF 63_38	-	P80 8024	085
39	145	2.1	23	5080	VF 86_23	-	P90 90S6	087
47	112	1.2	30	3470	VF 63_30	-	P80 8024	085
47	114	1.8	30	4640	VF 72_30	-	P80 8024	086
47	115	2.9	30	4940	VF 86_30	-	P80 8024	087
56	100	1.9	25	4320	VF 72_25	-	P80 8024	086
58	95	1.4	24	3280	VF 63_24	-	P80 8024	085
61	95	2.9	23	4550	VF 86_23	-	P80 8024	087
70	82	2.3	20	4050	VF 72_20	-	P80 8024	086
70	85	3.3	20	4370	VF 88_20	-	P80 8024	087
74	78	1.7	19	3090	VF 63_19	-	P80 8024	085
93	63	2.1	15	2900	VF 63_15	-	P80 8024	085
93	64	3.0	15	3730	VF 72_15	-	P80 8024	086
100	58	1.1	14	1690	VF 49_14	-	P80 8024	084
140	43	1.4	10	1540	VF 49_10	-	P80 8024	084
140	43	2.9	10	2590	VF 63_10	-	P80 8024	085
200	31	1.8	7	1400	VF 49_7	-	P80 8024	084

1.1 kW

2.0	2600	1.0	690	16000	-	VF/VF 86/150_690	P90 90S4	087
2.3	1800	1.0	600	13800	-	VF/VF 63/130_600	P90 90S4	085
2.6	2200	1.2	529	16000	-	VF/VF 86/150_529	P90 90S4	087
3.0	1907	1.4	460	16000	-	VF/VF 86/150_460	P90 90S4	087
3.5	1320	1.4	400	13800	-	VF/VF 63/130_400	P90 90S4	085
4.1	1505	1.7	345	16000	-	VF/VF 86/150_345	P90 90S4	087
4.7	1300	2.0	300	16000	-	VF/VF 86/150_300	P90 90S4	087
5.0	1042	1.7	280	13800	-	VF/VF 63/130_280	P90 90S4	085
6.2	1059	2.5	225	16000	-	VF/VF 86/150_225	P90 90S4	087
7.0	953	2.7	200	16000	-	VF/VF 86/150_200	P90 90S4	087
9.0	689	1.2	100	13200	VF 130_100	-	P90 90L6	089
11.3	570	0.9	80	7700	VF 110_80	-	P90 90L6	088
11.3	598	1.6	80	13200	VF 130_80	-	P90 90L6	089
14.0	465	1.0	100	7350	VF 110_100	-	P90 90S4	088
14.0	480	1.6	100	12600	VF 130_100	-	P90 90S4	089
17.5	396	1.2	80	7350	VF 110_80	-	P90 90S4	088
17.5	408	2.2	80	12600	VF 130_80	-	P90 90S4	089
19.6	365	0.9	46	5530	VF 86_46	-	P90 90L6	087
19.6	381	1.6	46	7700	VF 110_46	-	P90 90L6	088
19.6	392	2.9	46	13200	VF 130_46	-	P90 90L6	089
21.9	336	1.5	64	7350	VF 110_64	-	P90 90S4	088
21.9	341	2.7	64	12600	VF 130_64	-	P90 90S4	089
22.5	327	1.0	40	5360	VF 86_40	-	P90 90L6	087
25.0	290	0.9	56	5490	VF 86_56	-	P90 90S4	087
25.0	303	2.0	56	7350	VF 110_56	-	P90 90S4	088
25.0	307	3.1	56	12600	VF 130_56	-	P90 90S4	089
30	245	1.0	30	4500	VF 72_30	-	P90 90L6	086
30	249	1.2	46	5220	VF 86_46	-	P90 90S4	087
30	255	2.2	46	7350	VF 110_46	-	P90 90S4	088
35	210	0.9	40	4560	VF 72_40	-	P90 90S4	086
35	222	1.4	40	5040	VF 86_40	-	P90 90S4	087
35	228	2.7	40	7350	VF 110_40	-	P90 90S4	088
39	212	1.4	23	4690	VF 86_23	-	P90 90L6	087
39	217	2.7	23	7370	VF 110_23	-	P90 90L6	088
45	191	3.0	20	7080	VF 110_20	-	P90 90L6	088
47	167	1.2	30	4250	VF 72_30	-	P90 90S4	086
47	169	2.0	30	4700	VF 86_30	-	P90 90S4	087
56	146	1.3	25	4070	VF 72_25	-	P90 90S4	086
58	139	1.0	24	2990	VF 63_24	-	P90 90S4	085

1.1 kW

n2 r/min	M2 N.m	s.f	i	Fr2 N				
61	140	2.0	23	4350	VF 86_23	-	P90 90S4	087
61	143	3.4	23	6690	VF 110_23	-	P90 90S4	088
70	120	1.6	20	3840	VF 72_20	-	P90 90S4	086
70	125	2.2	20	4190	VF 86_20	-	P90 90S4	087
74	114	1.1	19	2840	VF 63_19	-	P90 90S4	085
93	92	1.4	15	2700	VF 63_15	-	P90 90S4	085
93	93	2.0	15	3560	VF 72_15	-	P90 90S4	086
93	95	3.1	15	3880	VF 86_15	-	P90 90S4	087
140	64	2.0	10	2440	VF 63_10	-	P90 90S4	085
140	65	2.9	10	3180	VF 72_10	-	P90 90S4	086
200	46	2.6	7	2210	VF 63_7	-	P90 90S4	085

1.5 kW

2.6	3022	0.9	529	16000	-	VF/VF 86/150_529	P90 90L14	098
3.0	2619	1.0	460	16000	-	VF/VF 86/150_460	P90 90L14	098
3.5	1813	1.0	400	13800	-	VF/VF 63/130_400	P90 90L14	097
4.0	2067	1.3	345	16000	-	VF/VF 86/150_345	P90 90L14	098
4.6	1785	1.5	300	16000	-	VF/VF 86/150_300	P90 90L14	098
5.0	1431	1.3	280	13800	-	VF/VF 63/130_280	P90 90L14	097
6.2	1455	1.8	225	16000	-	VF/VF 86/150_225	P90 90L14	098
7.0	1309	2.0	200	16000	-	VF/VF 86/150_200	P90 90L14	098
9.4	930	1.2	100	15500	VF 150_100	-	P100 100L16	090
11.8	780	1.2	80	13200	VF 130_80	-	P100 100L16	089
11.8	792	1.7	80	15500	VF 150_80	-	P100 100L16	090
13.9	660	1.2	100	12600	VF 130_100	-	P90 90L14	089
14.7	673	2.2	64	15500	VF 150_64	-	P100 100L16	090
16.8	580	1.1	56	7700	VF 110_56	-	P100 100L16	088
16.8	597	1.8	56	13200	VF 130_56	-	P100 100L16	089
16.8	606	2.5	56	15500	VF 150_56	-	P100 100L16	090
17.4	544	0.9	80	7350	VF 110_80	-	P90 90L14	088
17.4	561	1.6	80	12600	VF 130_80	-	P90 90L14	089
20.4	519	3.4	46	15500	VF 150_46	-	P100 100L16	090
21.7	462	1.1	64	7350	VF 110_64	-	P90 90L14	088
21.7	468	2.0	64	12600	VF 130_64	-	P90 90L14	089
23.5	445	1.4	40	7700	VF 110_40	-	P100 100L16	088
23.5	445	2.7	40	13200	VF 130_40	-	P100 100L16	089
24.8	416	1.4	56	7350	VF 110_56	-	P90 90L14	088
24.8	421	2.3	56	12600	VF 130_56	-	P90 90L14	089
30	341	0.9	46	4780	VF 86_46	-	P90 90L14	087
30	351	1.6	46	7350	VF 110_46	-	P90 90L14	088
30	360	2.9	46	12600	VF 130_46	-	P90 90L14	089
35	305	1.0	40	4640	VF 86_40	-	P90 90L14	085
35	313	1.9	40	7350	VF 110_40	-	P90 90L14	088
41	277	1.1	23	4300	VF 86_23	-	P100 100L16	087
41	284	2.0	23	7040	VF 110_23	-	P100 100L16	088
46	229	0.9	30	3880	VF 72_30	-	P90 90L14	086
46	232	1.4	30	4370	VF 86_30	-	P90 90L14	087
46	238	2.6	30	6960	VF 110_30	-	P90 90L14	088
56	201	0.9	25	3740	VF 72_25	-	P90 90L14	086
60	192	1.5	23	4060	VF 86_23	-	P90 90L14	087
60	197	2.5	23	6420	VF 110_23	-	P90 90L14	088
63	183	1.2	15	3520	VF 72_15	-	P100 100L16	086
70	165	1.2	20	3550	VF 72_20	-	P90 90L14	086
70	171	1.6	20	3930	VF 86_20	-	P90 90L14	087
70	173	3.0	20	6170	VF 110_20	-	P90 90L14	088
93	127	1.0	15	2440	VF 63_15	-	P90 90L14	085
93	128	1.5	15	3330	VF 72_15	-	P90 90L14	086
93	130	2.2	15	3670	VF 86_15	-	P90 90L14	087
139	88	1.5	10	2240	VF 63_10	-	P90 90L14	085
139	89	2.1	10	2990	VF 72_10	-	P90 90L14	086
139	90	3.0	10	3280	VF 86_10	-	P90 90L14	087
199	63	1.9	7	2050	VF 63_7	-	P90 90L14	085
199	63	2.7	7	2700	VF 72_7	-	P90 90L14	086



2.2 kW

n2 r/min	M2 N.m	s.f	i	Fr2 N				
11.8	1162	1.2	80	15500	VF 150_80	-	P112 112M6	090
14.1	969	1.2	100	14700	VF 150_100	-	P100 100L14	090
14.7	973	1.1	64	13200	VF130_64	-	P112 112M6	089
16.8	876	1.2	56	13200	VF 130_56	-	P112 112M6	089
17.6	811	1.1	80	12600	VF 130_80	-	P100 100L14	089
17.6	823	1.5	80	14700	VF 150_80	-	P100 100L14	090
20.4	751	1.5	46	13200	VF 130_46	-	P112 112M6	089
20.4	761	2.3	46	15500	VF 150_46	-	P112 112M6	090
22.0	677	1.4	64	12600	VF 130_64	-	P100 100L14	089
22.0	687	1.9	64	14700	VF 150_64	-	P100 100L14	090
23.5	653	1.0	40	7340	VF 110_40	-	P112 112M6	088
25.2	601	1.0	56	7350	VF 110_56	-	P100 100L14	088
25.2	609	1.6	56	12600	VF 130_56	-	P100 100L14	089
25.2	617	2.2	56	14200	VF 150_56	-	P100 100L14	090
31	507	1.1	46	7180	VF 110_46	-	P100 100L14	088
31	521	2.0	46	12600	VF 130_46	-	P100 100L14	089
31	528	2.9	46	14700	VF 150_46	-	P100 100L14	090
35	453	1.3	40	6950	VF 110_40	-	P100 100L14	088
35	453	2.4	40	12600	VF 130_40	-	P100 100L14	089
35	459	3.4	40	14700	VF 150_40	-	P100 100L14	090
41	416	1.4	23	6490	VF 110_23	-	P112 112M6	088
41	416	2.5	23	13200	VF 130_23	-	P112 112M6	089
47	335	1.0	30	3840	VF 86_30	-	P100 100L14	087
47	344	1.8	30	6510	VF 110_30	-	P100 100L14	088
47	353	3.0	30	12600	VF 130_30	-	P100 100L14	089
61	278	1.0	23	3610	VF 86_23	-	P100 100L14	087
61	284	1.7	23	6030	VF 110_23	-	P100 100L14	088
61	284	3.1	23	12600	VF 130_23	-	P100 100L14	089
71	247	1.1	20	3520	VF 86_20	-	P100 100L14	087
71	250	2.1	20	5815	VF 110_20	-	P100 100L14	088
94	186	1.0	15	2950	VF 72_15	-	P100 100L14	086
94	188	1.5	15	3350	VF 86_15	-	P100 100L14	087
94	188	2.9	15	5430	VF 110_15	-	P100 100L14	088
141	128	1.5	10	2200	VF 72_10	-	P100 100L14	086
141	130	2.1	10	3030	VF 86_10	-	P100 100L14	087
201	92	1.9	7	2460	VF 72_7	-	P100 100L14	086
201	92	2.7	7	3740	VF 86_7	-	P100 100L14	087

3 kW

14.1	1321	0.9	100	14700	VF 150_100	-	P100 100L24	090
17.6	1122	1.1	80	14700	VF 150_80	-	P100 100L24	090
22.0	923	1.0	64	12600	VF 130_64	-	P100 100L24	089
22.0	936	1.4	64	14700	VF 150_64	-	P100 100L24	090
25.2	831	1.2	56	12600	VF 130_56	-	P100 100L24	089
25.2	842	1.6	56	14700	VF 150_56	-	P100 100L24	090
31	710	1.5	46	12600	VF 130_46	-	P100 100L24	089
31	720	2.2	46	14700	VF 150_46	-	P100 100L24	090
35	618	1.0	40	6310	VF 110_40	-	P100 100L24	088
35	618	1.8	40	12600	VF 130_40	-	P100 100L24	089
35	626	2.5	40	14700	VF 150_40	-	P100 100L24	090
41	568	1.8	23	13200	VF 130_23	-	P132 132S6	089
41	575	2.6	23	15500	VF 150_23	-	P132 132S6	090
47	469	1.3	30	6000	VF 110_30	-	P100 100L24	088
47	482	2.2	30	12600	VF 130_30	-	P100 100L24	089
47	488	2.8	30	14700	VF 150_30	-	P100 100L24	090
61	388	1.3	23	5590	VF 110_23	-	P100 100L24	088
61	388	2.3	23	12600	VF 130_23	-	P100 100L24	089

3 kW

n2 r/min	M2 N.m	s.f	i	Fr2 N				
61	388	3.3	23	14700	VF 150_23	-	P100 100L24	090
71	341	1.5	20	5410	VF 110_20	-	P100 100L24	088
71	341	2.6	20	12600	VF 130_20	-	P100 100L24	089
94	256	1.1	15	2980	VF 86_15	-	P100 100L24	087
94	256	2.1	15	5120	VF110_15	-	P100 100L24	088
94	262	3.5	15	11770	VF 130_15	-	P100 100L24	089
141	175	1.1	10	2370	VF 72_10	-	P100 100L24	086
141	177	1.5	10	2740	VF 86_10	-	P100 100L24	087
141	177	2.8	10	4580	VF 110_10	-	P100 100L24	088
201	125	1.4	7	2190	VF 72_7	-	P100 100L24	086
201	125	2.0	7	2500	VF 86_7	-	P100 100L24	087





4 kW

20.5	1376	1.3	46	15500	VF 150_46	-	P132 132M16	090
22.2	1240	1.1	64	14700	VF 150_64	-	P112 112M4	090
23.6	1180	1.0	40	13200	VF 130_40	-	P132 132M16	089
25.4	1100	0.9	56	13200	VF 130_56	-	P112 112M4	089
25.4	1115	1.2	56	14700	VF 150_56	-	P112 112M4	090
31	940	1.1	46	12600	VF 130_46	-	P112 112M4	089
31	953	1.6	46	14700	VF 150_46	-	P112 112M4	090
32	934	1.3	30	13200	VF 130_30	-	P132 132M16	089
36	818	1.3	40	12600	VF 130_40	-	P112 112M4	089
36	829	1.9	40	14700	VF 150_40	-	P112 112M4	090
41	753	1.4	23	13200	VF 130_23	-	P132 132M16	089
41	762	2.0	23	13200	VF 150_23	-	P132 132M16	090
47	621	1.0	30	5360	VF 110_30	-	P112 112M4	088
47	638	1.6	30	12600	VF 130_30	-	P112 112M4	089
47	646	2.1	30	14700	VF 150_30	-	P112 112M4	090
62	514	1.0	23	5030	VF 110_23	-	P112 112M4	088
62	514	1.7	23	12600	VF 130_23	-	P112 112M4	089
62	514	2.5	23	14700	VF 150_23	-	P112 112M4	090
71	452	1.2	20	4910	VF 110_20	-	P112 112M4	088
71	452	2.0	20	12390	VF 130_20	-	P112 112M4	089
95	352	3.4	10	12710	VF 150_10	-	P132 132M16	090
95	339	0.9	15	2510	VF 86_15	-	P112 112M4	087
95	339	1.6	15	4720	VF 110_15	-	P112 112M4	088
95	347	2.7	15	11420	VF 130_15	-	P112 112M4	089
142	234	1.2	10	2380	VF 86_10	-	P112 112M4	087
142	234	2.1	10	4260	VF 110_10	-	P112 112M4	088
142	237	3.3	10	10130	VF 130_10	-	P112 112M4	089
203	166	1.4	7	2200	VF 86_7	-	P112 112M4	087
203	168	2.7	7	3870	VF 110_7	-	P112 112M4	088

5.5 kW

20.5	1892	0.9	46	15500	VF 150_46	-	P132 132M26	090
23.6	1645	1.1	40	15500	VF 150_40	-	P132 132M26	090
31	1292	1.2	46	14700	VF 150_46	-	P132 132S4	090
32	1284	1.0	30	13200	VF 130_30	-	P132 132M26	089
36	1109	1.0	40	12600	VF 130_40	-	P132 132S4	089
36	1123	1.4	40	14700	VF 150_40	-	P132 132S4	090
41	1035	1.0	23	12990	VF 130_23	-	P132 132M26	089
41	1048	1.4	23	15270	VF 150_23	-	P132 132M26	090
48	964	1.2	30	12600	VF 130_30	-	P132 132S4	089
48	975	1.6	30	14700	VF 150_30	-	P132 132S4	090
63	696	1.3	23	12120	VF 130_23	-	P132 132S4	089
63	696	1.8	23	14010	VF 150_23	-	P132 132S4	090
72	613	1.5	20	11690	VF 130_20	-	P132 132S4	089
72	613	2.1	20	13480	VF 150_20	-	P132 132S4	090
96	471	2.0	15	12840	VF 130_15	-	P132 132S4	089

5.5 kW

n2 r/min	M2 N.m	s.f	i	Fr2 N				
96	476	2.4	15	12380	VF 150_15	-	P132 132S4	090
144	321	2.5	10	9680	VF 130_10	-	P132 132S4	089
144	321	3.3	10	11010	VF 150_10	-	P132 132S4	090
206	227	3.3	7	8650	VF 130_7	-	P132 132S4	089

7.5 kW

63	950	0.9	23	11180	VF 130_23	-	P132 132M14	089
63	950	1.3	23	13180	VF 150_23	-	P132 132M14	090
72	836	1.1	20	10840	VF 130_20	-	P132 132M14	089
72	836	1.6	20	12730	VF 150_20	-	P132 132M14	090
96	642	1.4	15	10150	VF 130_15	-	P132 132M14	089
96	649	1.8	15	11740	VF 150_15	-	P132 132M14	090
129	496	2.3	7	10200	VF 150_7	-	P160 160M6	090
144	438	1.8	10	9150	VF 130_10	-	P132 132M14	089
144	438	2.4	10	10530	VF 150_10	-	P132 132M14	090
206	310	2.4	7	8210	VF 130_7	-	P132 132M14	089
206	313	3.2	7	9400	VF 150_7	-	P132 132M14	090


11 kW

64	1395	1.0	15	10930	VF 150_15	-	P160 160L6	090
73	1205	1.1	20	11410	VF 150_20	-	P160 160M4	090
98	936	1.2	15	10620	VF 150_15	-	P160 160M4	090
209	452	2.2	7	8660	VF 150_7	-	P160 160M4	090

