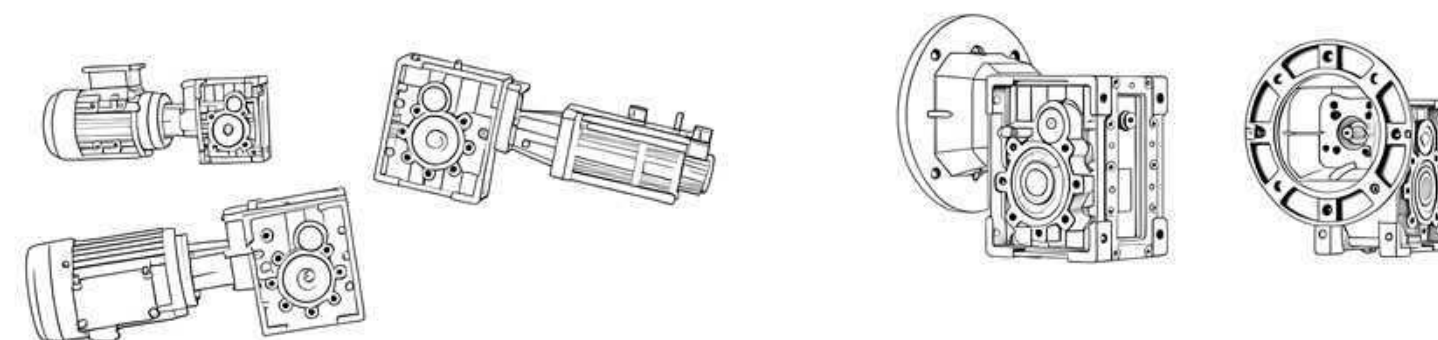




**KM - Hypoid
NMRV - Worm
Gear Reducer**

**KM-准双曲面 减速器
NMRV-蜗轮蜗杆 减速器**

浙江侨邦精密电机有限公司
ZHEJIANG QIAOBANG PRECISION MACHINE CO.,LTD

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CATALOG



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Dedicated to exceeding your expectations

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产品图片 / PRODUCT PICTURE



CKM28B~68B(IEC)



CKM28B~68B(MV)



CKM28C~68C(IEC)



CKM28C~68C(MV)



CKM28B~68B(MV)-直连



CKM28C~68C(MV)-直连

产品概述 / PRODUCTS OVERVIEW

产品特点 / Products features

CKM系列斜齿-准双曲面齿轮减速机是我公司自主研发的新一代实用性产品。融合了国内外先进技术，具有以下一些主要特点：

1. 采用准双曲面齿轮传动，传动比大；
2. 输出扭矩大，传动效率高，节能环保；
3. 优质铝合金铸造，重量轻，不生锈；
4. 传动平稳，噪音小，适合在恶劣环境中长期连续工作；
5. 美观耐用，体积小；
6. 可适应全方位安装，应用广泛，使用方便；
7. SKM系列减速机安装尺寸与NMRV系列蜗轮蜗杆减速机完全兼容（SKM28与NMRV050部分尺寸不同）；
8. 模块化组合，可多种形式组合，满足各种传动条件的需求。

CKM series helical-hypoid gear units is a new-generation of product developed by our company,with a compromise of advanced technology both at home and abroad,its main features are as follows:

- 1.Driven by hypois gear,has big ratios.
- 2.Large in output torque,high efficiency,energy saving and environmental protection.
- 3.Made of high-quqlity aluminum alloy,light in weight and nonrusting.
- 4.Smooth in running and low in noise,can work long time in dreadful conditions.
- 5.Good-looking in appearance,durable in service life and small in volume.
- 6.Suitable for all round installation,wide application and easy of use.
- 7.The mounting dimension of SKM series are compatible with NMRV series worm gear unit(A part of NMRV050 dimensions are different from SKM28).
- 8.Modulaw and multistructure can meet the demands of various conditions.

主要材料 / Main materials

1. 外壳：铝合金（机座：28-58）；铸铁(机座:68)
2. 齿轮：20CrMnTi，渗碳淬火，齿面硬度56-62HRC，精磨后保持渗碳层厚度0.3-0.5mm。

- 1· Housing:die-cast aluminum alloy (frame size:28 to 58); cast iron(framesize: 68)
2. Gear wheel:20CrMnTi,carbonize & quencher heat treatment make the hardness of gear's surface up to 56-62 HRC,retain carburization layer's thickness 0.3 and 0.5mm after precise grinding.