15 kW

147	860	1.2	10	8720	VF 150_10	-	P160 160L4	090
209	616	1.6	7	7840	VF 150_7	-	P160 160L4	090


VF 30

	i	ηs %	n1 = 1400min ⁻¹						n1 = 900min ⁻¹					
			n2 r/min	Mn2 N.m	Pn1 KW	Rn1 N	Rn2 N	ηD %	n2 r/min	Mn2 N.m	Pn1 KW	Rn1 N	Rn2 N	ηD %
VF30-7	7	69	200	16	0.41	140	630	84	129	18	0.3	150	730	82
VF30-10	10	64	140	16	0.30	80	770	81	90	18	0.22	150	900	79
VF30-15	15	56	93	18	0.24	-	910	76	60	20	0.17	-	1060	74
VF30-20	20	51	70	18	0.19	-	1030	73	45	20	0.14	-	1200	70
VF30-30	30	41	47	20	0.15	-	1200	65	30	22	0.12	-	1400	61
VF30-40	40	36	35	19	0.12	-	1360	60	23	20	0.09	-	1590	56
VF30-60	60	29	23.3	19	0.09	-	1590	51	15	20	0.07	-	1650	48
VF30-70	70	26	20.0	15	0.07	-	1600	48	13	17	0.05	-	1700	45

n1 = 500min⁻¹

VF30-7	7	69	71	20	0.19	150	920	81
VF30-10	10	64	50	20	0.14	150	1120	77
VF30-15	15	56	33	22	0.11	150	1320	71
VF30-20	20	51	25	22	0.09	150	1490	67
VF30-30	30	41	16.7	24	0.07	-	1700	58
VF30-40	40	36	12.5	22	0.06	-	1700	53
VF30-60	60	29	8.3	22	0.05	-	1700	44
VF30-70	70	26	7	19	0.04	-	1700	41

VF 44

	i	ηs %	n1 = 1400min ⁻¹						n1 = 900min ⁻¹					
			n2 r/min	Mn2 N.m	Pn1 KW	Rn1 N	Rn2 N	ηD %	n2 r/min	Mn2 N.m	Pn1 KW	Rn1 N	Rn2 N	ηD %
VF44-7	7	71	200	29	0.75	220	1180	86	129	39	0.63	220	1300	85
VF44-10	10	66	140	29	0.51	220	1430	84	90	39	0.45	220	1610	82
VF44-14	14	60	100	29	0.37	220	1680	81	64	39	0.34	220	1890	78
VF44-20	20	55	70	39	0.37	220	1860	77	45	45	0.29	220	2160	74
VF44-28	28	45	50	39	0.29	220	2140	71	32	49	0.24	220	2300	67
VF44-35	35	42	40	39	0.25	220	2300	68	25.7	49	0.20	220	2300	64
VF44-46	46	37	30	39	0.19	220	2300	63	19.6	49	0.17	60	2300	59
VF44-60	60	32	23.3	39	0.16	-	2300	58	15.0	45	0.13	200	2300	54
VF44-70	70	30	20.0	29	0.11	220	2300	55	12.9	39	0.10	220	2300	51
VF44-100	100	24	14.0	28	0.09	220	2300	47	9.0	30	0.06	220	2300	43

n1 = 500min⁻¹

VF44-7	7	71	71	45	0.41	220	1610	83
VF44-10	10	66	50	45	0.29	220	1980	80
VF44-14	14	60	36	50	0.25	220	2280	76
VF44-20	20	55	25.0	50	0.18	220	2500	72
VF44-28	28	45	17.9	55	0.16	220	2500	64
VF44-35	35	42	14.3	55	0.14	220	2500	60
VF44-46	46	37	10.9	50	0.10	220	2500	55
VF44-60	60	32	8.3	50	0.09	220	2500	50
VF44-70	70	30	7.1	45	0.07	220	2500	47
VF44-100	100	24	5.0	32	0.04	220	2500	39



VF 49									88 N.m						
	i	ηs %	n2	Mn2	Pn1	Rn1	Rn2	ηD	n2	Mn2	Pn1	Rn1	Rn2	ηD	
			r/min	N.m	KW	N	N	%	r/min	N.m	KW	N	N	%	
n1= 1400min ⁻¹									n1= 900min ⁻¹						
VF 49-7	7	70	200	54	1.3	400	1170	86	129	61	0.97	400	1370	85	
VF 49-10	10	65	140	59	1.0	400	1410	84	90	64	0.75	400	1670	82	
VF 49-14	14	59	100	65	0.90	400	1630	81	64	71	0.61	400	1920	78	
VF 49-18	18	55	78	59	0.60	400	1890	78	50	68	0.47	400	2190	75	
VF 49-24	24	50	58	63	0.50	400	2110	75	38	68	0.36	400	2480	71	
VF 49-28	28	43	50	74	0.55	220	2170	71	32	82	0.41	400	2540	67	
VF 49-36	36	39	39	69	0.42	400	2460	67	25.0	75	0.31	400	2880	63	
VF 49-45	45	35	31	65	0.33	400	2725	63	20.0	71	0.25	400	3190	59	
VF 49-60	60	30	23.3	59	0.25	400	3100	58	15.0	64	0.19	400	3300	53	
VF 49-70	70	28	20.0	55	0.21	400	3150	54	12.9	60	0.16	400	3300	50	
VF 49-80	80	25	17.5	54	0.19	400	3150	52	11.3	58	0.14	400	3300	47	
VF 49-100	100	22	14.0	49	0.13	400	3150	47	9.0	52	0.11	400	3300	42	

n1= 500min ⁻¹								
	i	ηs %	n2	Mn2	Pn1	Rn1	Rn2	ηD
			r/min	N.m	KW	N	N	%
VF 49-7	7	70	71	74	0.67	400	1670	83
VF 49-10	10	65	50	74	0.49	400	2060	80
VF 49-14	14	59	36	78	0.39	400	2400	75
VF 49-18	18	55	27.8	74	0.30	400	2730	72
VF 49-24	24	50	20.8	74	0.24	400	3090	68
VF 49-28	28	43	17.9	88	0.26	400	3180	63
VF 49-36	36	39	13.9	80	0.20	400	3450	59
VF 49-45	45	35	11.1	78	0.17	400	3450	55
VF 49-60	60	30	8.3	69	0.12	400	3450	49
VF 49-70	70	28	7.1	69	0.11	400	3450	46
VF 49-80	80	25	6.3	59	0.09	400	3450	43
VF 49-100	100	22	5.0	59	0.08	400	3450	38

VF 72									280 N.m						
	i	ηs %	n2	Mn2	Pn1	Rn1	Rn2	ηD	n2	Mn2	Pn1	Rn1	Rn2	ηD	
			r/min	N.m	KW	N	N	%	r/min	N.m	KW	N	N	%	
n1= 1400min ⁻¹									n1= 900min ⁻¹						
VF 72-7	7	71	200	170	4.0	750	1810	88	129	200	3.1	750	2100	86	
VF 72-10	10	67	140	190	3.2	750	2280	86	90	220	2.5	750	2640	84	
VF 72-15	15	60	93	190	2.2	750	2930	83	60	220	1.7	750	3400	80	
VF 72-20	20	56	70	190	1.7	750	3410	80	45	220	1.3	750	3950	77	
VF 72-25	25	52	56	190	1.4	750	3800	78	36	220	1.1	750	4400	75	
VF 72-30	30	45	47	200	1.27	750	4060	74	30	240	1.1	750	4660	70	
VF 72-40	40	40	35	190	0.96	750	4670	70	22.5	220	0.78	750	5420	66	
VF 72-50	50	36	28.0	170	0.73	750	5250	67	18.0	190	0.58	750	5500	62	
VF 72-60	60	33	23.3	160	0.60	750	5250	63	15.0	180	0.49	750	5500	59	
VF 72-80	80	28	17.5	150	0.45	750	5250	58	11.3	150	0.34	750	5500	53	
VF 72-100	100	25	14.0	130	0.35	750	5250	53	9.0	140	0.27	750	5500	48	

n1= 500min ⁻¹								
	i	ηs %	n2	Mn2	Pn1	Rn1	Rn2	ηD
			r/min	N.m	KW	N	N	%
VF 72-7	7	71	71	240	2.1	750	2590	84
VF 72-10	10	67	50	270	1.7	750	3190	82
VF 72-15	15	60	33	270	1.2	750	4120	77
VF 72-20	20	56	25.0	270	0.97	750	4790	74
VF 72-25	25	52	20.0	270	0.81	750	5340	71
VF 72-30	30	45	16.7	280	0.75	750	5730	66
VF 72-40	40	40	12.5	270	0.58	750	5750	61
VF 72-50	50	36	10.0	220	0.40	750	5750	57
VF 72-60	60	33	8.3	210	0.34	750	5750	54
VF 72-80	80	28	6.3	180	0.25	750	5750	48
VF 72-100	100	25	5.0	170	0.20	750	5750	43

VF 63									180 N.m						
	i	ηs %	n2	Mn2	Pn1	Rn1	Rn2	ηD	n2	Mn2	Pn1	Rn1	Rn2	ηD	
			r/min	N.m	KW	N	N	%	r/min	N.m	KW	N	N	%	
n1= 1400min ⁻¹									n1= 900min ⁻¹						
VF 63-7	7	70	200	119	2.8	480	1570	87	129	130	2.0	480	1890	86	
VF 63-10	10	66	140	128	2.1	480	1940	85	90	140	1.5	480	2310	83	
VF 63-15	15	59	93	131	1.5	480	2420	82	60	140	1.1	480	2890	79	
VF 63-19	19	55	74	131	1.2	480	2730	80	47	140	0.88	480	3250	77	
VF 63-24	24	52	58	135	1.0	480	3030	77	38	140	0.72	480	3620	74	
VF 63-30	30	44	47	139	0.9	-	3310	73	30	157	0.69	90	3870	69	
VF 63-38	38	40	37	140	0.75	-	3680	69	23.7	160	0.59	-	4270	65	
VF 63-45	45	37	31	129	0.62	-	4030	66	20.0	148	0.48	-	4680	62	
VF 63-64	64	31	21.9	118	0.45	-	4700	60	14.1	131	0.34	-	5000	55	
VF 63-80	80	27	17.5	113	0.36	-	4700	55	11.3	120	0.27	480	5000	51	
VF 63-100	100	23	14.0	113	0.32	-	4700	50	9.0	120	0.24	-	5000	46	

n1= 500min ⁻¹								
	i	ηs %	n2	Mn2	Pn1	Rn1	Rn2	ηD
			r/min	N.m	KW	N	N	%
VF 63-7	7	70	71	150	1.3	480	2370	84
VF 63-10	10	66	50	160	1.0	480	2890	81
VF 63-15	15	59	33	160	0.72	480	3560	76
VF 63-19	19	55	26.3	160	0.59	480	3990	73
VF 63-24	24	52	20.8	165	0.51	480	4440	70
VF 63-30	30	44	16.7	190	0.52	300	4710	64
VF 63-38	38	40	13.2	183	0.41	210	5000	61
VF 63-45	45	37	11.1	165	0.33	480	5000	58
VF 63-64	64	31	7.8	155	0.25	480	5000	51
VF 63-80	80	27	6.3	136	0.19	480	5000	46
VF 63-100	100	23	5.0	127	0.15	480	5000	41

VF 86									430 N.m						
	i	ηs %	n2	Mn2	Pn1	Rn1	Rn2	ηD	n2	Mn2	Pn1	Rn1	Rn2	ηD	
			r/min	N.m	KW	N	N	%	r/min	N.m	KW	N	N	%	
n1= 1400min ⁻¹									n1= 900min ⁻¹						
VF 86-7	7	71	200	245	5.8	850	1340	88	129	280	4.3	850	1730	87	
VF 86-10	10	67	140	270	4.6	850	2160	87	90	300	3.3	850	2590	85	
VF 86-15	15	60	93	290	3.4	850	2790	84	60	330	2.6	850	3260	81	
VF 86-20	20	60	70	280	2.5	850	3340	83	45	310	1.8	850	3950	80	
VF 86-23	23	58	61	280	2.2	850	3610	81	39	300	1.6	850	4310	79	
VF 86-30	30	45	47	330	2.2	850	3880	75	30	360	1.6	850	4610	72	
VF 86-40	40	45	35	320	1.6	850	4560	74	22.5	340	1.1	850	5430	70	
VF 86-46	46	43	30	310	1.5	850	4920	72	19.6	330	1.0	850	5830	68	
VF 86-56	56	39	25.0	275	1.1	850	5540	69	16.1	310	0.8	850	6450	65	
VF 86-64	64	37	21.9	275	0.9	850	5860	67	14.1	290	0.7	850	6600	62	
VF 86-80	80	33	17.5	255	0.75	850	6300	63	11.3	270	0.54	850	6600	58	
VF 86-100	100	29	14.0	230	0.6	850	6300	58	9.0	240	0.41	850	6600	54	

n1= 500min ⁻¹								
	i	ηs %	n2	Mn2	Pn1	Rn1	Rn2	ηD
			r/min	N.m	KW	N	N	%
VF 86-7	7	71	71	360	3.2	850	1970	85
VF 86-10	10	67	50	360	2.3	850	3180	82
VF 86-15	15	60	33	390	1.7	850	4030	78
VF 86-20	20	60	25.0	390	1.3	850	4730	77
VF 86-23	23	58	21.7	360	1.1	850	5270	75
VF 86-30	30	45	16.7	430	1.1	850	5640	67
VF 86-40	40	45	12.5	390	0.77	850	6720	66
VF 86-46	46	43	10.9	390	0.70	850	7000	63
VF 86-56	56	39	8.9	360	0.56	850	7000	60
VF 86-64	64	37	7.8	360	0.51	850	7000	58
VF 86-80	80	33	6.3	290	0.36	850	7000	53
VF 86-100	100	29	5.0	290	0.31	850	7000	49

参见第107页 See page 107

参见第107页 See page 107



VF 110									800 N.m					
	i	ηs %	n2	Mn2	Pn1	Rn1	Rn2	ηD	n2	Mn2	Pn1	Rn1	Rn2	ηD
			r/min	N.m	KW	N	N	%	r/min	N.m	KW	N	N	%
									n1= 1400min ⁻¹					
VF 110-7	7	71	200	460	11.0	1200	1230	89	129	530	8.2	1200	1640	88
VF 110-10	10	67	140	500	8.4	1200	2920	87	90	550	6.0	1200	3530	86
VF 110-15	15	60	93	550	6.4	1200	3780	84	60	600	4.5	1200	4550	83
VF 110-20	20	61	70	520	4.5	1200	4640	84	45	580	3.3	1200	5470	82
VF 110-23	23	59	61	490	3.8	1200	5160	83	39	580	3.0	1200	5930	81
VF 110-30	30	45	47	620	3.9	1200	5400	77	30	680	2.9	1200	6410	74
VF 110-40	40	46	35	610	3.0	1200	6360	76	22.5	640	2.1	1200	7630	73
VF 110-46	46	44	30	570	2.5	1200	6960	74	19.6	610	1.8	1200	7700	71
VF 110-56	56	41	25.0	590	2.2	1200	7350	72	16.1	610	1.6	1200	7700	68
VF 110-64	64	38	21.9	510	1.7	1200	7350	70	14.1	540	1.2	1200	7700	65
VF 110-80	80	34	17.5	470	1.3	1200	7350	66	11.3	510	1.0	1200	7700	61
VF 110-100	100	30	14.0	460	1.1	1200	7350	62	9.0	480	0.78	1200	7700	57
									n1= 900min ⁻¹					
									n1= 500min ⁻¹					
VF 110-7	7	71	71	650	5.7	1200	2200	86						
VF 110-10	10	67	50	650	4.1	1200	4400	84						
VF 110-15	15	60	33	680	3.0	1200	5770	80						
VF 110-20	20	61	25	680	2.3	1200	6770	79						
VF 110-23	23	59	21.7	680	2.0	1200	7320	77						
VF 110-30	30	45	16.7	740	1.8	1200	8000	70						
VF 110-40	40	46	12.5	800	1.5	1200	8000	68						
VF 110-46	46	44	10.9	740	1.3	1200	8000	66						
VF 110-56	56	41	8.9	660	0.98	1200	8000	63						
VF 110-64	64	38	7.8	640	0.87	1200	8000	60						
VF 110-80	80	34	6.3	560	0.64	1200	8000	56						
VF 110-100	100	30	5.0	530	0.53	1200	8000	51						

VF 150									2000 N.m					
	i	ηs %	n2	Mn2	Pn1	Rn1	Rn2	ηD	n2	Mn2	Pn1	Rn1	Rn2	ηD
			min ⁻¹	Nm	KW	N	N	%	r/min	N.m	KW	N	N	%
									n1= 1400min ⁻¹					
VF 150-7	7	72	200	1000	24.0	2200	6040	90	129	1150	17.6	2200	7040	89
VF 150-10	10	68	140	1050	17.5	2200	8120	88	90	1200	13.0	2200	9480	87
VF 150-15	15	64	93	1150	13.1	2200	9990	87	60	1350	10.0	2200	11510	85
VF 150-20	20	59	70	1300	11.3	2200	11310	84	45	1500	8.6	2200	13130	83
VF 150-23	23	57	61	1270	9.8	2200	12290	83	39	1500	7.6	2200	14150	82
VF 150-30	30	48	47	1370	8.5	2200	13730	80	30	1600	6.5	2200	15500	77
VF 150-40	40	44	35	1540	7.4	830	14700	77	22.5	1750	5.6	1150	15500	74
VF 150-46	46	45	30	1550	6.5	1400	14700	77	19.6	1750	4.9	2100	15500	74
VF 150-56	56	42	25.0	1370	4.9	2200	14700	74	16.1	1500	3.7	2200	15500	71
VF 150-64	64	39	21.9	1330	4.2	2200	14700	72	14.1	1450	3.2	2200	15500	69
VF 150-80	80	35	17.5	1250	3.4	2200	14700	69	11.3	1350	2.5	2200	15500	65
VF 150-100	100	31	14.0	1150	2.6	2200	14700	65	9.0	1150	1.8	2200	15500	61
									n1= 900min ⁻¹					
									n1= 500min ⁻¹					
VF 150-7	7	72	71	1400	12.2	2200	8560	87						
VF 150-10	10	68	50	1500	9.4	2200	11360	85						
VF 150-15	15	64	33	1700	7.3	2200	13790	83						
VF 150-20	20	59	25.0	1900	6.4	2200	15720	80						
VF 150-23	23	57	21.7	1850	5.5	2200	16000	78						
VF 150-30	30	48	16.7	1950	4.8	2200	16000	73						
VF 150-40	40	44	12.5	2000	3.9	2200	16000	69						
VF 150-46	46	45	10.9	2000	3.4	2200	16000	69						
VF 150-56	56	42	8.9	1750	2.6	2200	16000	66						
VF 150-64	64	39	7.8	1700	2.3	2200	16000	63						
VF 150-80	80	35	6.3	1550	1.8	2200	16000	59						
VF 150-100	100	31	5.0	1300	1.3	2200	16000	55						

参见第99页 See page 99

VF 130									1500 N.m					
	i	ηs %	n2	Mn2	Pn1	Rn1	Rn2	ηD	n2	Mn2	Pn1	Rn1	Rn2	ηD
			r/min	N.m	KW	N	N	%	r/min	N.m	KW	N	N	%
									n1= 1400min ⁻¹					
VF 130-7	7	71	200	740	17.4	1500	5990	89	129	850	13.0	1500	6980	88
VF 130-10	10	67	140	790	13.3	1500	7620	88	90	900	9.9	1500	8900	87
VF 130-15	15	63	93	920	10.6	1500	9100	86	60	1080	8.1	1500	10490	84
VF 130-20	20	59	70	900	8.0	1500	10730	84	45	1050	6.1	1500	12410	82
VF 130-23	23	57	61	890	6.9	1500	11540	83	39	1050	5.4	1500	13200	81
VF 130-30	30	49	47	1050	6.6	-	12520	79	30	1250	5.2	-	13200	77
VF 130-40	40	44	35	1100	5.4	-	12600	76	22.5	1200	3.9	-	13200	73
VF 130-46	46	45	30	1050	4.5	-	12600	76	19.6	1150	3.3	490	13200	73
VF 130-56	56	42	25.0	960	3.4	940	12600	73	16.1	1080	2.7	1500	13200	70
VF 130-64	64	39	21.9	930	3.0	1220	12600	71	14.1	1050	2.4	1500	13200	68
VF 130-80	80	35	17.5	880	2.4	1500	12600	68	11.3	950	1.8	1500	13200	64
VF 130-100	100	31	14.0	780	1.8	1500	12600	64	9.0	800	1.3	1500	13200	59
									n1= 900min ⁻¹					
									n1= 500min ⁻¹					
VF 130-7	7	71	71	1000	8.8	1500	8670	86						
VF 130-10	10	67	50	1100	6.9	1500	10810	84						
VF 130-15	15	63	33	1350	5.9	1500	12610	81						
VF 130-20	20	59	25.0	1350	4.6	1500	13800	79						
VF 130-23	23	57	21.7	1300	3.9	1500	13800	77						
VF 130-30	30	49	16.7	1500	3.7	-	13800	72						
VF 130-40	40	44	12.5	1400	2.8	-	13800	68						
VF 130-46	46	45	10.9	1350	2.3	1270	13800	68						
VF 130-56	56	42	8.9	1200	1.8	1500	13800	65						
VF 130-64	64	39	7.8	1200	1.6	1500	13800	62						
VF 130-80	80	35	6.3	1150	1.3	1500	13800	58						
VF 130-100	100	31	5.0	900	0.91	1500	13800	54						

参见第99页 See page 99



VF/VF 30/44

70 N.m

	i	ηs %	n1= 1400min ⁻¹							n1= 900min ⁻¹						
			n2	Mn2	Pn1	Rn1	Rn2	ηD	n2	Mn2	Pn1	Rn1	Rn2	ηD		
			r/min	N.m	KW	N	N	%	r/min	N.m	KW	N	N	%		
VF/VF 30/44-245	245	29	5.7	60	0.09	140	2500	40	3.7	70	0.07	150	2500	38		
VF/VF 30/44-350	350	27	4.0	60	0.07	80	2500	36	2.6	70	0.05	150	2500	38		
VF/VF 30/44-420	420	25	3.3	60	0.06	-	2500	35	2.1	70	0.04	-	2500	39		
VF/VF 30/44-560	560	23	2.5	60	0.05	-	2500	31	1.6	70	0.04	-	2500	29		
VF/VF 30/44-700	700	21	2.0	60	0.04	-	2500	31	1.3	70	0.03	-	2500	31		
VF/VF 30/44-840	840	18	1.7	60	0.04	-	2500	26	1.1	70	0.03	-	2500	26		
VF/VF 30/44-1120	1120	16	1.3	60	0.03	-	2500	26	0.8	70	0.02	-	2500	29		
VF/VF 30/44-1680	1680	13	0.83	60	0.02	-	2500	26	0.54	70	0.02	-	2500	20		
VF/VF 30/44-2100	2100	12	0.87	60	0.02	-	2500	21	0.43	70	0.02	-	2500	16		

VF/VF 30/49

100 N.m

	i	ηs %	n1= 1400min ⁻¹							n1= 900min ⁻¹						
			n2	Mn2	Pn1	Rn1	Rn2	ηD	n2	Mn2	Pn1	Rn1	Rn2	ηD		
			r/min	N.m	KW	N	N	%	r/min	N.m	KW	N	N	%		
VF/VF 30/49-240	240	32	5.8	95	0.13	80	3450	45	3.8	100	0.09	150	3450	44		
VF/VF 30/49-315	315	24	4.4	95	0.11	140	3450	40	2.9	100	0.07	150	3450	43		
VF/VF 30/49-420	420	24	3.3	95	0.08	-	3450	41	2.1	100	0.06	-	3450	37		
VF/VF 30/49-540	540	22	2.6	95	0.07	-	3450	37	1.7	100	0.05	-	3450	35		
VF/VF 30/49-720	720	20	1.9	95	0.05	-	3450	39	1.3	100	0.04	-	3450	33		
VF/VF 30/49-900	900	18	1.6	95	0.05	-	3450	31	1.0	100	0.04	-	3450	26		
VF/VF 30/49-1120	1120	15	1.3	95	0.04	-	3450	31	0.8	100	0.03	-	3450	28		
VF/VF 30/49-1440	1440	14	0.97	95	0.04	-	3450	24	0.63	100	0.03	-	3450	22		
VF/VF 30/49-2160	2160	11	0.65	95	0.03	-	3450	21	0.42	100	0.02	-	3450	22		
VF/VF 30/49-2700	2700	10	0.52	95	0.03	-	3450	17	0.33	100	0.02	-	3450	17		

VF/VF 30/63

220 N.m

	i	ηs %	n1= 1400min ⁻¹							n1= 900min ⁻¹						
			n2	Mn2	Pn1	Rn1	Rn2	ηD	n2	Mn2	Pn1	Rn1	Rn2	ηD		
			r/min	N.m	KW	N	N	%	r/min	N.m	KW	N	N	%		
VF/VF 30/63-240	240	33	5.8	200	0.26	80	5000	47	3.8	220	0.19	150	5000	45		
VF/VF 30/63-315	315	26	4.4	200	0.22	140	5000	42	2.9	220	0.16	150	5000	41		
VF/VF 30/63-450	450	25	3.1	200	0.16	-	5000	41	2.0	220	0.11	-	5000	42		
VF/VF 30/63-570	570	22	2.5	200	0.13	-	5000	40	1.6	220	0.01	-	5000	36		
VF/VF 30/63-720	720	21	1.9	200	0.11	-	5000	37	1.3	220	0.09	-	5000	32		
VF/VF 30/63-900	900	18	1.6	200	0.11	-	5000	30	1.0	220	0.08	-	5000	29		
VF/VF 30/63-1200	1200	16	1.2	200	0.10	-	5000	24	0.75	220	0.07	-	5000	25		
VF/VF 30/63-1520	1520	14	0.92	200	0.08	-	5000	24	0.59	220	0.06	-	5000	23		
VF/VF 30/63-2280	2280	12	0.61	200	0.06	-	5000	21	0.39	220	0.04	-	5000	23		
VF/VF 30/63-2700	2700	11	0.52	200	0.05	-	5000	22	0.33	220	0.04	-	5000	19		

VF/VF 44/72

320 N.m

	i	ηs %	n1= 1400min ⁻¹							n1= 900min ⁻¹						
			n2	Mn2	Pn1	Rn1	Rn2	ηD	n2	Mn2	Pn1	Rn1	Rn2	ηD		
			r/min	N.m	KW	N	N	%	r/min	N.m	KW	N	N	%		
VF/VF 44/72-250	250	34	5.6	300	0.31	220	5750	57	3.6	320	0.23	220	5750	52		
VF/VF 44/72-300	300	30	4.7	300	0.29	220	5750	51	3	320	0.22	220	5750	46		
VF/VF 44/72-400	400	26	3.5	300	0.24	220	5750	46	2.3	320	0.18	220	5750	42		
VF/VF 44/72-525	525	25	2.7	300	0.19	220	5750	44	1.7	320	0.14	220	5750	41		
VF/VF 44/72-700	700	24	2.0	300	0.15	220	5750	42	1.3	320	0.11	220	5750	39		
VF/VF 44/72-920	920	21	1.5	300	0.12	-	5750	40	0.98	320	0.09	60	5750	36		
VF/VF 44/72-1200	1200	18	1.2	300	0.10	-	5750	37	0.75	320	0.08	220	5750	31		
VF/VF 44/72-1500	1500	17	0.93	300	0.08	220	5750	37	0.60	320	0.07	220	5750	29		
VF/VF 44/72-2100	2100	14	0.67	300	0.07	220	5750	30	0.43	320	0.06	220	5750	24		
VF/VF 44/72-2800	2800	12	0.50	300	0.06	220	5750	26	0.32	320	0.05	220	5750	22		

参见第100页 See page 100

VF/VF 44/86

500 N.m

	i	ηs %	n1= 1400min ⁻¹							n1= 900min ⁻¹						
			n2	Mn2	Pn1	Rn1	Rn2	ηD	n2	Mn2	Pn1	Rn1	Rn2	ηD		
			r/min	N.m	KW	N	N	%	r/min	N.m	KW	N	N	%		
VF/VF 44/86-230	230	38	6.1	450	0.53	220	7000	54	3.9	500	0.39	220	7000	53		
VF/VF 44/86-300	300	30	4.7	450	0.49	220	7000	45	3.0	500	0.37	220	7000	42		
VF/VF 44/86-400	400	30	3.5	450	0.40	220	7000	41	2.3	500	0.29	220	7000	41		
VF/VF 44/86-525	525	25	2.7	450	0.30	220	7000	42	1.7	500	0.23	220	7000	39		
VF/VF 44/86-700	700	25	2.0	450	0.24	220	7000	39	1.3	500	0.18	220	7000	37		
VF/VF 44/86-920	920	22	1.5	450	0.18	220	7000	40	0.98	500	0.14	60	7000	37		
VF/VF 44/86-1380	1380	17	1.0	450	0.15	220	7000	32	0.65	500	0.12	60	7000	28		
VF/VF 44/86-1840	1840	17	0.76	450	0.12	220	7000	30	0.49	500	0.09	60	7000	28		
VF/VF 44/86-2116	2116	16	0.66	450	0.11	220	7000	28	0.43	500	0.08	220	7000	28		
VF/VF 44/86-2760	2760	14	0.51	450	0.10	-	7000	24	0.33	500	0.07	220	7000	24		

VF/VF 49/110

950 N.m

	i	ηs %	n1= 1400min ⁻¹							n1= 900min ⁻¹						
			n2	Mn2	Pn1	Rn1	Rn2	ηD	n2	Mn2	Pn1	Rn1	Rn2	ηD		
			r/min	N.m	KW	N	N	%	r/min	N.m	KW	N	N	%		
VF/VF 49/110-230	230	38	6.1	900	1.1	400	8000	52	3.9	950	0.76	400	8000	51		
VF/VF 49/110-300	300	29	4.7	900	0.91	400	8000	48	3.0	950	0.63	400	8000	47		
VF/VF 49/110-400	400	30	3.5	900	0.73	400	8000	45	2.3	950	0.50	400	8000	45		
VF/VF 49/110-540	540	25	2.6	900	0.60	400	8000	41	1.7	950	0.44	400	8000	38		
VF/VF 49/110-720	720	24	1.9	900	0.46	400	8000	40	1.3	950	0.33	400	8000	38		
VF/VF 49/110-1080	1080	18	1.3	900	0.39	400	8000	31	0.83	950	0.28	400	8000	30		
VF/VF 49/110-1350	1350	16	1.0	900	0.33	400	8000	30	0.67	950	0.24	400	8000	28		
VF/VF 49/110-1656	1656	17	0.85	900	0.27	400	8000	30	0.54	950	0.18	400	8000	30		
VF/VF 49/110-2070	2070	15	0.68	900	0.23	400	8000	28	0.43	950	0.17	400	8000	25		
VF/VF 49/110-2800	2800	13	0.50	900	0.20	400	8000	24	0.32	950	0.15	400	8000	21		

VF/VF 63/130

1850 N.m

	i	ηs %	n1= 1400min ⁻¹							n1= 900min ⁻¹						
			n2	Mn2	Pn1	Rn1	Rn2	ηD	n2	Mn2	Pn1	Rn1	Rn2	ηD		
			r/min	N.m	KW	N	N	%	r/min	N.m	KW	N	N	%		
VF/VF 63/130-280	280	31	5.0	1800	1.9	480	13800	50	3.2	1850	1.3	480	13800	48		
VF/VF 63/130-400	400	29	3.5	1800	1.5	480	13800	44	2.3	1850	1.0	480	13800	44		
VF/VF 63/130-600	600	26	2.3	1800	1.1	480	13800	40	1.5	1850	0.73	480	13800	40		
VF/VF 63/130-760	760	24	1.8	1800	0.89	480	13800	39	1.2	1850	0.62	480	13800	37		
VF/VF 63/130-960	960	23	1.5	1800	0.74	480	13800	37	0.94	1850	0.52	480	13800	35		
VF/VF 63/130-1200	1200	19	1.2	1800	0.65	-	13800	34	0.75	1850	0.45	-	13800	32		
VF/VF 63/130-1520	1520	18	0.92	1800	0.55	-	13800	32	0.59	1850	0.38	-	13800	30		
VF/VF 63/130-1800	1800	16	0.78	1800	0.52	-	13800	28	0.50	1850	0.37	-	13800	26		
VF/VF 63/130-2560	2560	14	0.55	1800	0.45	-	13800	23	0.35	1850	0.32	-	13800</			



(T13)

VF/VF系列减速机速比 Ratio distribution for VF/VF series gearboxes Ratios											
型号 Type	Rapporti / Ratios / Verhaitnisse / Rapports i										
VF/VF 30/44	245	350	420	560	700	840	1120	1680	2100		
VF 30	7	10	15	20	20	30	40	60	60		
VF 44	35	35	28	28	35	28	28	28	35		
VF/VF 30/49	240	315	420	540	720	900	1120	1440	2160	2700	
VF 30	10	7	15	15	20	20	40	40	60	60	
VF 49	24	45	28	36	36	45	28	36	36	45	
VF/VF 30/63	240	315	450	570	720	900	1200	1520	2280	2700	
VF 30	10	7	15	15	30	30	40	40	60	60	
VF 63	24	45	30	38	24	30	30	38	38	45	
VF/VF 44/72	250	300	400	525	700	920	1200	1500	2100	2800	
VF 44	10	10	10	35	35	46	60	60	70	70	
VF 72	25	30	40	15	20	20	20	25	30	40	
VF/VF 44/86	230	300	400	525	700	920	1380	1840	2116	2760	
VF 44	10	10	10	35	35	46	46	46	46	60	
VF 86	23	30	40	15	20	20	30	40	46	46	
VF/VF 49/110	230	300	400	540	720	1080	1350	1656	2070	2800	
VF 49	10	10	10	18	36	36	45	36	45	70	
VF 110	23	30	40	30	20	30	30	46	46	40	
VF/VF 63/130	280	400	600	760	960	1200	1520	1800	2560	3200	
VF 63	7	10	15	19	24	30	38	45	64	80	
VF 130	40	40	40	40	40	40	40	40	40	40	
VF/VF 86/150	200	225	300	345	460	529	690	920	1380	1840	2944
VF 86	10	15	15	15	20	23	23	23	46	46	64
VF 150	20	15	20	23	23	23	30	40	30	40	46

双级蜗杆减速机VF/VF在客户要求的某些情况下,能供给高于标准的减速机(见下表)。

On customer's request the double wormgearboxes VF/VF in some cases, can be supplied with higher ratios than the standard ones (see below descriptions).

(T14)

型号 Type	i max.
VF/VF 30/44	2450
VF/VF 30/49	4200
VF/VF 30/63	7000
VF/VF 44/72	4000
VF/VF 44/86	5600
VF/VF 49/110	5600

从 63/130 到 86/150 的型号规格的速比可达到 1:10000
From size 63/130 to 86/150 it is possible to supply ratios up to 1:10000.

(T15)

型号 Type	电机框号(B5)Motor frame (B5)							
	56	63	71	80	90	100	112	
VF30 i =	7-70	7-60*	-	-	-	-	-	
VF44 i =	-	7-100*	7-35*	-	-	-	-	
VF49 i =	-	7-100*	7-60*	7-28*	-	-	-	
VF63 i =	-	-	7-100*	7-45*	7-24*	-	-	
VF72 i =	-	-	50-100	7-80*	7-40*	7-15*	-	
VF86 i =	-	-	7-100	7-100*	7-56*	7-30*	7-30*	
VF110 i =	-	-	-	7-100*	7-100*	7-56*	7-56*	
型号 Type	电机框号(B5)Motor frame (B5)							
	90	100	112	132	160	180	200	225
VF130 i =	46-100	7-80	7-40	7-40#	-	-	-	-
VF150 i =	-	23-100	23-100	7-46	7-20#	-	-	-

(T17)