表面涂装 / Surface painting

铝合金外壳：

1. 先抛丸处理，再经过特种防腐处理，保持银白金属感，并耐汽油，二甲苯等有机溶剂的腐蚀；
2. 磷化处理后，再喷RAL5010蓝色或银灰色涂料。

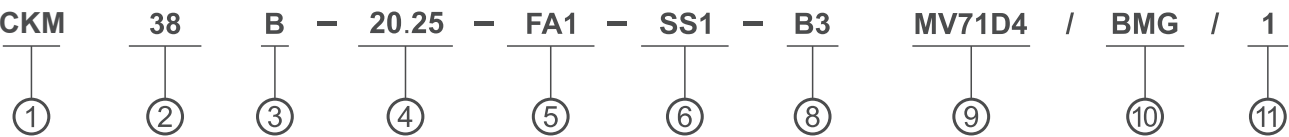
铸铁外壳：先涂红色防锈漆，后喷涂RAL5010蓝色或银色涂料

Aluminum alloy housing：

1. Shot blasting and special antiseptic treatment on the aluminum alloy surface.
 2. After phosphating,spray the paintRAL5010 in blue or in grey.
- Cast iron housing：First paint with red antirust paint，then paint white RAL5010blue or silvery white paint.

型号说明 / MODEL ILLUMINATE

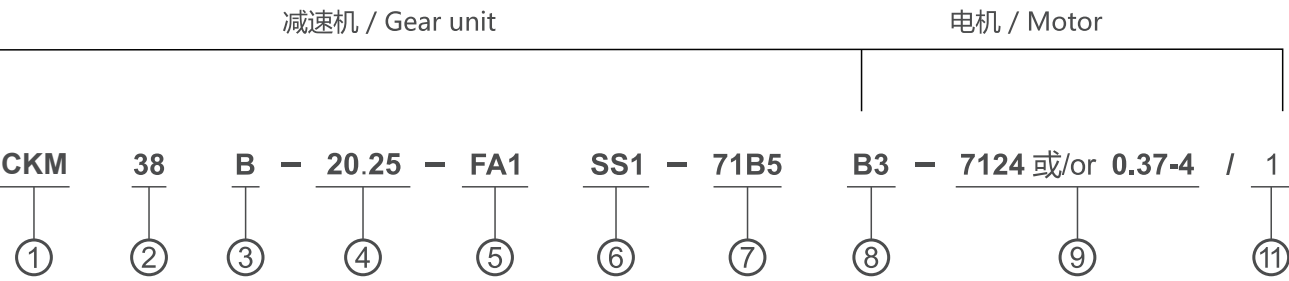
减速电机 / Geared motor



NO	说 明	Comments
1	减速机系列代号：CKM	Code for gear units series: CKM
2	减速机规格代号：28、38、48、58、68	Specification code of gear units: 28、38、48、58、68
3	1) B：表示2级传动 2) C：表示3级传动	1) B: Means 2 stages 2) C: Means 3 stages
4	减速机电速比 i	Speed ratio of reducer i
5	1.无代号表示不带输出法兰 2.FA,FB,FC,FD,FE(1/2):输出法兰代号和位置	1.No mark means without output flange 2.FA, FB, FC, FD, FE(1/2):output Flange and position
6	1.无代号表示孔输出 2.SS(1/2):单向输出轴和位置 3.DS：双向输出轴	1.No mark means hole output 2.SS(1/2):Single output shaft and position 3.DS:Double output shaft
8	安装方位代号	Installation position code
9	电机型号规格	motor type
10	1.无代号表示不带制动器 2.BMG:制动器	1.No mark means without brake 2.BMG:brake
11	电机接线盒位置，默认位置1可以不写	Position of motor terminal box default position 1 not to write out is ok

型号说明 / MODEL ILLUMINATE

减速机或减速机+IEC电机 / Gear unit or gear unit + IEC motor



NO	说 明	Comments
1	减速机系列代号：CKM	Code for gear units series: CKM
2	减速机规格代号：28、38、48、58、68	Specification code of gear units: 28、38、48、58、68
3	1) B：表示2级传动 2) C：表示3级传动	1) B: Means 2 stages 2) C: Means 3 stages
4	减速机电速比 i	Speed ratio of reducer i
5	1.无代号表示不带输出法兰 2.FA,FB,FC,FD,FE(1/2):输出法兰代号和位置	1.No mark means without output flange 2.FA, FB, FC, FD, FE(1/2):output Flange and position
6	1.无代号表示孔输出 2.SS(1/2):单向输出轴和位置 3.DS：双向输出轴	1.No mark means hole output 2.SS(1/2):Single output shaft and position 3.DS:Double output shaft
7	1) 输入法兰规格代号(63B5、71B5、71B14……) 2) HS：表示轴输入	1) Input flange code (63B5、71B5、71B14……) 2) HS: means shaft input
8	安装方位代号	Installation position code
9	1.无代号表示不带电机 2.电机型号或功率、极数	1.No mark means without motor 2.Model motos (poles of power)
11	电机接线盒位置，默认位置1可以不写	Position of motor terminal box default position 1 not to write out is ok

注：订单时请说明是否带电机，一般按不带电机供应。

NOTE: When ordering , you should show whether the reducers are equipped with motors , otherwise reducers aren’ t supplied with motors.

示例Example :CKM48C - 149.33 - B3 - MV71D4
CKM48B - 59.44 - FA1 - 90B5

选型相关参数 / RELEVANT PARAMETER

功率 P

$$P_1 = P_2 / \eta \text{ (kW)}$$
$$P_{1n} \geq P_1 \cdot fs \text{ (kW)}$$

P_1 输入功率
 P_{1n} 输入电机额定功率
 η 传动效率
 P_2 输出功率
 fs 使用系数

SKM系列减速机的效率是根据传动级数确定，2级传动效率 η 为92%，3级传动效率 η 为90%。

POWER P

$$P_1 = P_2 / \eta \text{ (kW)}$$
$$P_{1n} \geq P_1 \cdot fs \text{ (kW)}$$

P_1 Input power
 P_{1n} Rated input motor power
 η Transmission efficiency
 P_2 Output power
 fs Service factor

The efficiency of SKM gear units varies with the number of gear stages, which is 92% for 2-stage, 90% for 3-stage.

转速 n / Rotation speed n

n_1 减速机输入转速
 n_2 减速机输出转速

n_1 Gear units input speed
 n_2 Gear units output speed

若是齿轮箱外部传动装置驱动，为了优化工作条件和提高使用寿命，建议使用1400r/min或更低转速。允许输入较高的输入转速，但在这种情况下，额定扭矩 M_2 会下降。

If driven by the external gearing, 1400r/min or lower rotation speed is suggested so as to optimize the working conditions and prolong the service life. Higher input rotation speed is permitted, but in this situation, the rated torque M_2 will be reduced.

传动比 i / Transmission ratio i

$$i = n_1 / n_2$$

传动比通常为小数，在选型表中保留两位小数。
Usually transmission ratio is decimal fraction with 2 radix point tagged in selection tables.

扭矩 M / Torque m

$$M_2 = 9550 \cdot P_1 \cdot \eta / n_2 \text{ (Nm)}$$
$$M_{2n} \geq M_2 \cdot fs \text{ (Nm)}$$

M_2 输出扭矩
 M_{2n} 额定输出扭矩
 P_1 输入功率
 η 传动效率
 fs 使用系数

$$M_2 = 9550 \cdot P_1 \cdot \eta / n_2 \text{ (Nm)}$$
$$M_{2n} \geq M_2 \cdot fs \text{ (Nm)}$$

M_2 Output torque
 M_{2n} Rated output torque
 P_1 Input power
 η Transmission efficiency
 fs Service factor