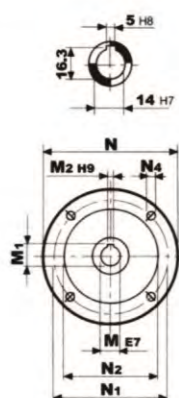
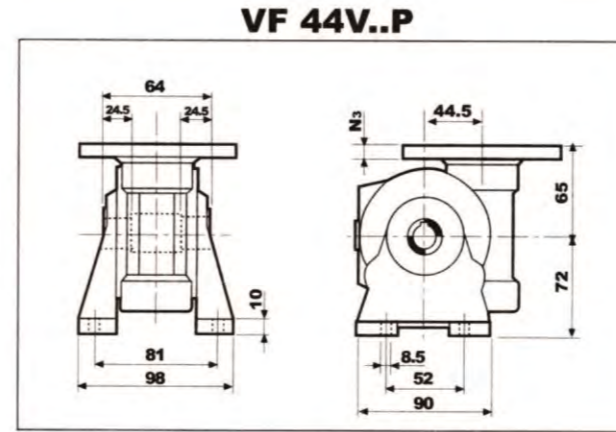
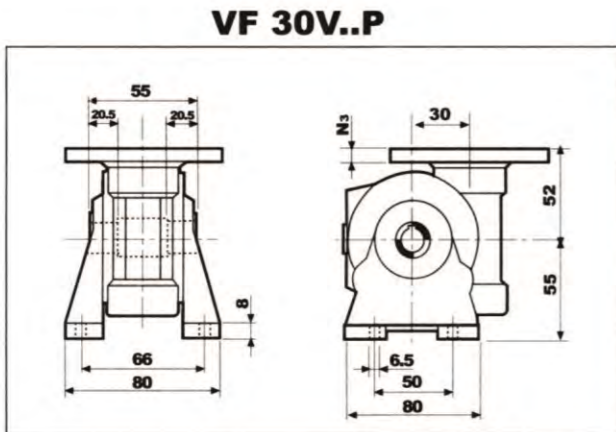
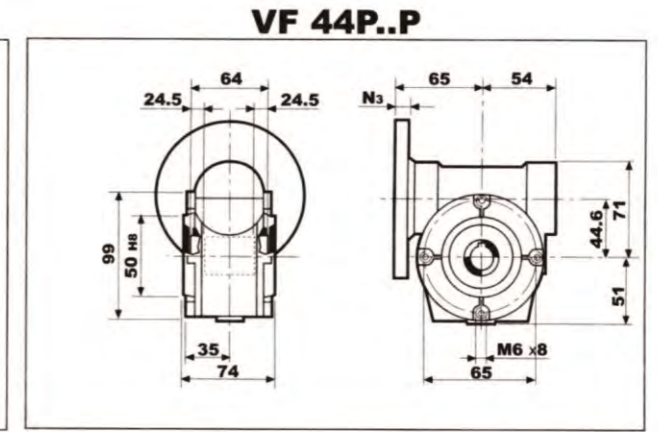
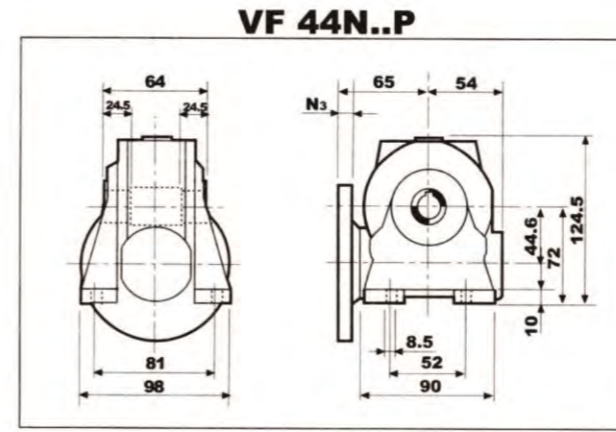
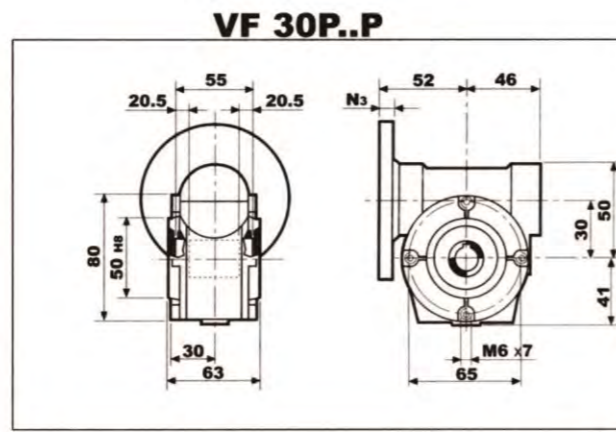
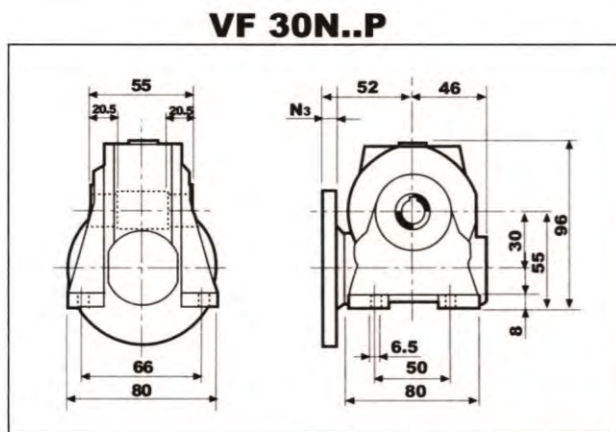
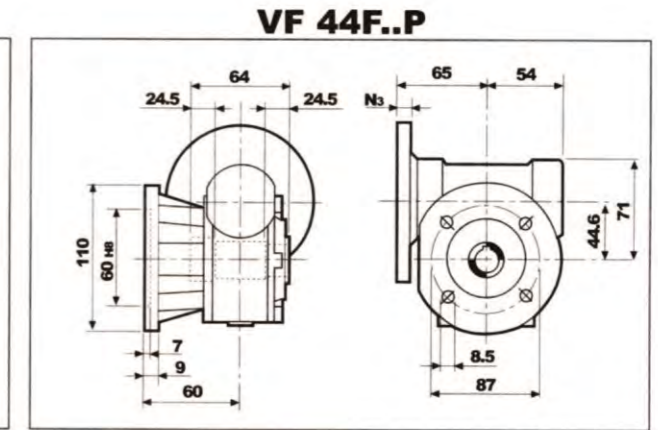
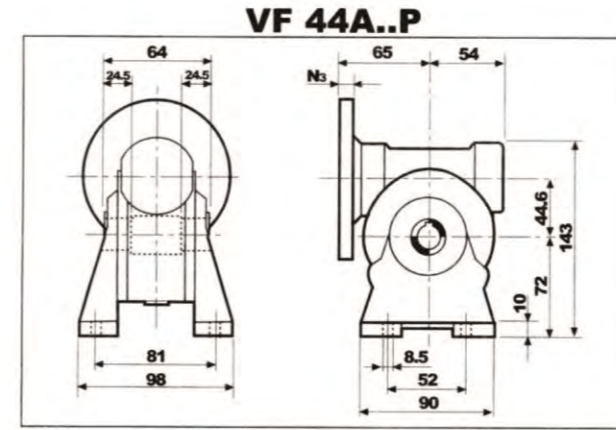
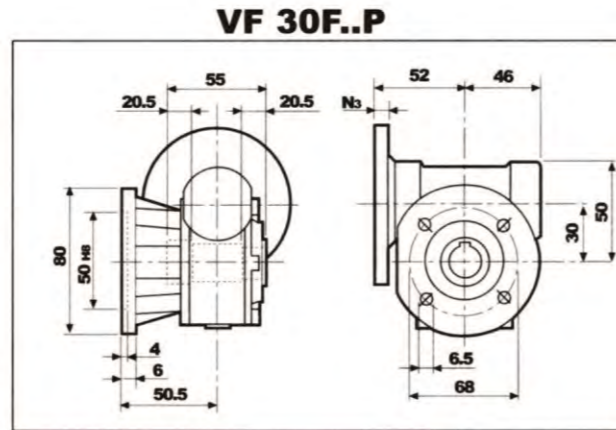
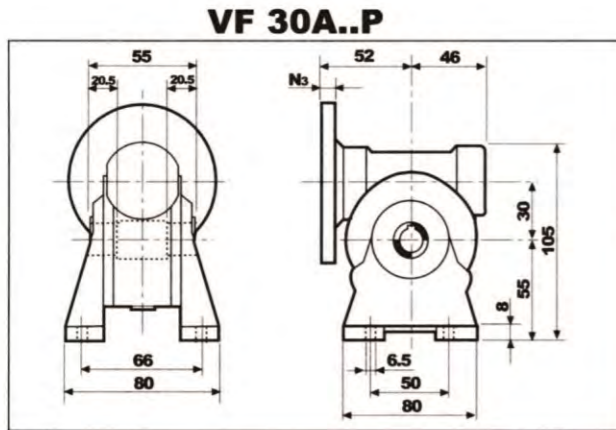
型号 Type	电动机框(B5) Motor frame (B5)							
	56	63	71	80	90	100	112	132
VF/VF 30/44 i =	-	245-2100*	-	-	-	-	-	-
VF/VF 30/49 i =	-	240-2700*	-	-	-	-	-	-
VF/VF 30/63 i =	240-2700	240-2700	-	-	-	-	-	-
VF/VF 44/72 i =	-	250-2800	250-700	-	-	-	-	-
VF/VF 44/86 i =	-	230-2760	230-700	-	-	-	-	-
VF/VF 49/110 i =	-	230-2800	230-2070	230-540	-	-	-	-
VF/VF 63/130 i =	-	-	280-3200	280-1800	280-960	-	-	-
VF/VF 86/150 i =	-	-	200-2944	200-2944	200-1840	200-920	200-920	-

* 只能选择B14框号

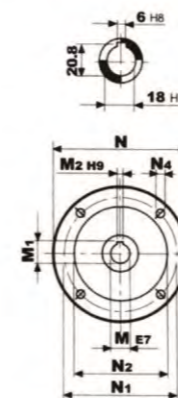
1. 齿轮电机VF和VFR系列可能是独家装备。IEC标准的电机,即: B5和B14框号用于VF系列
2. 星号(*)标记者为IEC标准电机, B14为特制型号框架。
3. VF30, VF44, P91和VF49为凸缘式整体电机, 其中VF49 P83 B14例外。

* Only available in B14 frame.

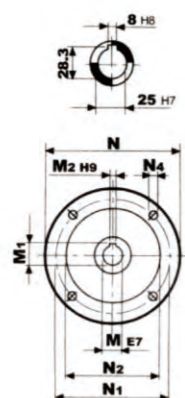
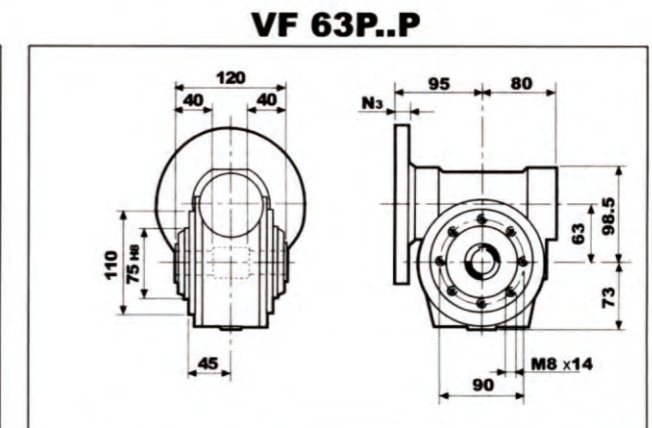
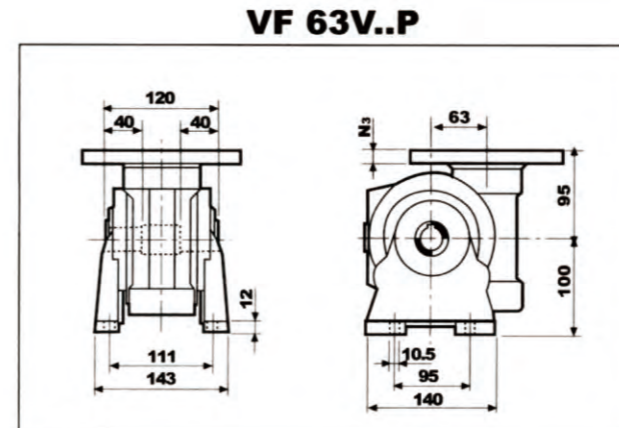
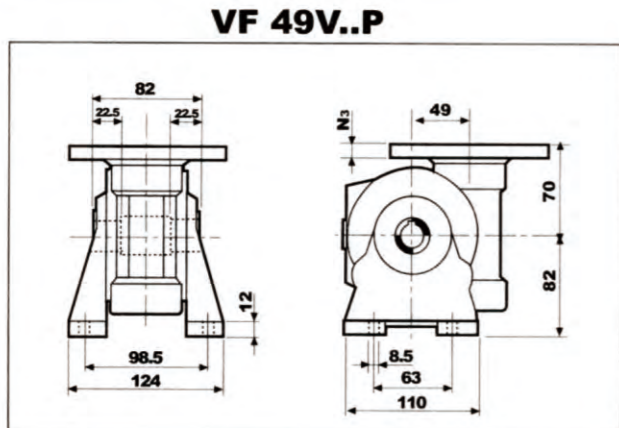
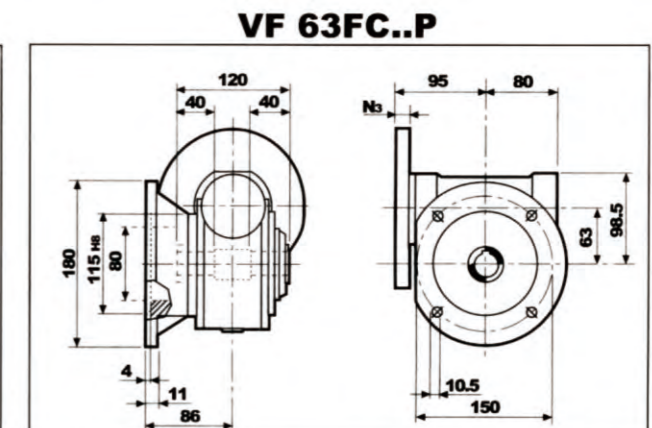
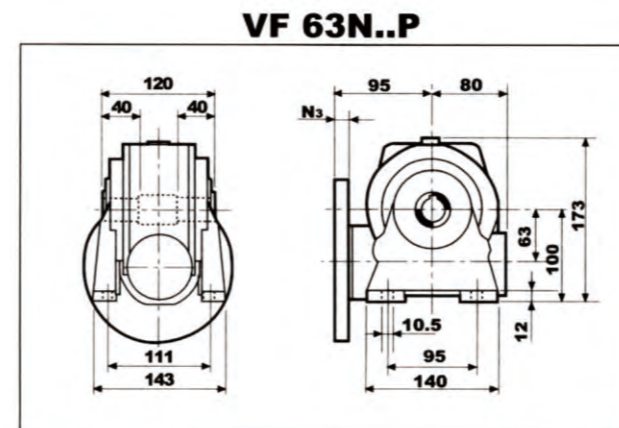
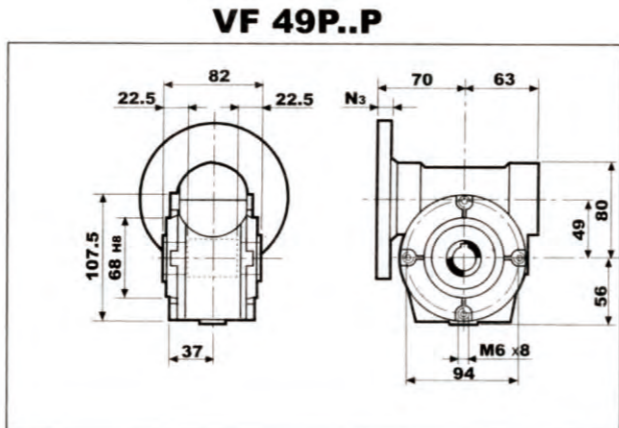
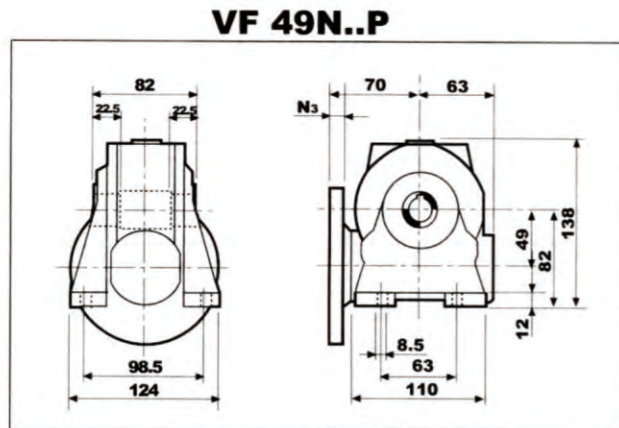
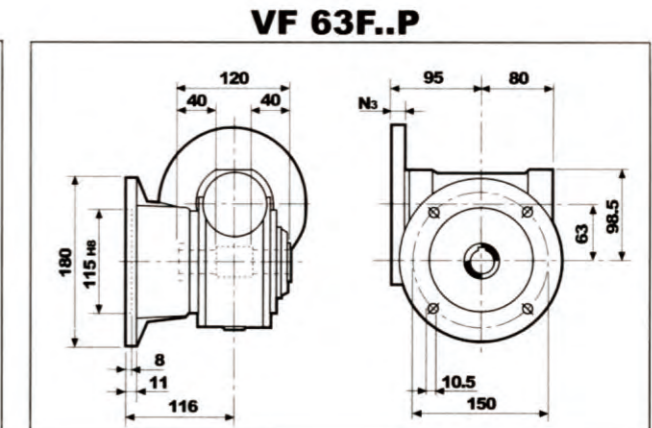
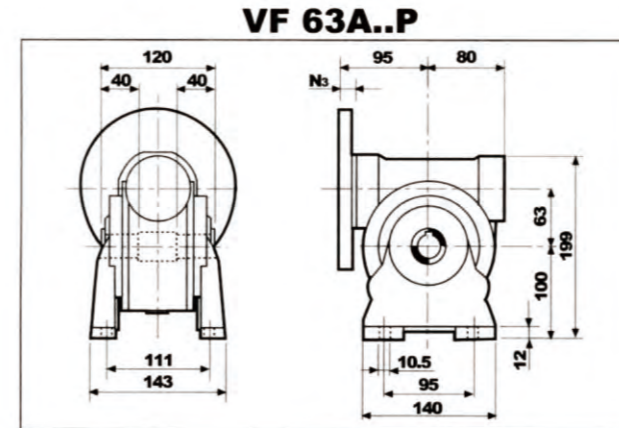
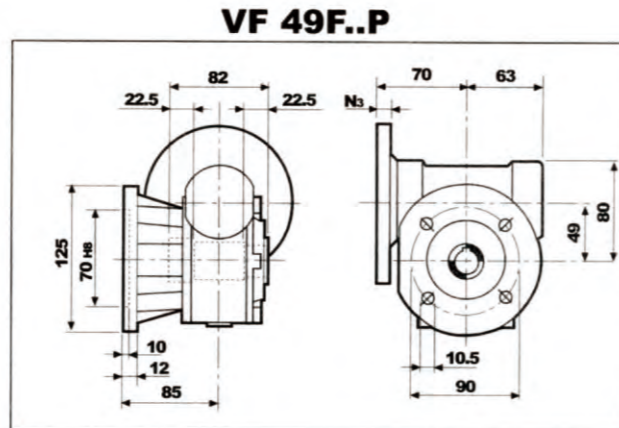
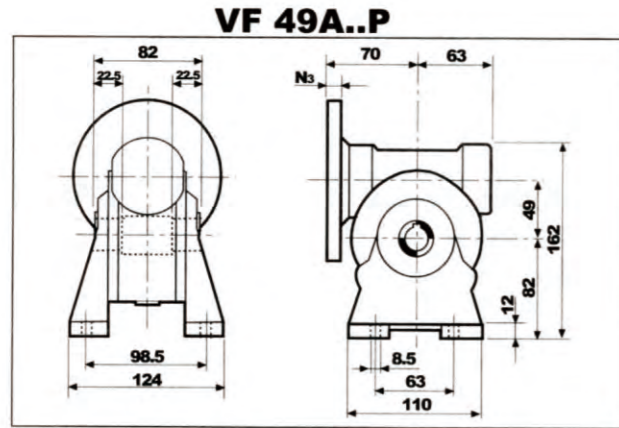
Gearmotors VF and VFR series can be exclusively equipped with electric motors to IEC standards and namely:
- B5 and B14 frame for VF units
Asterisk [*] marks combinations where IEC motor adapter, B14 stye, comes as an option.
Gear units VF 30, VF 44 P91 and VF 49 feature an integraTmotor mounting flange, with the ex ception of VF 49_P83 B14.