选型相关参数 / RELEVANT PARAMETER

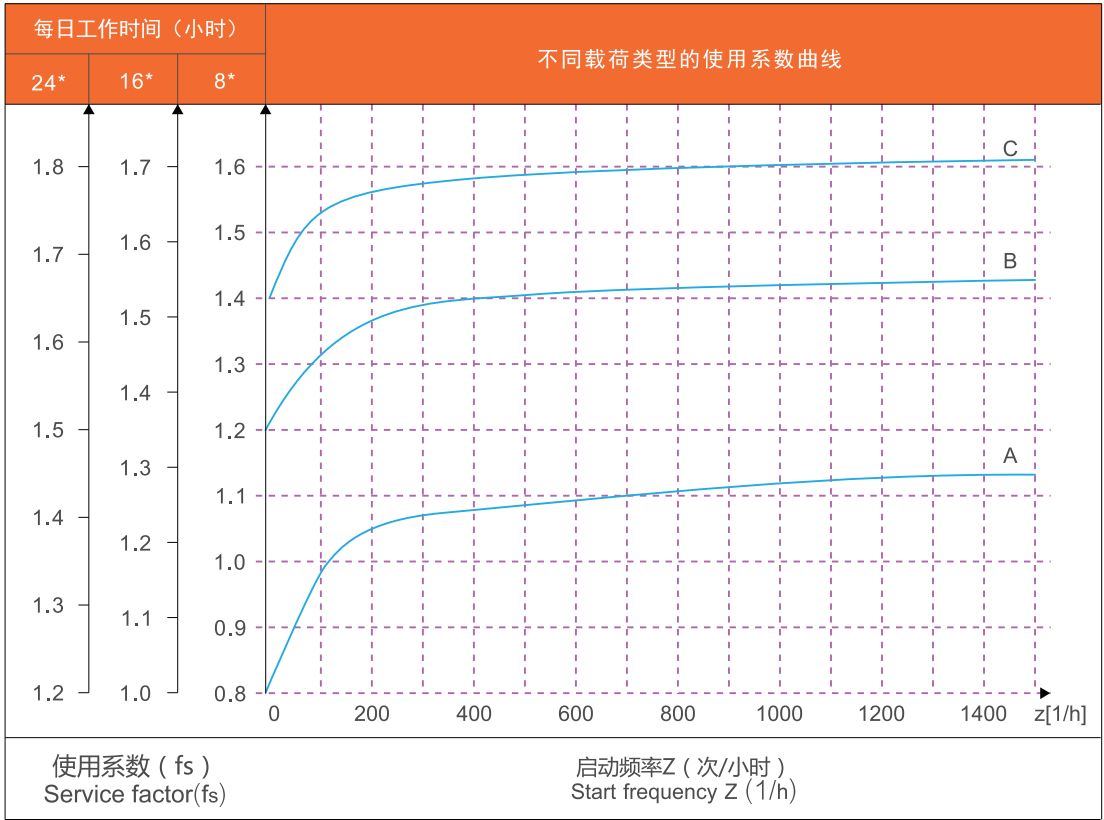
使用系数 fs / Service factor fs

使用减速机时，应考虑一定的使用系数 fs ，它是根据每天的运转时间和启停频率 Z 确定的。

根据惯性加速系数确定三种负载类型，在下图中可以读取实际应用的使用系数，按下图选取的使用系数必须小于或等于从性能参数表中提供的使用系数。

The effect of the driven machine on the gear unit is taken into account to a sufficient level of accuracy using the service factor fs . The service factor is determined according to the daily operating time and the starting frequency Z .

Three load classifications are considered depending on the mass acceleration factor. You can read off the service factor applicable to your application in following figure. The service factor selected using this diagram must be less than or equal to the service factor as given in the performance parameter table.



- 启动频率 Z ：周期包括所有启动、制动次数以及变速电机高低速变化时的次数。
- Starting frequency Z : The cycles include all starting and braking procedures as well as change overs from low to high speed.

选型相关参数 / RELEVANT PARAMETER

负载类型 / Load classifications

负载性质：

- A. 均匀冲击负载，允许惯性加速系数Fa≤0.2
- B. 中等冲击负载，允许惯性加速系数Fa≤3
- C. 重冲击负载，允许惯性加速系数Fa≤10

Type of load:

- A. Uniform ,permitted mass acceleration factor Fa≤0.2
- B. Moderate shock load,permitted mass acceleration factor Fa≤3
- C. Heavy shock load,permitted mass acceleration factor Fa≤10

轻负载的螺杆输送，风扇，装备线，输送带，小型搅拌器，电梯，清洗机器，过滤器，控制驱动。

卷扬机，木工机器进料器，货物起重机，平衡器，绞螺纹机器，中型搅拌器，重型输送带，绞盘，滑动闸门，刮料机，包装机械，混凝土搅拌机，行车驱动装置，铣床，齿轮泵。

大型搅拌器，剪床，压机，离心机，旋转支撑装置，重型绞盘和起重机，磨床，石材打磨机，翻斗机，钻床，冲床，凸轴压机，摺床，机床转盘，翻桶装置，震荡装置，破碎机。

Screw feeders for light materials, fans, assembly lines, conveyor belts for light materials, small mixers, lifts, cleaning machines, fillers, control machines.

Winding devices, woodworking machine feeders, goods lifts, balancers, threading machines, medium mixers, conveyor belts for heavy materials, winches, sliding doors, fertilize scrapers, packing machines, concrete mixers, crane mechanisms, milling cutters, folding machines, gear pumps.

Mixers for heavy materials, shears, presses, centrifuges, rotating supports, winches and lifts for heavy materials, grinding lathes, stone mills, bucket elevators, drilling machines, hammer mills, cam presses, folding machines, turntables, tumbling barrels, vibrators, shredders.

惯性加速系数 / Mass acceleration factor

惯性加速系数计算如下：

The mass acceleration factor is calculated as follows:

$$Fa=Jc/Jm$$

$$Fa=Jc/Jm$$

Fa惯性加速系数

Fa Mass acceleration factor

Jc所有外部传动惯量（ kgm² ）

Jc All external mass moments of inertia(kgm²)

Jm驱动电机的传动惯量（ kgm² ）

Jm Mass moment of inertia on the motor end(kgm²)

如果惯性加速系数Fa>10，请与我们技术部联系。

If mass acceleration factors fa>10,please call our Technical Service.

为了保持减速机的使用寿命，从产品样本中所选择的使用系数fs应等于或略高于计算出的使用系数fs。

To keep the service-life of gear units,use factor fs selected from the catalogue must be equal or slightly higher than the calculated use factor fs.

举例 / Example：

惯性加速系数2.5（负载类型B），运行时间14小时/天，（按16小时/天查图）和每小时200次起停，查图得使用系数fs=1.48。根据性能参数表所选择的使用系数fs≥1.48

Mass acceleration factor 2.5 (load classification B)，14hours/day operating time（read off at 16h/d）and 200 cycles/hour result in a service factor fs=1.48.

choose the service factor fs≥1.48 according to the parameter sheet.