A . N . V F . P	VF 30							
	M	M ₁	M ₂	N	N ₁	N ₂	N ₃	N ₄
VF 30 P 63 B14	11	12.8	4	90	75	60	6	5.5



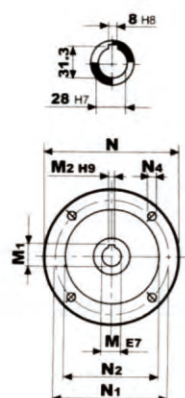
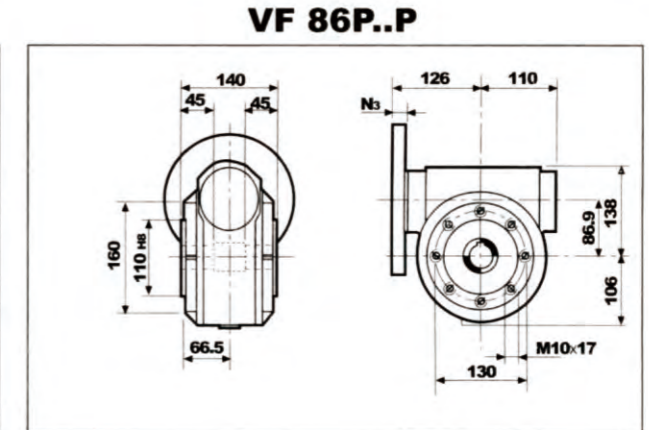
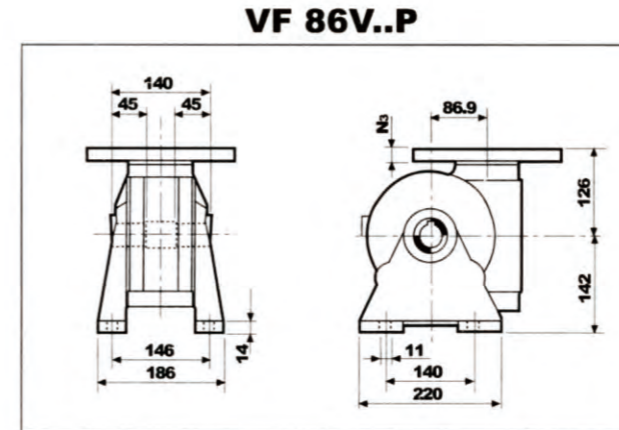
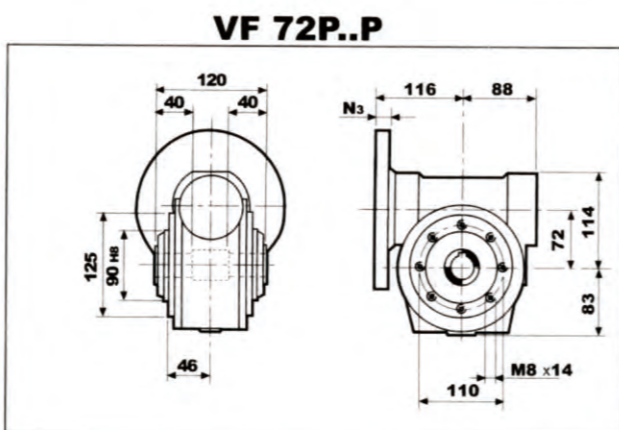
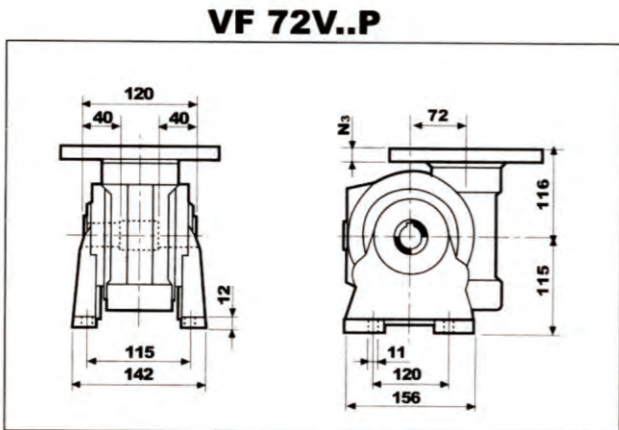
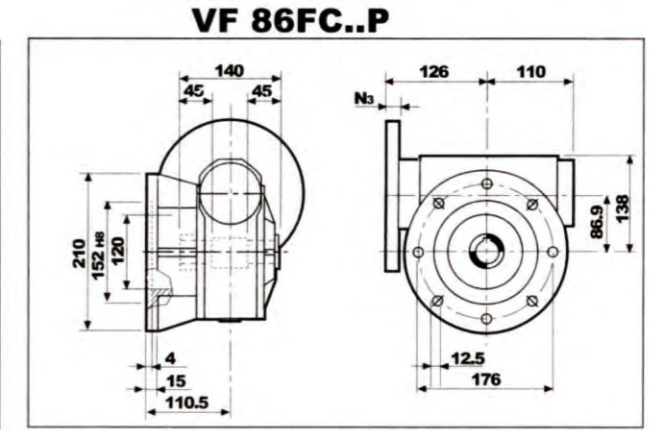
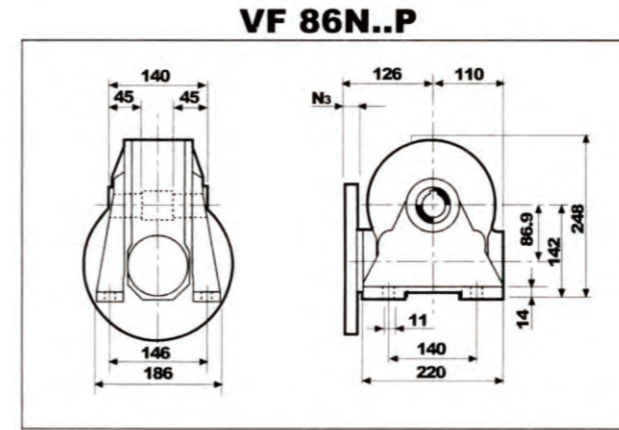
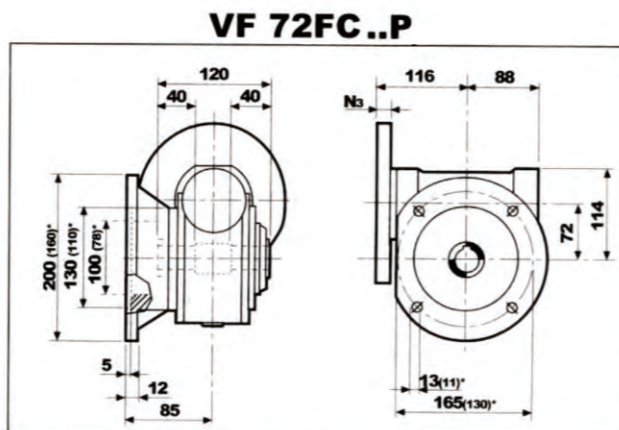
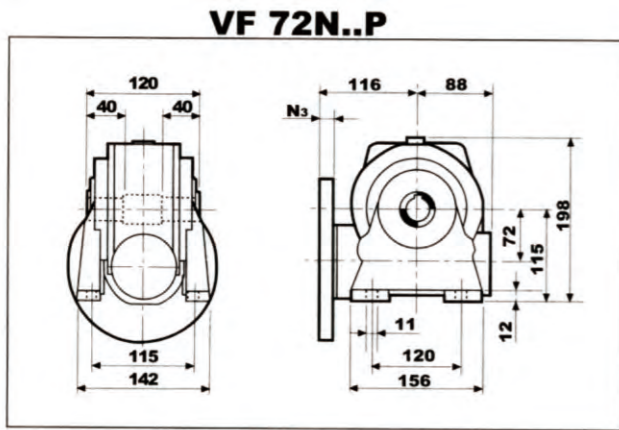
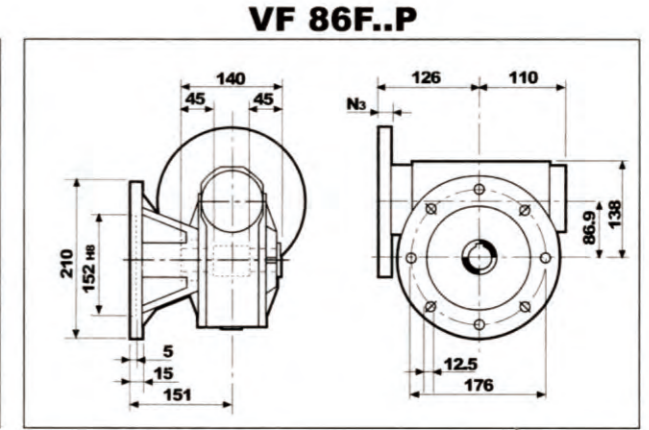
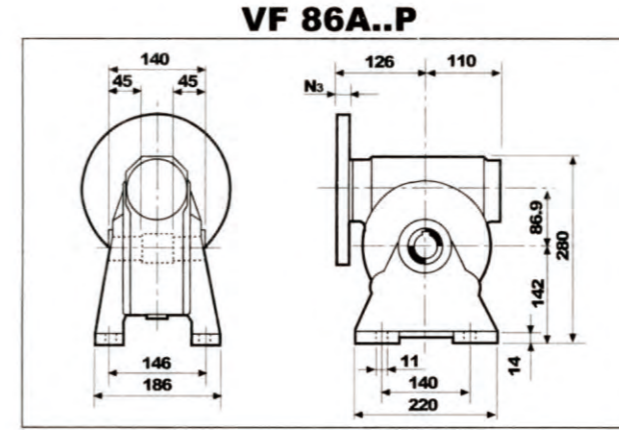
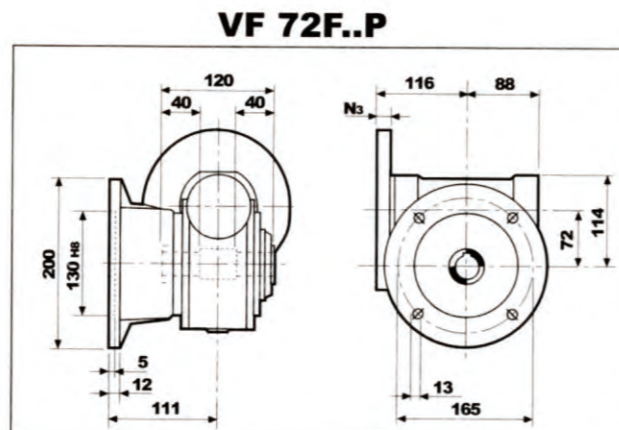
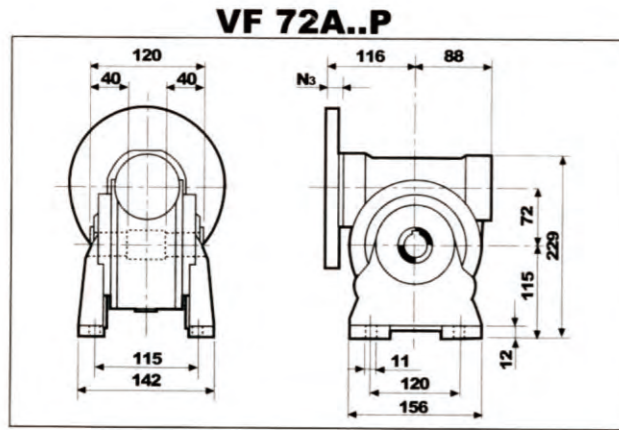
A . N . V F . FA . P	VF 44							
	M	M ₁	M ₂	N	N ₁	N ₂	N ₃	N ₄
VF 44 P 63 B5	11	12.8	4	140	115	95	10	9.5
VF 44 P 71 B5	14	16.3	5	160	130	110	10	9.5
VF 44 P 63 B14	11	12.8	4	90	75	60	8	5.5
VF 44 P 71 B14	14	16.3	5	105	85	70	10	7



A . N . V F . FA . P	VF 49							
	M	M ₁	M ₂	N	N ₁	N ₂	N ₃	N ₄
VF 49 P 63 B5	11	12.8	4	140	115	95	10.5	9.5
VF 49 P 71 B5	14	16.3	5	160	130	110	10.5	9.5
VF 49 P 80 B5	19	21.8	6	200	165	130	10	11.5
VF 49 P 63 B14	11	12.8	4	90	75	60	7	6
VF 49 P 71 B14	14	16.3	5	105	85	70	10.5	6.5
VF 49 P 80 B14	19	21.8	6	120	100	80	10	7



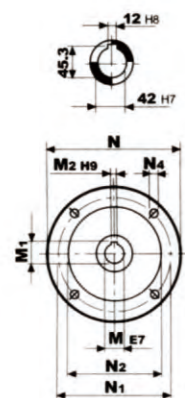
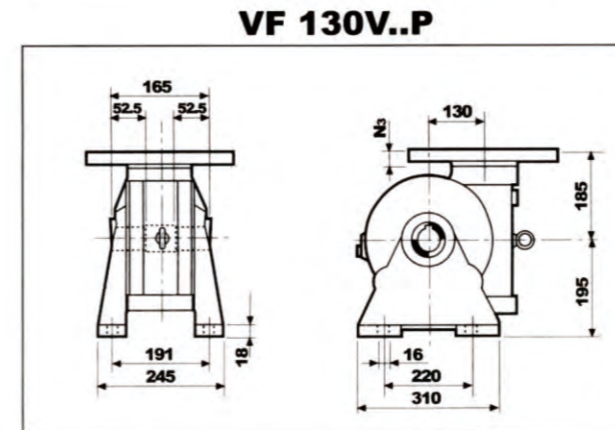
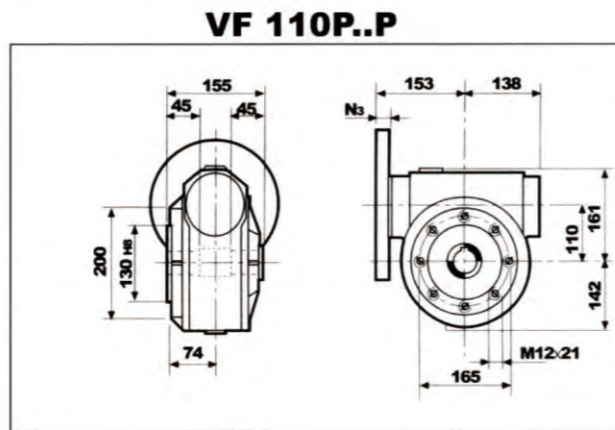
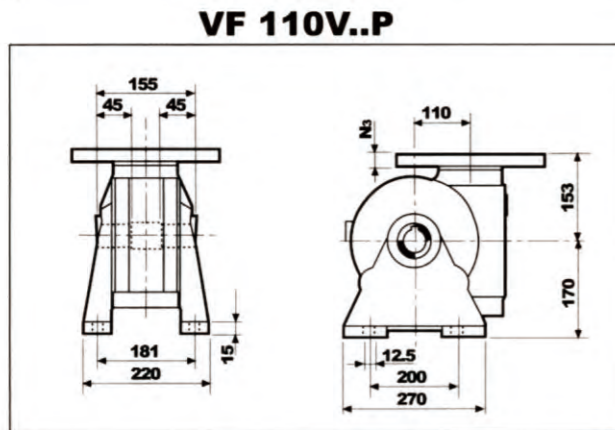
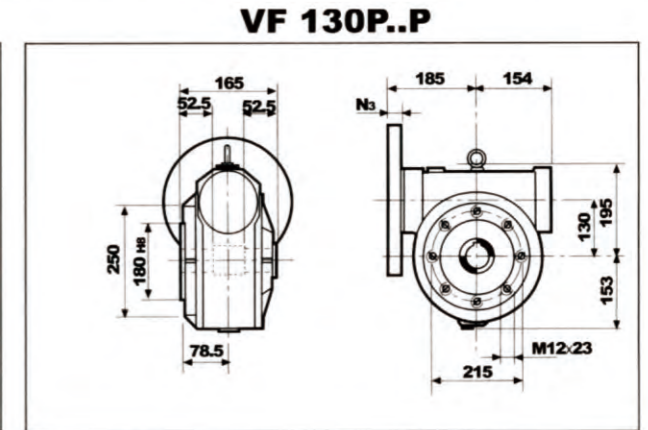
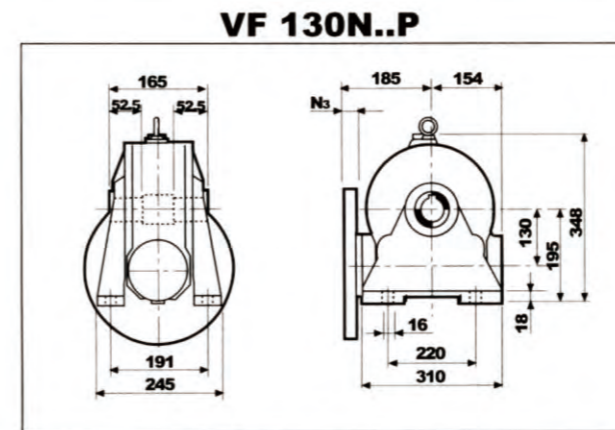
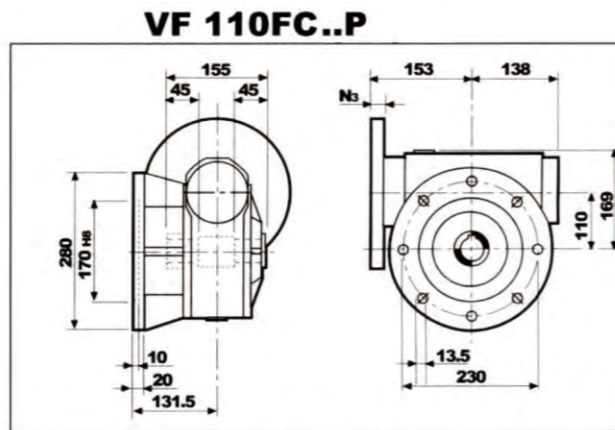
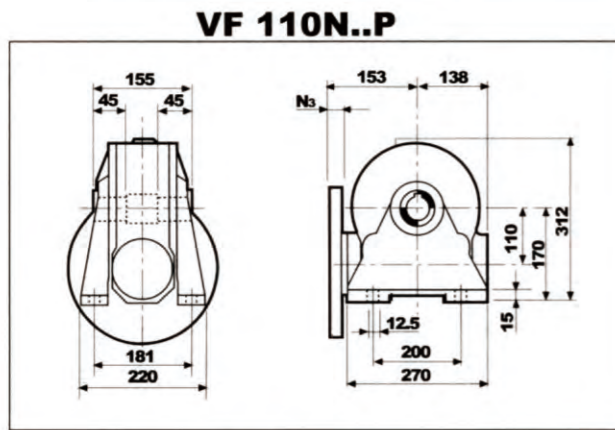
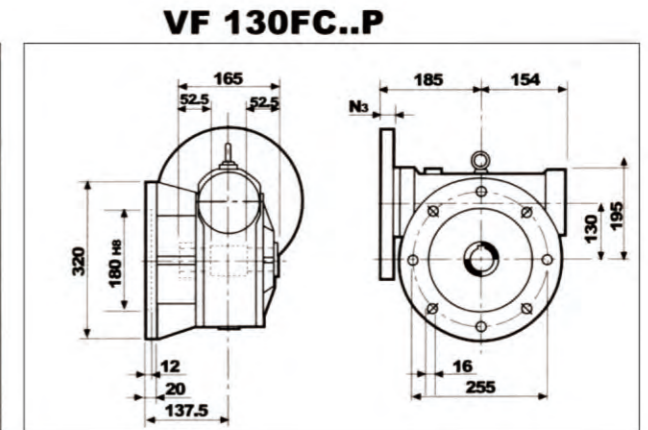
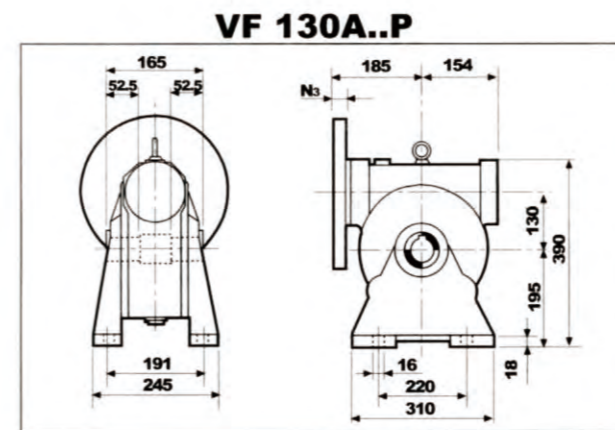
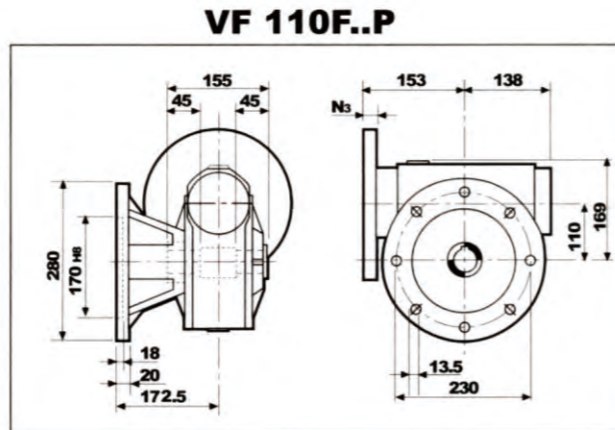
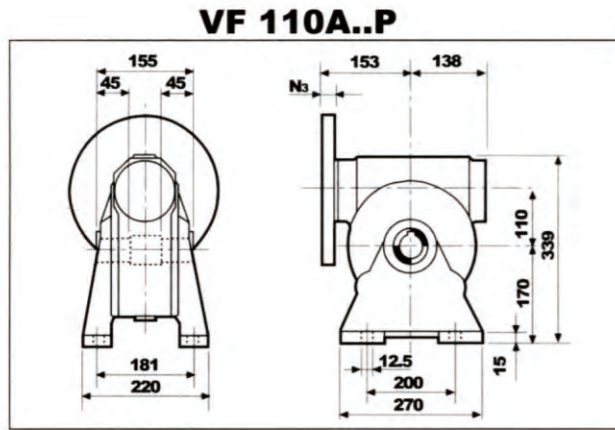
A . N . V F . FC . P	VF 63							
	M	M ₁	M ₂	N	N ₁	N ₂	N ₃	N ₄
VF 63 P 71 B5	14	16.3	5	160	130	110	12	9.5
VF 63 P 80 B5	19	21.8	6	200	165	130	13.5	11.5
VF 63 P 90 B5	24	27.3	8	200	165	130	13.5	11.5
VF 63 P 71 B14	14	16.3	5	105	85	70	11.5	6.5
VF 63 P 80 B14	19	21.8	6	120	100	80	10	6.5
VF 63 P 90 B14	24	27.3	8	140	115	95	13.5	8.5



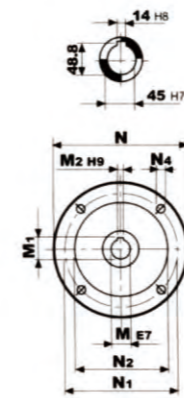
A.N.V.F FC.P	VF 72							
	M	M ₁	M ₂	N	N ₁	N ₂	N ₃	N ₄
VF 72 P 71 B5	14	16.3	5	160	130	110	12	9
VF 72 P 80 B5	19	21.8	6	200	165	130	12	11.5
VF 72 P 90 B5	24	27.3	8	200	165	130	12	11.5
VF 72 P 100 B5	28	31.3	8	250	215	180	13	13.5
VF 72 P 80 B14	19	21.8	6	120	100	80	10	7
VF 72 P 90 B14	24	27.3	8	140	115	95	10	9
VF 72 P 100 B14	28	31.3	8	160	130	110	12	9