选型相关参数 / RELEVANT PARAMETER

径向载荷和轴向载荷 / Overhung loads and axial forces

在决定影响径向载荷时，安装在轴端上的传动件类型必须考虑在内。不同类型的传动对应不同的传动附加系数fz，列表如下：

When determining the resulting radial loads,the type of transmission elements,mounted on the shaft end must be considered,Varous transmission elements are corresponding with following transmission element factors fz:

传动件 Transmission element	传动附加系数fz Transmission element factor fz	注释 Comments
齿轮 Gears	1.15	<17齿 teeth
链轮 Chain sprockets	1.25	<20齿 teeth
	1.40	<13齿 teeth
V 带轮 Narrow V-belt pulleys	1.75	有预紧力作用 Influence of the tensile force
平带轮 Flat belt pulleys	2.50	有预紧力作用 Influence of the tensile force
齿带轮 Toothed belt pulleys	2.50	有预紧力作用 Influence of the tensile force

作用在电机和齿轮轴上的径向载荷按如下公式计算：

The overhung loads exerted on the motor or gear shaft is then calculated as follows.

$$Fr=\frac{M \cdot 2000 \cdot fz}{d_o} \text{ (N)}$$

Fr 作用在轴上的载荷[N] Resulting radial load [N]

M 作用在轴上的扭矩[Nm] Torque on the shafts [Nm]

d_o 安装在轴上传动件的平均直径[mm] Mean diameter of the mounted transmission element in [mm]

fz 传动附加系数 Transmission element factor

许用径向载荷时根据轴承额定使用寿命L_{10h}来估算的（根据ISO0281）。对于特殊的运行条件，许用径向载荷时根据修正使用寿命Lna来确定。

The basis for determining the permitted radial loads is the computation of the rated service life L_{10h} of the bearings (according to ISO0281) For special operating conditions , the permitted radial loads can be determined with regard service life Lna.

当作用点偏离出轴中点时，许用径向载荷须按以下公式来计算，取在X点的许可数值FxL(根据轴承的使用寿命)

The permitted radial loads given in the selection tables must be calculated using the following formula in the event of force application not in the center of the shaft end.The smaller of the two values FxL（according to bearing service life）

根据轴承的使用寿命公式 / according to bearing service life：

$$F_xL=Fr_{(1,2)} \cdot \frac{a}{b+x} \text{[N]}$$

Fr₁,Fr₂ =性能参数表中的许用径向载荷（x=L/2）[N]

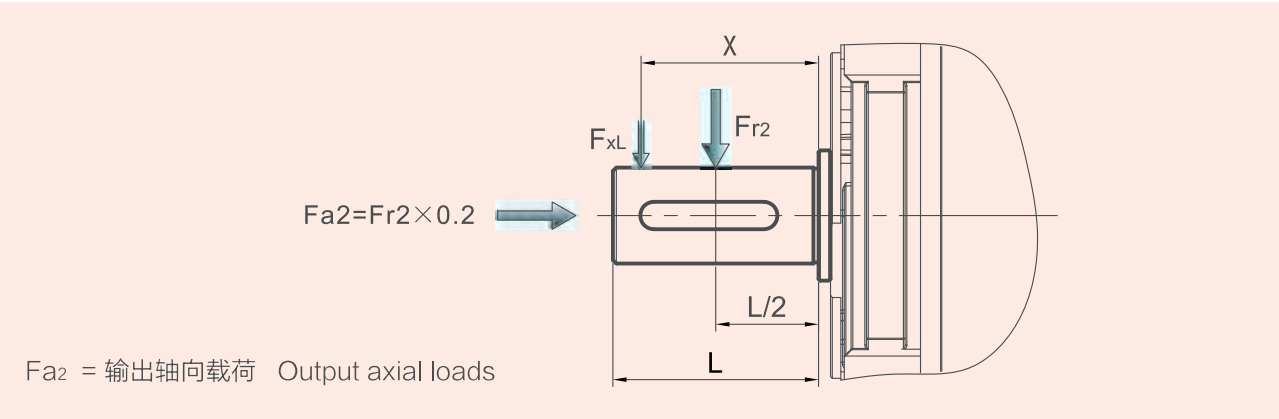
Permitted overhung load（x=L/2）for footmounted gear units according to he selection tables in [N]

X=从轴肩到受力点的距离[mm] Distance from the shaft shoulder to the force application point in [mm]

a,b =减速机径向转化常量[mm] Gear unit constant for overhung load conversion [mm]

选型相关参数 / RELEVANT PARAMETER

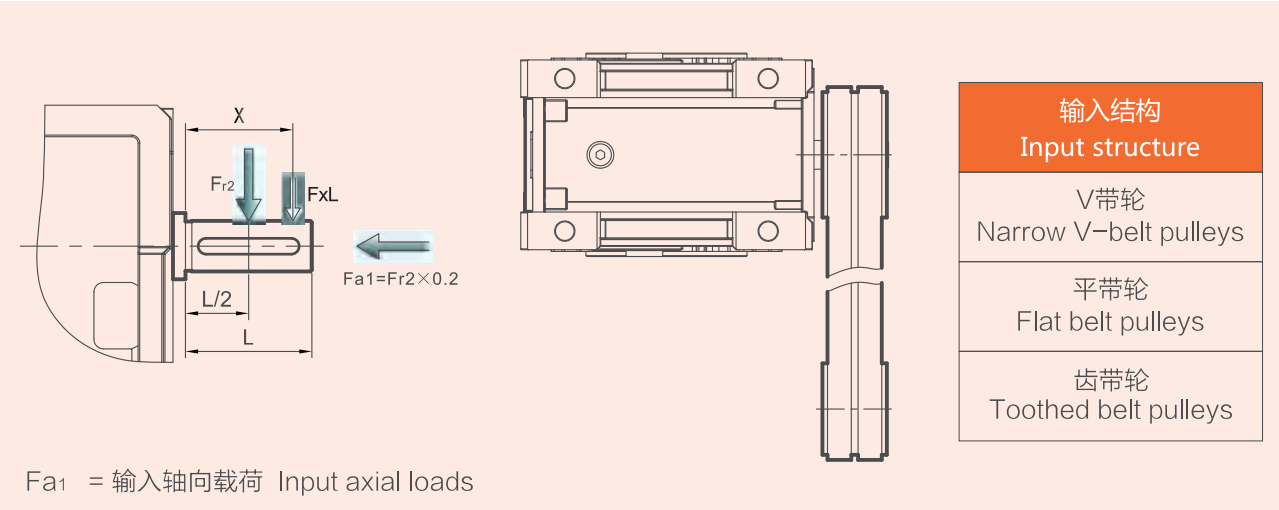
输出轴径向载荷 / Output shafts radial loads



CKM减速机径向转化常量 Gear unit constants for overhung load conversion:

	CKM28B	CKM28C	CKM38B	CKM38C	CKM48B	CKM48C	CKM58B	CKM58C	CKM68B	CKM68C
a	104	104	118	118	131	131	159	159	174	174
b	78	78	93	93	101	101	119	119	134	134

输入轴径向载荷 / Input shafts radial loads



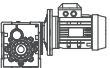
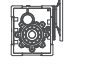
右示图的输入不被允许使用（包括三级输入）。
It is forbidden to use the input on the right chart (including 3 stage input) .

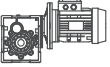
CKM 减速机径向转化常量 Gear unit constants for overhung load conversion:

	CKM28B	CKM28C	CKM38B	CKM38C	CKM48B	CKM48C	CKM58B	CKM58C	CKM68B	CKM68C
a	51.5	56	58	56	73	70	81	70	101	87
b	40	44.5	43	44.5	53	55	61	55	76	67

选型相关参数 / RELEVANT PARAMETER

选型表注释 / Selection tables comments

	表示电机与减速机的组合是可行的		减速机实际传动比
	表示电机与减速机的组合是不可行的		使用系数
*	表示速比可除尽		减速机型号
P_{1n}	电机额定功率 [kW]		减速机型号
n_2	输出转速 [r/min]		电机型号
M_{2n}	输出扭矩 [Nm]		
M_{2max}	最大允许输出扭矩 [Nm]		
F_{r2}	输出轴径向载荷 [N]		
i	减速机公称传动比		

	Combination with the motor in the header row is possible		Gear unit actual ratio
	Combination with the motor in the header row is not possible		Service factor
*	Finite gear unit reduction ratio		Geared motor type
P_{1n}	Rated power driving motor [kW]		Gear unit type
n_2	Output speed [r/min]		Motor type
M_{2n}	Output torque`[Nm]		
M_{2max}	Max.permmissible output torque[Nm]		
F_{r2}	Permissible overhung load output side [N]		
i	Gear unit nominal ratio		

选型相关参数 / RELEVANT PARAMETER

选型举例 / Selection example

减速电机 / Gear motor

例：被驱动设备所需要功率0.25kW，工作8小时/天，中等冲击，启动频率100次/小时，输出转速n₂=35r/min，减速机要求B3安装，则：

查P6使用系数图表即可选使用系数fs=1.3

Example：Required power 0.25kW on driven machine，work for 8 h/day，moderate shock load，start up frequency 100（1/h），n₂=35r/min，B3 mounted，So：

Check the service factor table on page 6，choose fs=1.3

$$i = \frac{n_1}{n_2} = \frac{1400}{35} = 40$$

$$P_{in} \geq P_1 \cdot fs = \frac{P_2}{\eta} \cdot fs = \frac{0.25}{0.94} \times 1.3 = 0.345 \text{ (kW)}$$

查CKM系列性能参数表可确定减速机型号为：

CKM28B-40.29-MV71D4-B3

Choose type:

CKM28B-40.29-MV71D4-B3

减速机 / Gear units

例：被驱动设备所需扭矩为200Nm，工作8小时，均匀冲击负载，启动频率400次/小时，减速机要求FA1法兰安装，减速机要求输入转速n₁=900r/min，输出转速n₂=6r/min，查性能参数表可知，只选能三级传动形式。