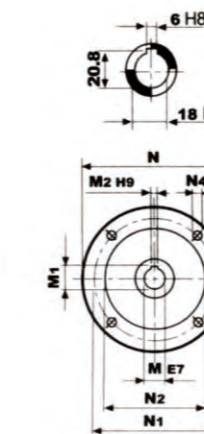
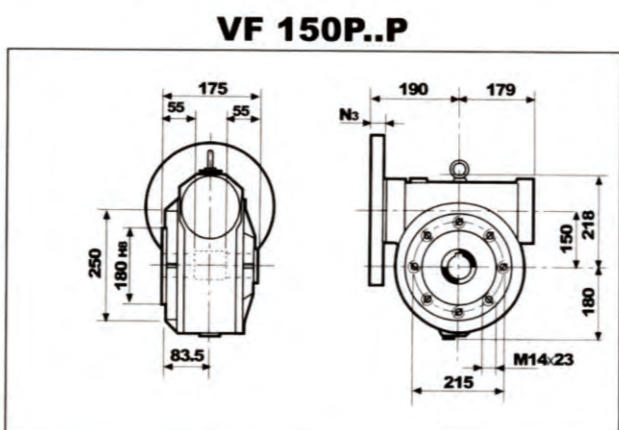
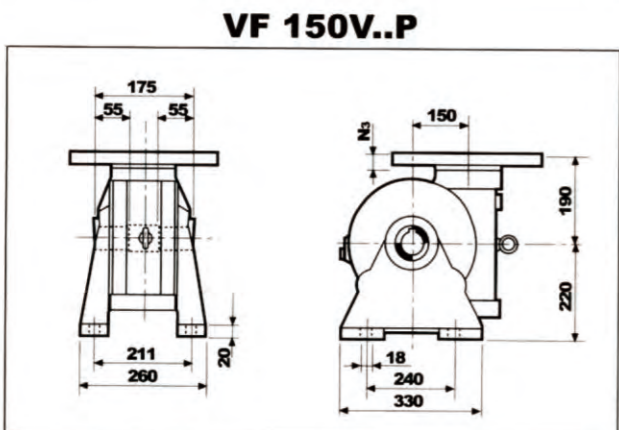
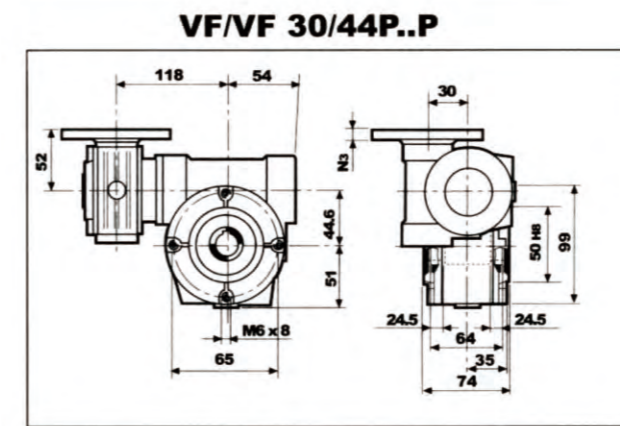
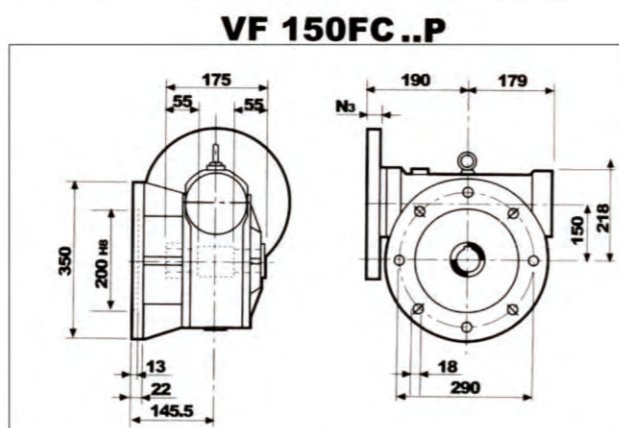
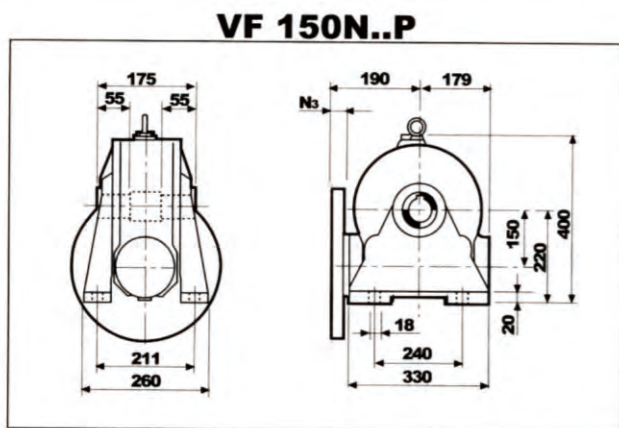
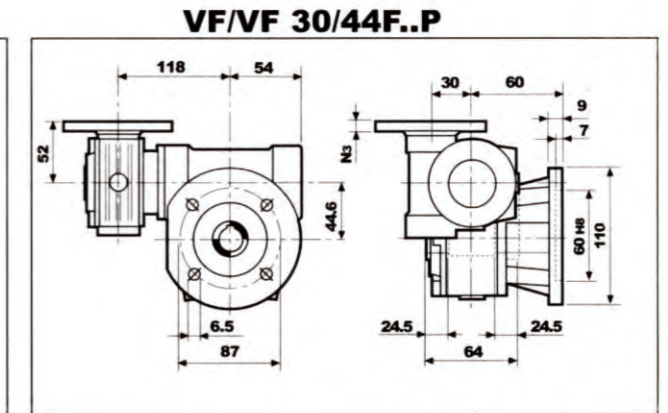
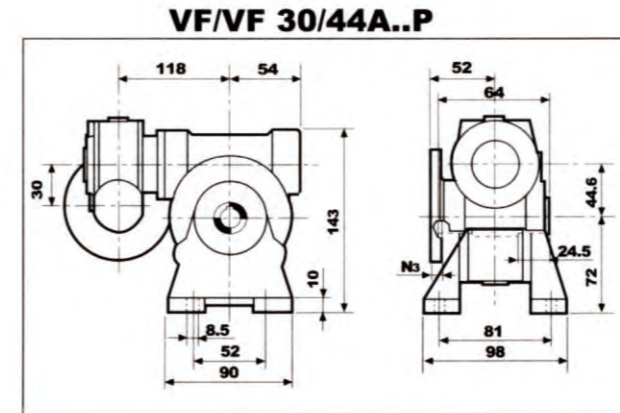
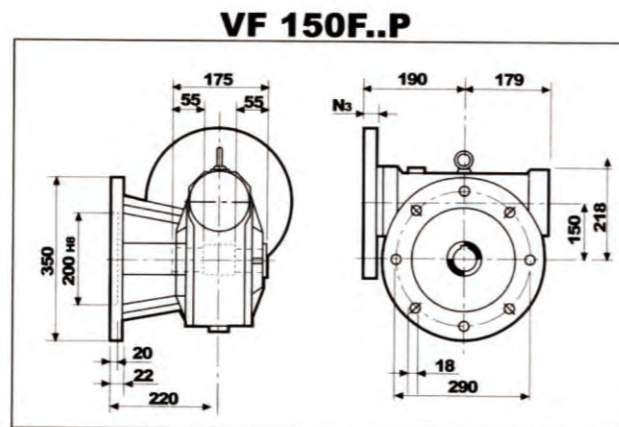
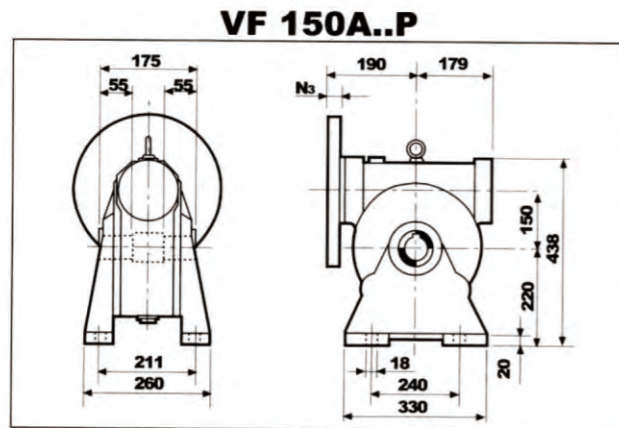
A.N.V.F FC.P	VF 86							
	M	M ₁	M ₂	N	N ₁	N ₂	N ₃	N ₄
VF 86 P 71 B5	14	16.3	5	160	130	110	12	9
VF 86 P 80 B5	19	21.8	6	200	165	130	12	11.5
VF 86 P 90 B5	24	27.3	8	200	165	130	12	11.5
VF 86 P 100 B5	28	31.3	8	250	215	180	13	13.5
VF 86 P 112 B5	28	31.3	8	250	215	180	13	13.5
VF 86 P 80 B14	19	21.8	6	120	100	80	10	7
VF 86 P 90 B14	24	27.3	8	140	115	95	10	9
VF 86 P 100 B14	28	31.3	8	160	130	110	12	9
VF 86 P 112 B14	28	31.3	8	160	130	110	12	9



A.N.V.F FC.P	VF 110							
	M	M ₁	M ₂	N	N ₁	N ₂	N ₃	N ₄
VF 110 P 80 B5	19	21.8	6	200	165	130	10	11.5
VF 110 P 90 B5	24	27.3	8	200	165	130	10	11.5
VF 110 P 100 B5	28	31.3	8	250	215	180	13	13.5
VF 110 P 112 B5	28	31.3	8	250	215	180	13	13.5
VF 110 P 80 B14	19	21.8	6	120	100	80	10	7
VF 110 P 90 B14	24	27.3	8	140	115	95	10	9
VF 110 P 100 B14	28	31.3	8	160	130	110	12	9
VF 110 P 112 B14	28	31.3	8	160	130	110	12	9

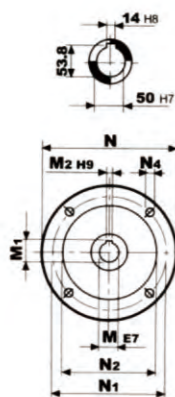


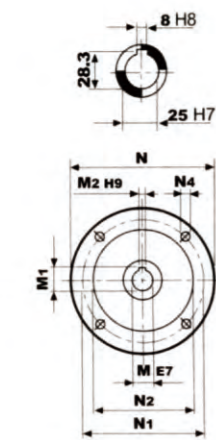
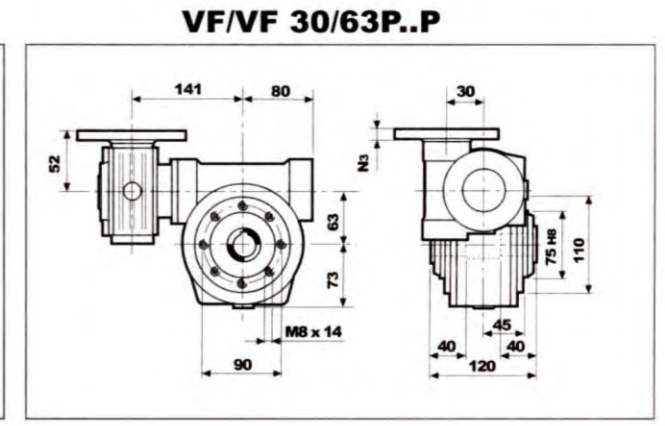
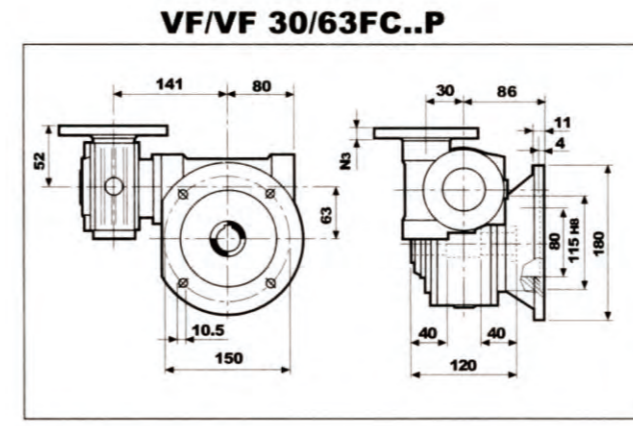
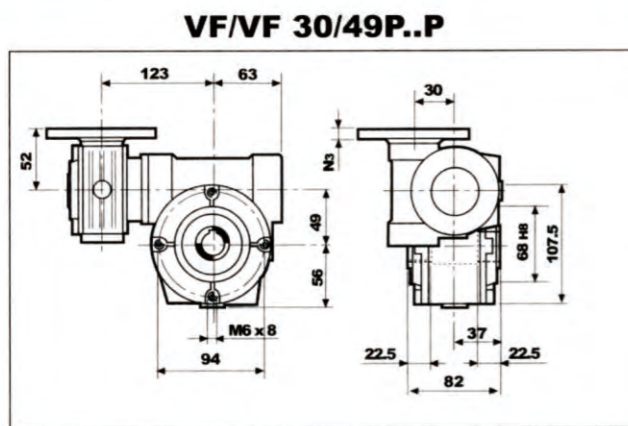
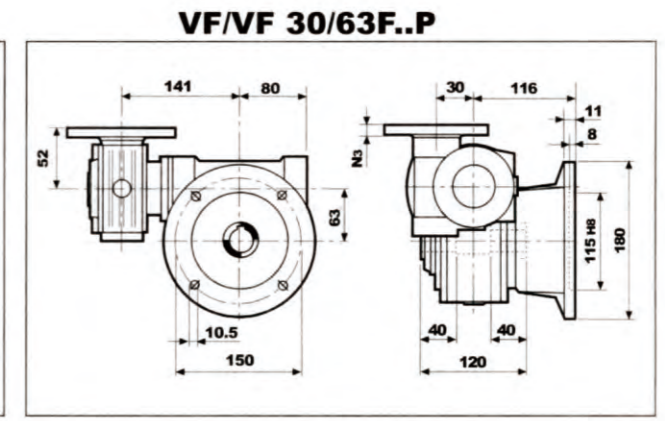
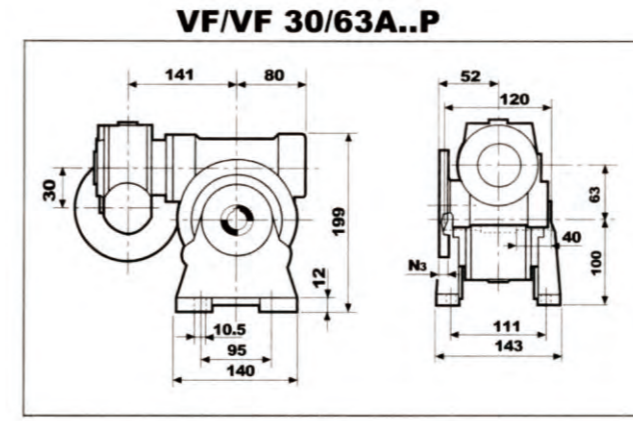
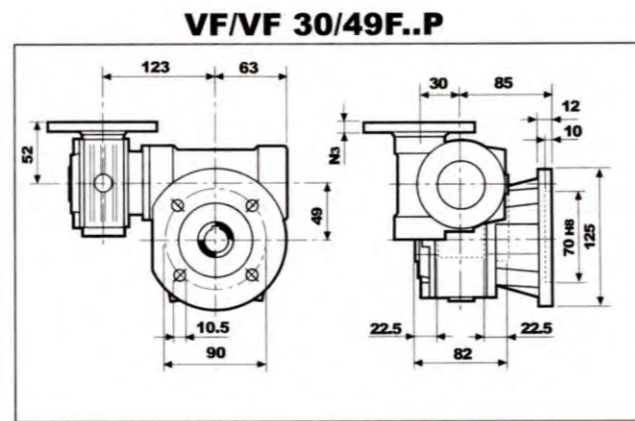
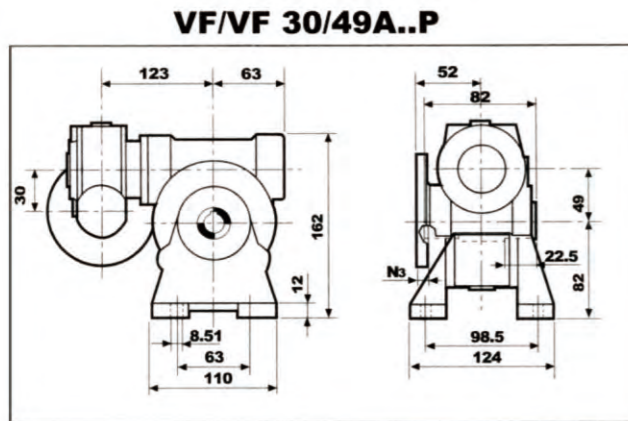
A.N.V FC.P	VF 130							
	M	M ₁	M ₂	N	N ₁	N ₂	N ₃	N ₄
VF 130 P 90 B5	24	27.3	8	200	165	130	17	11
VF 130 P 100 B5	28	31.3	8	250	215	180	17	13
VF 130 P 112 B5	28	31.3	8	250	215	180	17	13
VF 130 P 132 B5	38	40.1	10	300	265	230	17	13



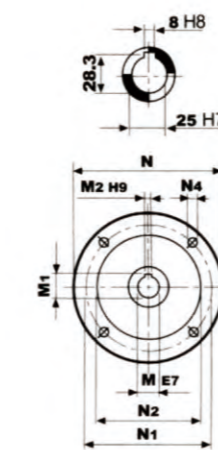
A - F - P	VF/VF 30/44							
	M	M ₁	M ₂	N	N ₁	N ₂	N ₃	N ₄
VF/VF 30/44 P 63 B14	11	12.8	4	90	75	60	6	5.5

A.N.V.F FC.P	VF 150							
	M	M ₁	M ₂	N	N ₁	N ₂	N ₃	N ₄
VF 150 P 100 B5	28	31.3	8	250	215	180	11	13
VF 150 P 112 B5	28	31.3	8	250	215	180	11	13
VF 150 P 132 B5	38	41.3	10	300	265	230	16	13
VF 150 P 160 B5	42	44.6	12	350	300	250	18	18



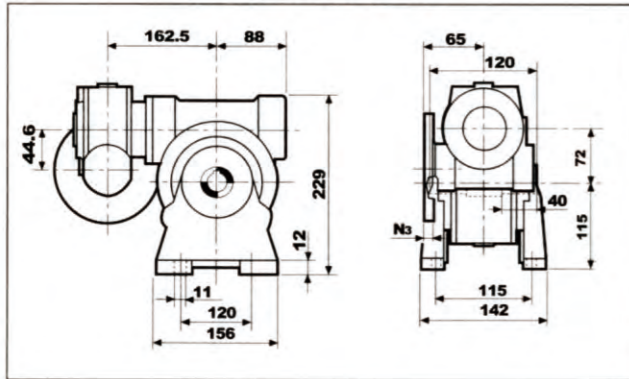


		VF/VF 30/49							
A - F - P		M	M₁	M₂	N	N₁	N₂	N₃	N₄
VF/VF 30/49 P 63 B14		11	12.8	4	90	75	60	6	5.5

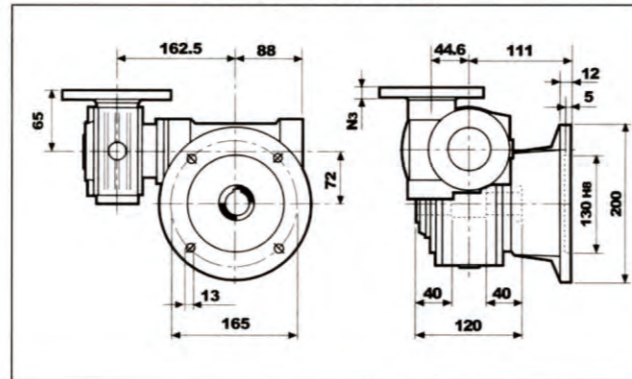


		VF/VF 30/63							
A - F FC - P		M	M₁	M₂	N	N₁	N₂	N₃	N₄
VF/VF 30/63 P 56 B5		9	10.4	3	120	100	80	7	7
VF/VF 30/63 P 63 B5		11	12.8	4	140	115	95	8	9.5
VF/VF 30/63 P 63 B14		11	12.8	4	90	75	60	6	5.5