查P6使用系数表即可选使用系数fs=1.05

Example:Required torque 200Nrn on driven machine,work 8 h/day,uniform load,Start up frequency 400(1/h) FA1 mounted, n₁= 900 r/min, n₂= 6 r/min, so the only selection is 3 stage after checked the table:

check the service factor table on page 6, choose fs=1.05

$$i = \frac{n_1}{n_2} = \frac{900}{6} = 150$$

$$M_{2N} \geq M_2 \cdot fs = 200 \times 1.05 = 210 \text{ (Nm)}$$

$$P_{in} \geq P_1 \cdot fs = \frac{M_2 \cdot n_1}{9550 \cdot \eta \cdot i} \cdot fs = \frac{210 \times 900}{9550 \times 0.92 \times 150} \times 1.05 = 0.151 \text{ (kW)}$$

查SKM系列性能参数表可确定减速机型号为：

CKM48C-149.32-FA1

Choose type:

CKM48C-149.32-FA1

减速机选型表 / GEAR UNIT SELECTION TABLES

CKM 28..减速机组合表 (n₁ =1400r/min)

CKM 28..Possible geometrical combinations (n₁ =1400r/min)

130Nm

减速机型号 Gear units	i 公称 Nominal	i 实际 Actual	n ₂ [r/min]	M _{2max} [Nm]	F _{r2} [N]	MV63	MV71	MV80	MV90
3级/Stage									
CKM28C	300	298.57	4.8	130	4100				
CKM28C	250	244.29	5.7	130	4100				
CKM28C	200	200.44	7.0	130	4100				
CKM28C	150	146.67	9.5	130	4000				
CKM28C	125	120.34	11.6	100	3770				
CKM28C	100	101.04	13.9	80	3560				
CKM28C	75	74.62	18.8	80	3220				
2级/Stage									
CKM28B	60	59.71	24	130	2960				
CKM28B	50	48.86	29	130	2790				
CKM28B	40	44.09	35	130	2610				
CKM28B	30	29.33	48	130	2350				
CKM28B	25	24.07	58	130	2200				
CKM28B	20	20.21	69	100	2080				
CKM28B	15	14.92	94	80	1880				
CKM28B	12.5	12.47	112	130	1770				
CKM28B	10	10.47	134	100	1670				
CKM28B	7.5	7.73	181	80	1510				

CKM 38..减速机组合表 (n₁ =1400r/min)

CKM 38..Possible geometrical combinations (n₁ =1400r/min)

200Nm

减速机型号 Gear units	i 公称 Nominal	i 实际 Actual	n ₂ [r/min]	M _{2max} [Nm]	F _{r2} [N]	MV63	MV71	MV80	MV90
3级/Stage									
CKM38C	300	304.46	4.6	200	4800				
CKM38C	250	243.57	5.7	200	4800				
CKM38C	200	196.43	7.1	180	4800				
CKM38C	150	151.56	9.2	200	4650				
CKM38C	125	122.22	11.5	180	4330				
CKM38C	100	101.27	13.8	150	4070				
CKM38C	75	73.33	19.0	110	3650				
2级/Stage									
CKM38B	60	60.89	23	200	3430				
CKM38B	50	48.71	29	200	3190				
CKM38B	40	39.29	36	180	2970				
CKM38B	30	30.31	46	200	2720				
CKM38B	25	24.44	57	180	2530				
CKM38B	20	20.25	69	150	2380				
CKM38B	15	14.67	95	110	2130				
CKM38B	12.5	12.67	110	180	2030				
CKM38B	10	10.50	133	150	1910				
CKM38B	7.5	7.60	184	110	1710				

减速机选型表 / GEAR UNIT SELECTION TABLES

CKM 48..减速机组合表 (n_1 =1400r/min)
CKM 48..Possible geometrical combinations (n_1 =1400r/min) **350Nm**

减速机型号 Gear units	i 公称 Nominal	i 实际 Actual	n_2 [r/min]	M_{2max} [Nm]	F_{r2} [N]	MV63	MV71	MV80	MV90	MV100	MV112
3级/Stage											
CKM48C	300	297.21	4.7	350	6500						
CKM48C	250	240.89	5.8	350	6500						
CKM48C	200	200.66	7.0	300	6500						
CKM48C	150	149.32	9.4	350	6500						
CKM48C	125	121.02	11.6	300	5980						
CKM48C	100	100.81	13.9	240	5520						
CKM48C	75	79.41	17.6	200	5040						
2级/Stage											
CKM48B	60	59.44	24	350	4660						
CKM48B	50	48.18	29	350	4340						
CKM48B	40	40.13	35	300	4080						
CKM48B	30	29.86	47	350	3720						
CKM48B	25	24.20	58	300	3500						
CKM48B	20	20.16	69	240	3230						
CKM48B	15	15.88	88	200	2950						
CKM48B	12.5	12.49	112	300	2770						
CKM48B	10	9.84	142	240	2550						
CKM48B	7.5	7.48	187	200	2330						