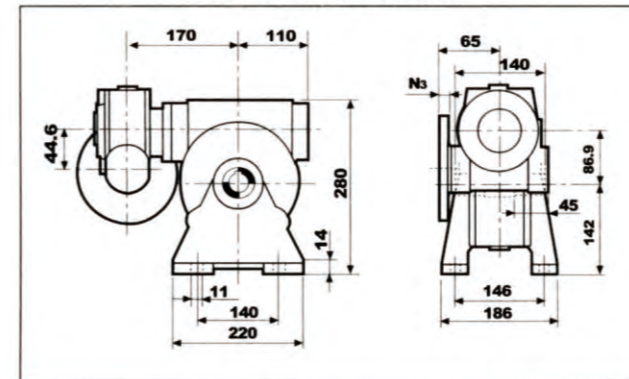
VF/VF 44/72A..P



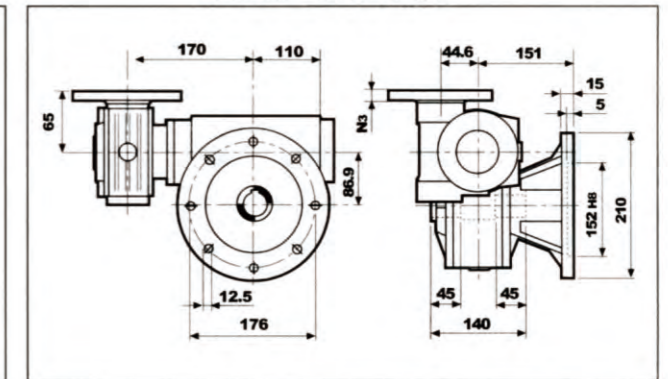
VF/VF 44/72F..P



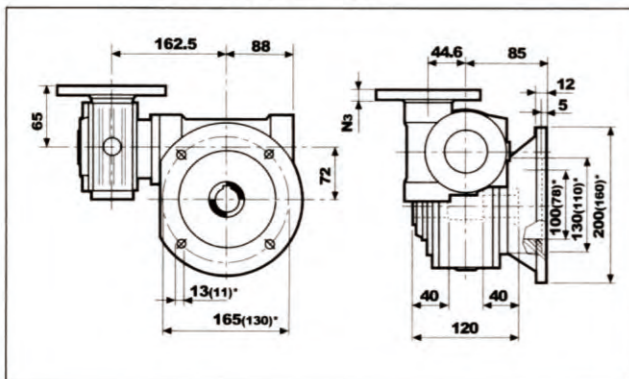
VF/VF 44/86A..P



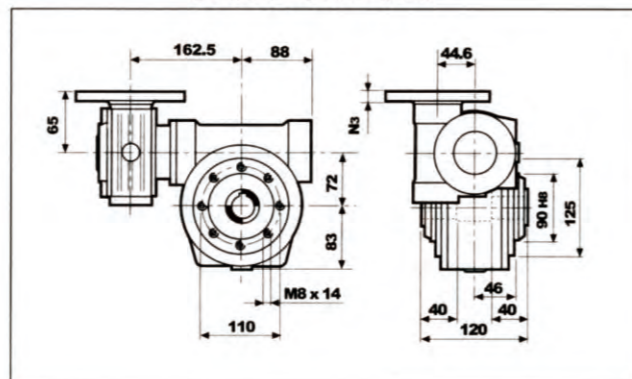
VF/VF 44/86F..P



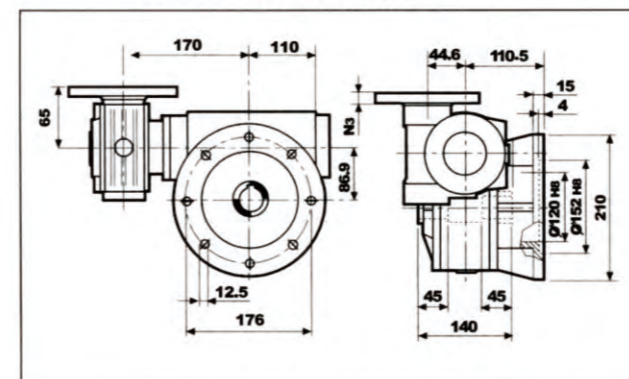
VF/VF 44/72FC..P



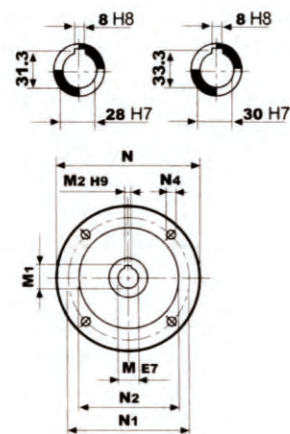
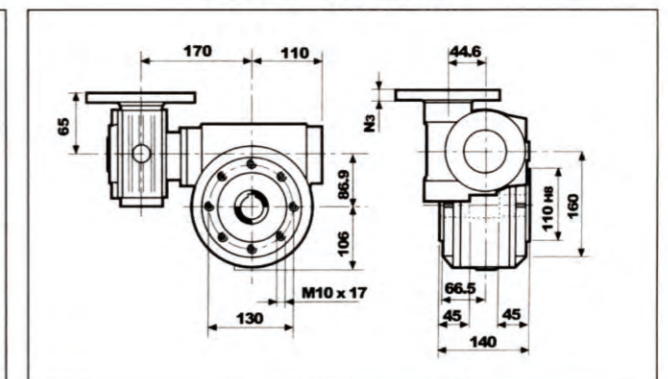
VF/VF 44/72P..P



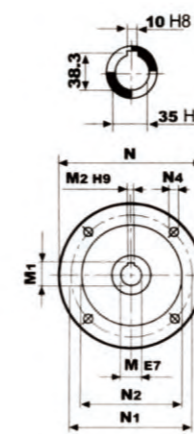
VF/VF 44/86FC..P



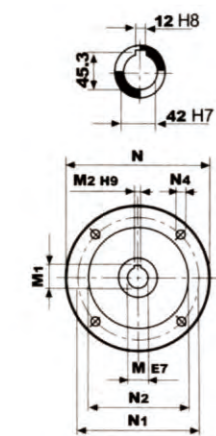
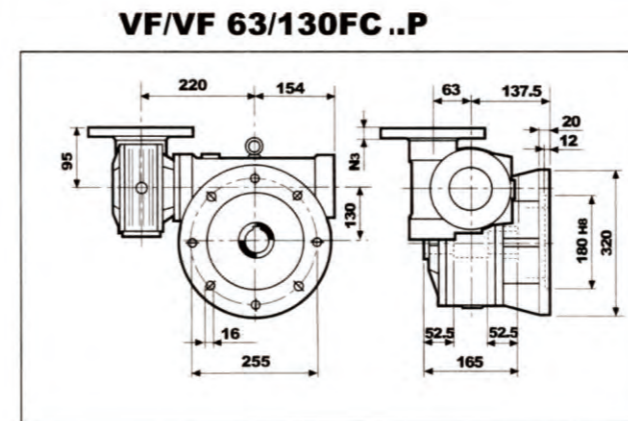
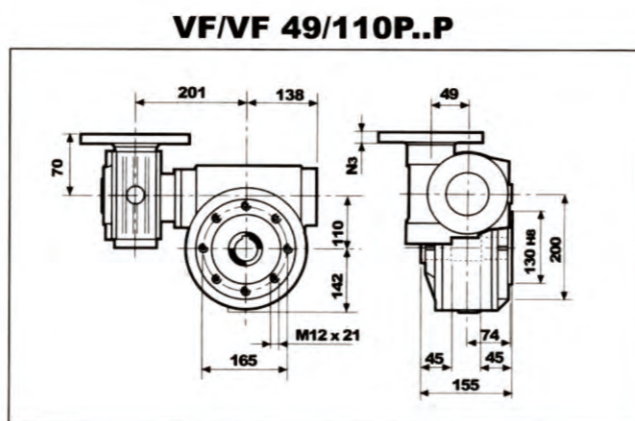
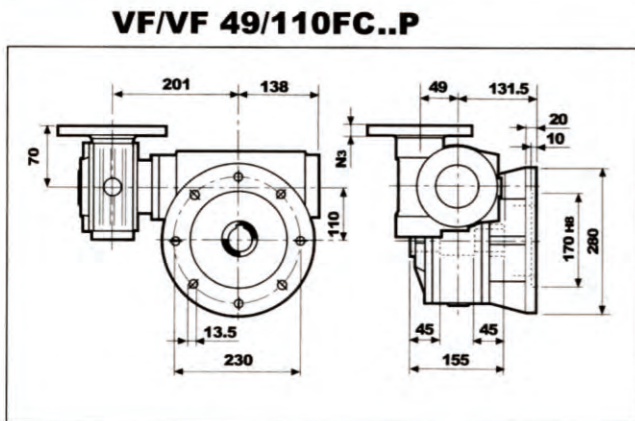
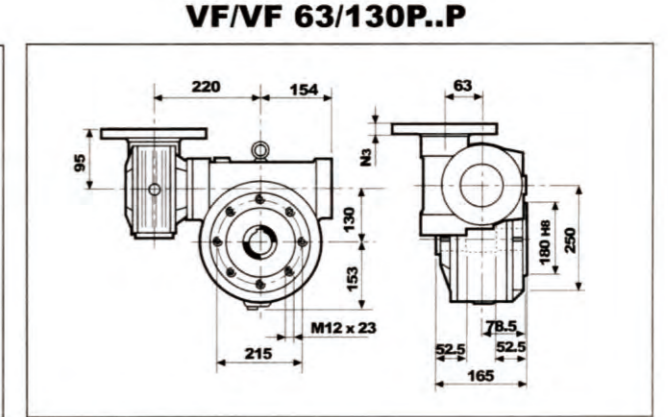
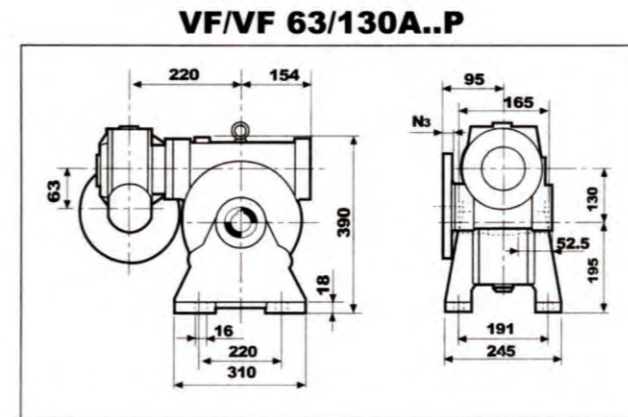
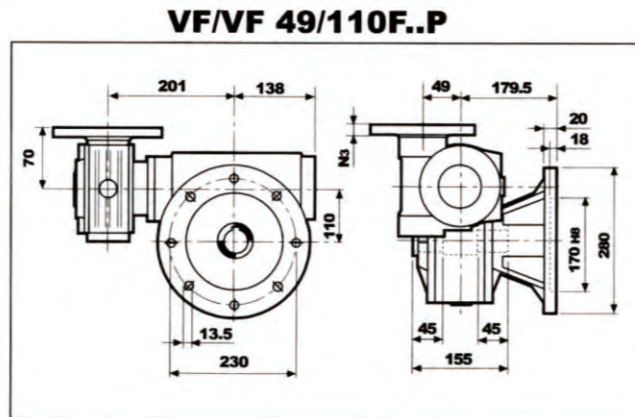
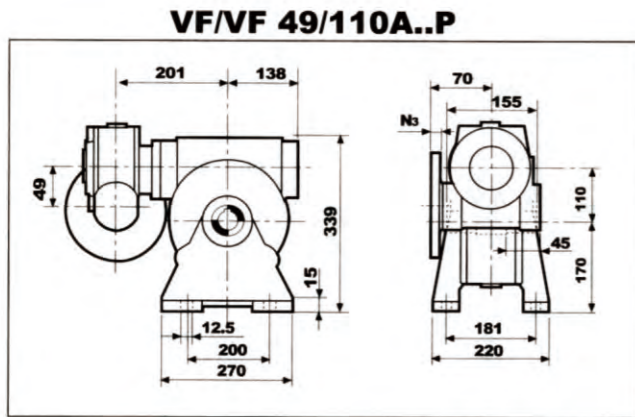
VF/VF 44/86P..P



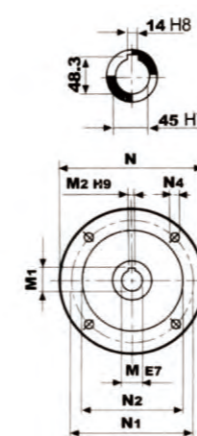
A - F FC - P	VF/VF 44/72							
	M	M ₁	M ₂	N	N ₁	N ₂	N ₃	N ₄
VF/VF 44/72 P 63 B5	11	12.8	4	140	115	95	10	9.5
VF/VF 44/72 P 71 B5	14	16.3	5	160	130	110	10	9.5
VF/VF 44/72 P 63 B14	11	12.8	4	90	75	60	8	5.5
VF/VF 44/72 P 71 B14	14	16.3	5	105	85	70	10	7



A - F - FC - P	VF/VF 44/86							
	M	M ₁	M ₂	N	N ₁	N ₂	N ₃	N ₄
VF/VF 44/86 P 63 B5	11	12.8	4	140	115	95	10	9.5
VF/VF 44/86 P 71 B5	14	16.3	5	160	130	110	10	9.5
VF/VF 44/86 P 63 B14	11	12.8	4	90	75	60	8	5.5
VF/VF 44/86 P 71 B14	14	16.3	5	105	85	70	10	7

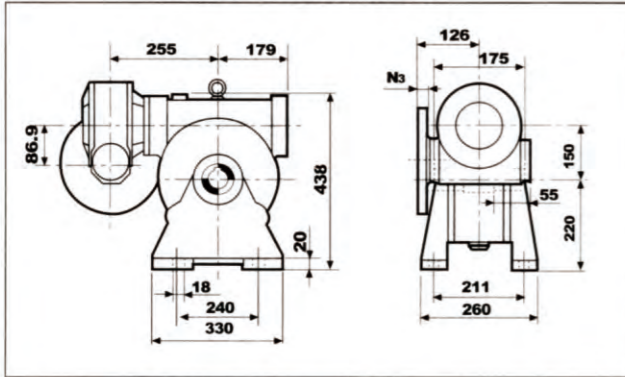


A - F - FC - P	VF/VF 49/110							
	M	M ₁	M ₂	N	N ₁	N ₂	N ₃	N ₄
VF/VF 49/110 P 63 B5	11	12.8	4	140	115	95	10.5	9.5
VF/VF 49/110 P 71 B5	14	16.3	5	160	130	110	10.5	9.5
VF/VF 49/110 P 80 B5	19	21.8	6	200	165	130	10	11.5
VF/VF 49/110 P 63 B14	11	12.8	4	90	75	60	7	6
VF/VF 49/110 P 71 B14	14	16.3	5	105	85	70	10.5	6.5
VF/VF 49/110 P 80 B14	19	21.8	6	120	100	80	10	7

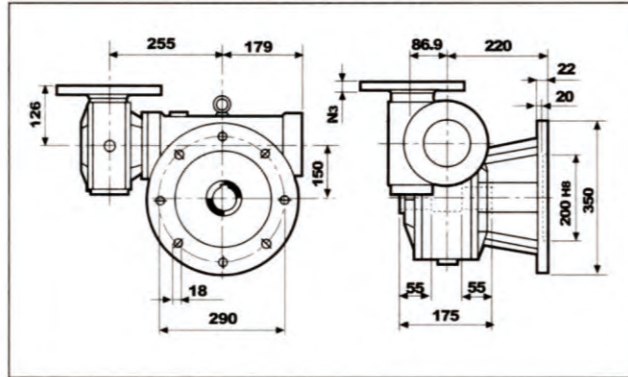


A - F - FC - P	VF/VF 63/130							
	M	M ₁	M ₂	N	N ₁	N ₂	N ₃	N ₄
VF/VF 63/130 P 71 B5	14	16.3	5	160	130	110	12	9.5
VF/VF 63/130 P 80 B5	19	21.8	6	200	165	130	13.5	12
VF/VF 63/130 P 90 B5	24	27.3	8	200	165	130	13.5	12
VF/VF 63/130 P 71 B14	14	16.3	5	105	85	70	11.5	6.5
VF/VF 63/130 P 80 B14	19	21.8	6	120	100	80	10	6.5
VF/VF 63/130 P 90 B14	24	27.3	8	140	115	95	13.5	8.5

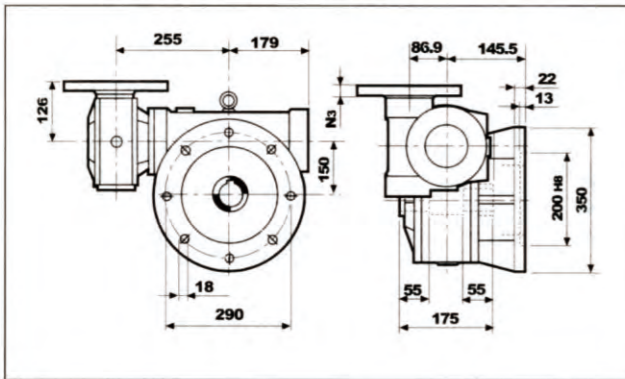
VF/VF 86/150A..P



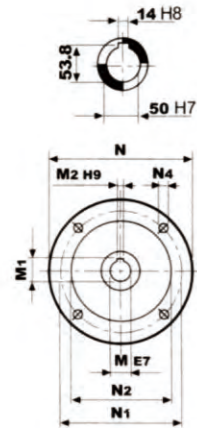
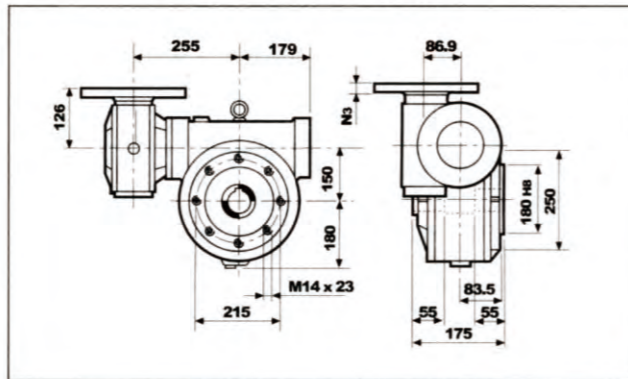
VF/VF 86/150F..P



VF/VF 86/150FC..P

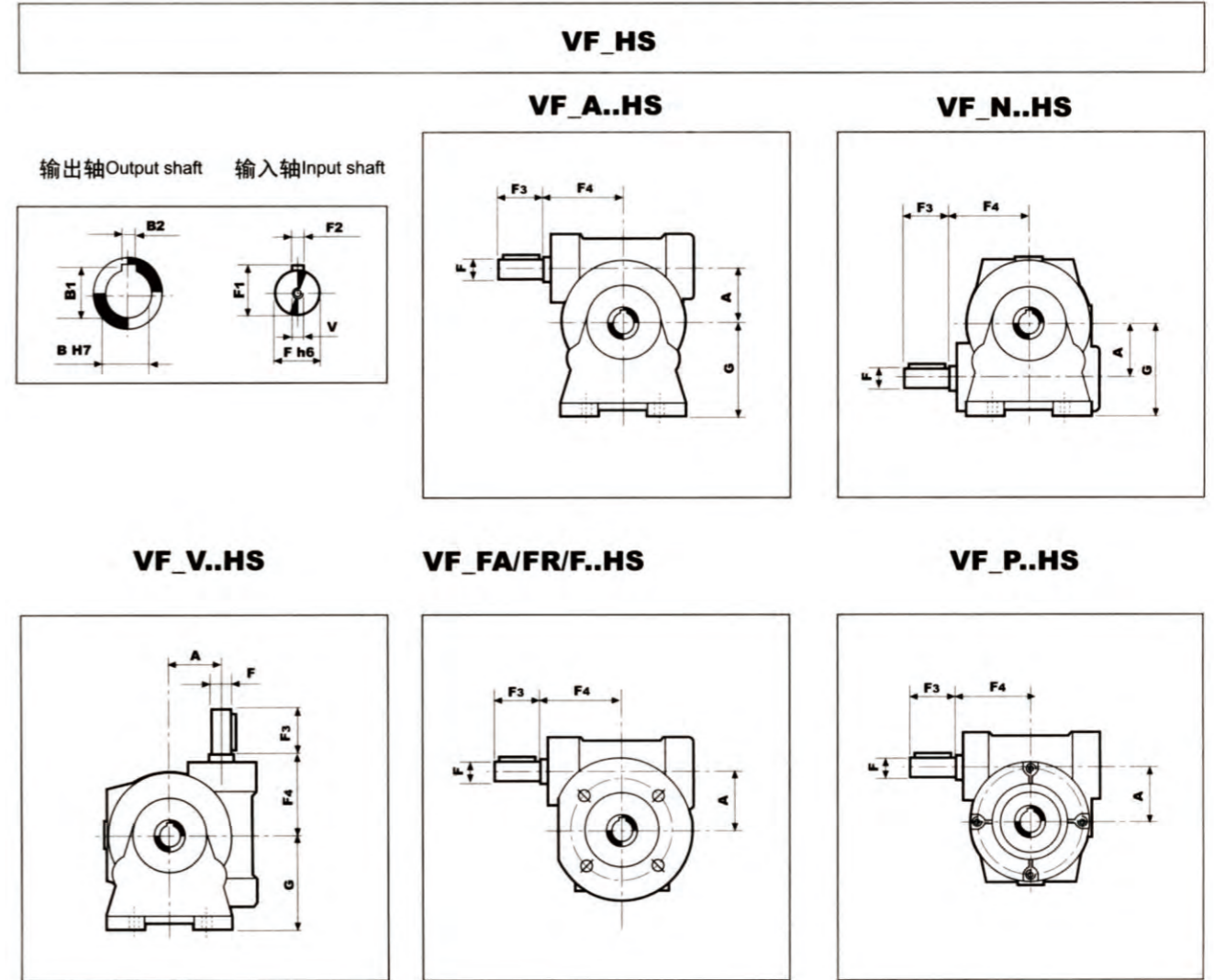


VF/VF 86/150P..P



A - F - FC - P	VF/VF 86/150							
	M	M ₁	M ₂	N	N ₁	N ₂	N ₃	N ₄
VF/VF 86/150 P 71 B5	14	16.3	5	160	130	110	12	9
VF/VF 86/150 P 80 B5	19	21.8	6	200	165	130	12	11.5
VF/VF 86/150 P 90 B5	24	27.3	8	200	165	130	12	11.5
VF/VF 86/150 P 100 B5	28	31.3	8	250	215	180	13	13.5
VF/VF 86/150 P 112 B5	28	31.3	8	250	215	180	13	13.5
VF/VF 86/150 P 80 B14	19	21.8	6	120	100	80	10	7
VF/VF 86/150 P 90 B14	24	27.3	8	140	115	95	10	9
VF/VF 86/150 P 100 B14	28	31.3	8	160	130	110	12	9
VF/VF 86/150 P 112 B14	28	31.3	8	160	130	110	12	9

减速机尺寸 GEARBOX DIMENSIONS

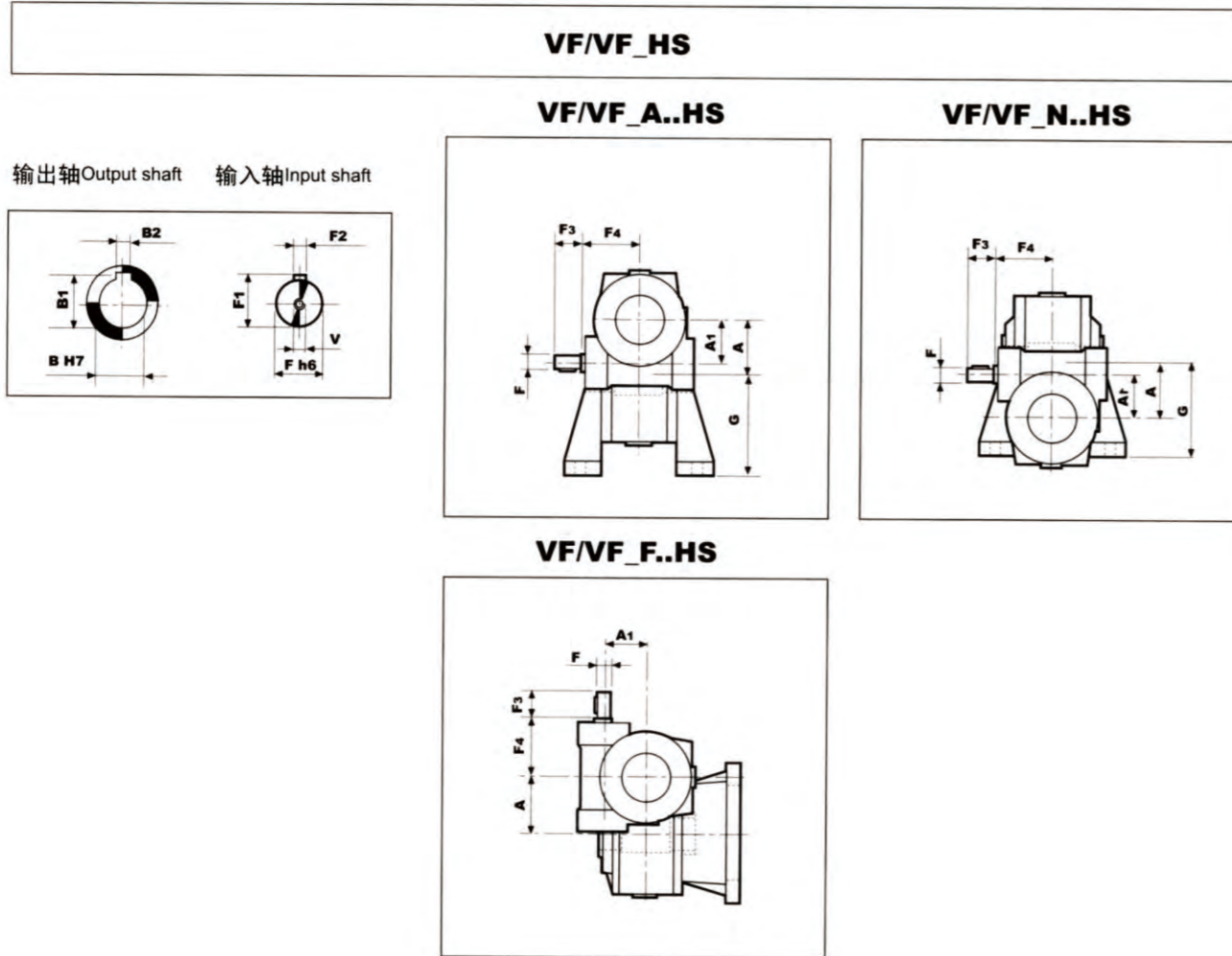


型号 Type	A	B	B1	B2	F	F1	F2	F3	F4	G	V
VF 30 HS	30	14	16.3	5	9	10.2	3	20	50	55	-
VF 44 HS	44.6	18	20.8	6	11	12.5	4	30	54	72	-
VF 49 HS	49.5	25	28.3	8	16	18	5	40	65	82	M6x16
VF 63 HS	62.17	25	28.3	8	18	20.5	6	45	80	100	M6x16
VF 72 HS	72	28(30)	31.3(33.3)	8	19	21.5	6	40	98	115	M6x16
VF 86 HS	86.9	35	38.3	10	25	28	8	50	110	142	M8x20
VF 110 HS	110.1	42	45.3	12	25	28	8	60	138	170	M8x20
VF 130 HS	130	45	48.8	14	30	33	8	60	160	195	M8x20
VF 150 HS	150	50	53.8	14	35	38	10	65	185	220	M8x20

其它常用结构尺寸在82至90页。

Dimensions common to the other configurations are to be found from page 82 to 90.

减速机尺寸 GEARBOX DIMENSIONS



型号 Type	A	A1	B	B1	B2	F	F1	F2	F3	F4	G	V	kg
VF/VF 30/44_HS	44.6	30	18	20.8	6	9	10.2	3	20	50	72	-	3.5
VF/VF 30/49_HS	49.5	30	25	28.3	8	9	10.2	3	20	50	82	-	4.5
VF/VF 30/63_HS	62.17	30	25	28.3	8	9	10.2	3	20	50	100	-	7.5
VF/VF 44/72_HS	72	44.6	28(30)	31.3(33.3)	8	11	12.5	4	30	54	115	-	10.5
VF/VF 44/86_HS	86.9	44.6	35	38.3	10	11	12.5	4	30	54	142	-	18.5
VF/VF 49/110_HS	110.0	49.5	42	45.3	12	16	18	5	40	65	170	M6	40
VF/VF 63/130_HS	130	62.17	45	48.8	14	18	20.5	6	45	80	195	M6	56
VF/VF 86/150_HS	150	86.9	50	53.8	14	25	28	8	50	110	220	M8	77

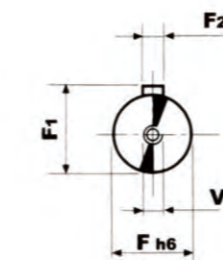
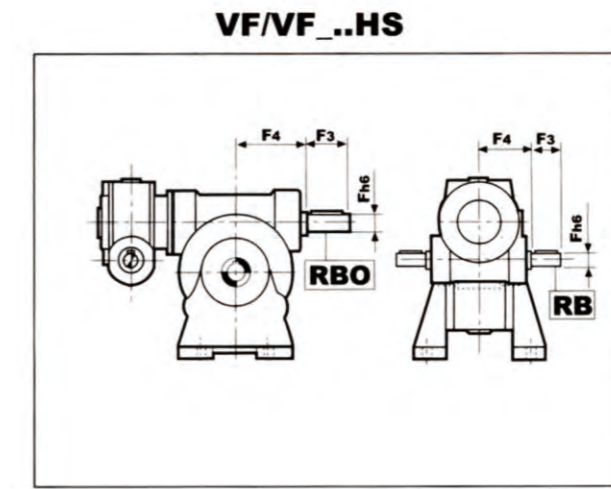
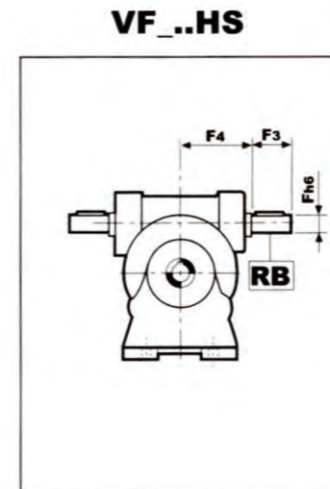
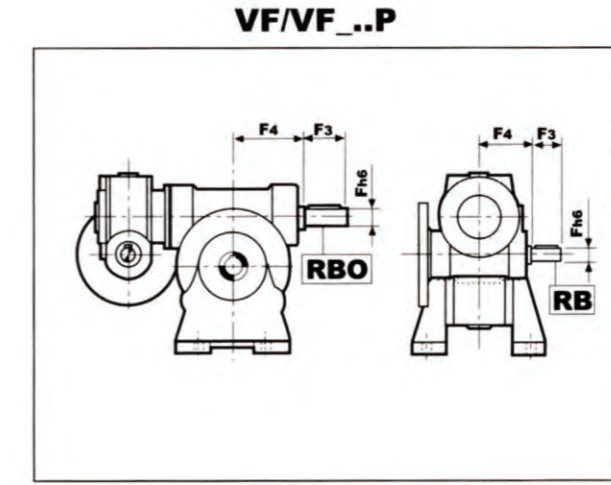
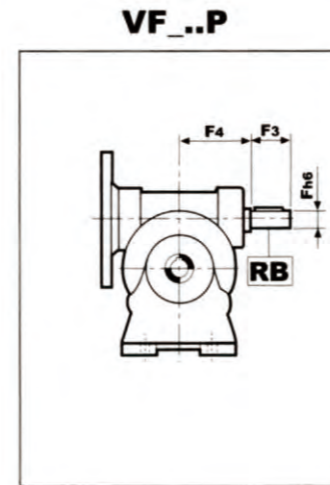
其它常用结构尺寸在91至98页。
Dimensions common to the other configurations are to be found from page 91 to 98.

选项

蜗杆减速机VF和VF/VF系列可以按需要延长蜗杆轴。选择的时候，注意选项RB(VF, VF/VF)或RBO(只有VF/VF可以选择)。

RB, RBO OPTIONS

Worm gearboxes of the VF, and VF/VF series can be supplied on request with an extended worm shaft. When ordering, remember to specify option RB (VF, VF/VF) or RBO (for VF/VF only).



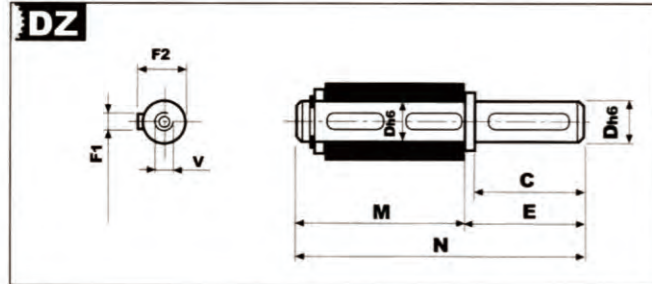
Input shaft.
输入轴

型号Type VF-VF/VF	F	F1	F2	F3	F4/F5	V
30	9	10.2	3	20	50	-
44	11	12.5	4	30	56	-
49	16	18	5	40	65	M6
63	18	20.5	6	45	85	M6
72	19	21.5	6	40	92	M6
86	25	28	8	50	110	M8
110	25	28	8	60	138	M8
130	30	33	8	60	160	M8
150	35	38	10	65	185	M8



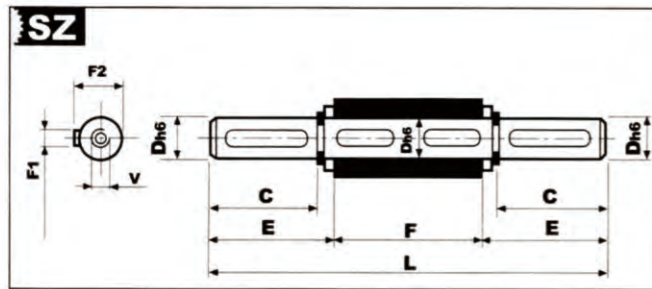
VF- VF/VF附件 ACCESSORIES VF- VF/VF

单向输出轴 Single output shaft



型号 Type	C	D	E	F1	F2	M	N	V
VF-30	30	14	35	5	16	61	96	M5x13
VF-44	40	18	45	6	20.5	70	115	M6x16
VF-49	60	25	65	8	28	89	154	M8x20
VF-63	60	25	65	8	28	127	192	M8x20
VF-72	60	28	70	8	31	126	196	M8x20
VF-72	60	30	70	8	33	126	196	M8x20
VF-86	60	35	65	10	38	149	214	M10x25
VF-110	75	42	80	12	45	164	244	M12x32
VF-130	80	45	85	14	48.5	176	261	M12x32
VF-150	85	50	93	14	53.5	185	278	M16x40

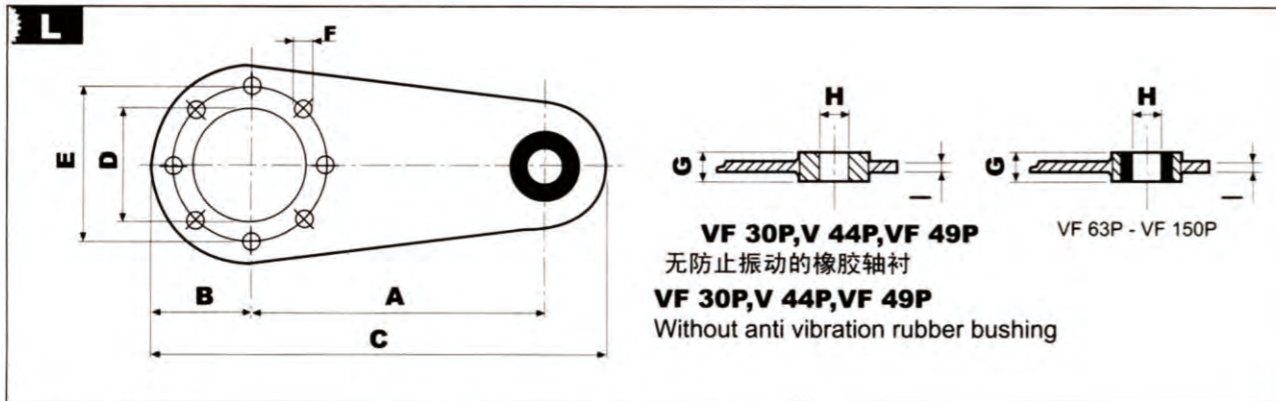
双向输出轴 Double output shaft



型号 Type	C	D	E	F	F1	F2	L	V
VF-30	30	14	32.5	55	5	16	120	M5x13
VF-44	40	18	42.7	64	6	20.5	149.4	M6x16
VF-49	60	25	63.2	82	8	28	208.4	M8x20
VF-63	60	25	63.2	120	8	28	246.4	M8x20
VF-72	60	28	63.5	120	8	31	247	M8x20
VF-72	60	30	63.5	120	8	33	247	M8x20
VF-86	60	35	64	140	10	38	268	M10x25
VF-110	75	42	79.25	155	12	45	313.5	M12x32
VF-130	80	45	84.75	165	14	48.5	334.5	M12x32
VF-150	85	50	90	175	14	53.5	355	M16x40

扭力臂为 VF_P, VF/VF_P 型

Torque arm for VF_P, VF/VF_P version



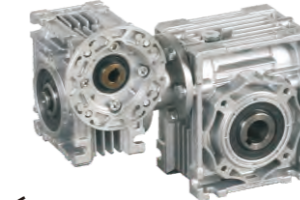
型号 Type	A	B	C	D	E	F	G	H	I
VF 30P	100	40	157.5	50	65	7	14	8	4
VF 44P	100	40	157.5	50	65	7	14	8	4
VF 49P	100	55	172.5	68	94	7	14	8	4
VF 63P	150	55	233	75	90	9	20	10	6
VF 72P	200	63	300	90	110	9	25	20	6
VF 86P	200	80	318	110	130	11	25	20	6
VF 110P	250	100	388	130	165	13	25	20	6
VF 130P	300	125	470	180	215	13	30	25	6
VF 150P	300	125	470	180	215	15	30	25	6



RV系列
RV25-RV150
0.06-15KW



RVE系列
RV30/30-RV110/150
0.06-4KW



VF系列
VF25-VF150
0.06-15KW



WPRT系列
WPRT50-WPRT120
0.18-4KW



WSG系列滚珠丝杆
WSG010-WSG500
0.25-11KW



WSH系列
WSH-2T-WSH100T
0.25-7.5KW



R斜齿轮系列
R17-R167
0.12-160KW



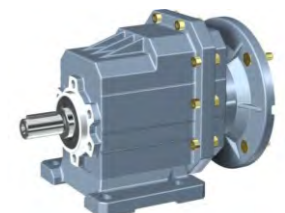
FS型齿轮变速系列
FS401-FS415
0.18-15KW



F斜齿轮系列
F37-F157
0.18-200KW



S斜齿轮蜗杆系列
S37-S97
0.18-22KW



RC系列斜齿轮
RC01-RC04
0.12-4KW



K斜齿轮-螺旋伞齿轮系列
K37-K187
0.12-200KW

★因说明书内的内容会不断更新，订货时请以最新的资料为准