CKM 58..减速机组合表 (n_1 =1400r/min)
CKM 58..Possible geometrical combinations (n_1 =1400r/min) **500Nm**

减速机型号 Gear units	i 公称 Nominal	i 实际 Actual	n_2 [r/min]	M_{2max} [Nm]	F_{r2} [N]	MV63	MV71	MV80	MV90	MV100	MV112
3级/Stage											
CKM58C	300	297.21	4.7	500	8300						
CKM58C	250	240.89	5.8	500	8300						
CKM58C	200	200.66	7.0	480	8300						
CKM58C	150	151.20	9.3	500	8050						
CKM58C	125	125.95	11.1	480	7580						
CKM58C	100	99.22	14.1	380	7000						
CKM58C	75	75.45	18.6	300	6390						
CKM58C	2级/Stage										
	60	59.44	24	500	5890						
CKM58B	50	48.18	29	500	5500						
CKM58B	40	40.13	35	480	5170						
CKM58B	30	30.24	46	500	4710						
CKM58B	25	25.19	56	480	4430						
CKM58B	20	19.84	71	380	4090						
CKM58B	15	15.09	93	300	3730						
CKM58B	12.5	12.49	112	480	3510						
CKM58B	10	9.84	142	380	3240						
CKM58B	7.5	7.48	187	300	2950						

减速机选型表 / GEAR UNIT SELECTION TABLES

CKM 68..减速机组合表 (n_1 =1400r/min)
CKM 68..Possible geometrical combinations (n_1 =1400r/min) **750Nm**

减速机型号 Gear units	i 公称 Nominal	i 实际 Actual	n_2 [r/min]	M_{2max} [Nm]	F_{r2} [N]	MV71	MV80	MV90	MV100	MV112	MV132
3级/Stage											
CKM68C	300	296.10	4.7	750	10000						
CKM68C	250	244.29	5.7	750	10000						
CKM68C	200	206.29	6.8	750	9920						
CKM68C	150	153.33	9.1	750	8980						
CKM68C	125	129.48	10.8	750	8490						
CKM68C	100	103.64	13.5	650	7880						
CKM68C	75	75.55	18.5	520	7090						
2级/Stage											
CKM68B	60	59.22	24	750	6540						
CKM68B	50	48.86	29	750	6130						
CKM68B	40	41.26	34	750	5800						
CKM68B	30	30.67	46	750	5250						
CKM68B	25	25.90	54	750	4960						
CKM68B	20	20.73	68	650	4610						
CKM68B	15	15.11	93	520	4150						
CKM68B	12.5	12.84	109	750	3930						
CKM68B	10	10.27	136	650	3965						
CKM68B	7.5	7.49	187	520	3280						

CKM系列

减速机选型表 / GEAR UNIT SELECTION TABLES

CKM.. 性能参数 / Performance parameter

	P _{1n}	n ₂	M _{2n}	i	i	F _{r2}	f _s			Page
	[kW]	[r/min]	[Nm]	公称 Nominal	实际 Actual	[N]				
0.12	4.8	215	300	291.80	4100	0.60	CKM28C	63B5	6314	36
	5.7	180	250	244.29	4100	0.72				
	7.0	148	200	200.41	4100	0.88				
	9.5	108	150	146.67	4000	1.2				
	11.6	89	125	120.32	3770	1.5				
	13.9	74	100	101.03	3560	1.3				
	18.8	55	75	74.59	3220	1.5				
	24	44	60	58.36	2960	3.0	CKM28B	63B5	6314	36
	29	37	50	48.86	2790	3.5				
	35	30	40	40.08	2610	4.3				
	48	22	30	29.33	2350	5.9				
	58	18.1	25	24.06	2200	7.2				
	69	15.2	20	20.21	2080	6.6				
	94	11.2	15	14.92	1880	7.1				
	112	9.4	12.5	12.47	1770	13.8				
	134	7.9	10	10.47	1670	12.7	CKM38C	63B5	6314	37
	181	5.8	7.5	7.73	1510	13.7				
	4.6	223	300	304.46	4800	0.90				
	5.7	179	250	243.57	4800	1.1				
	7.1	145	200	196.43	4800	1.2				
	9.2	112	150	151.56	4650	1.8				
	11.5	90	125	122.22	4330	2.0				
	13.8	75	100	101.27	4070	2.0				
	19.0	54	75	73.33	3650	2.0	CKM38B	63B5	6314	37
	23	46	60	60.89	3430	4.4				
	29	37	50	48.71	3190	5.5				
	36	30	40	39.29	2970	6.1				
	46	23	30	30.31	2720	8.8	CKM48C	63B5	6314	38
	4.7	219	300	297.21	6500	1.6				
	5.8	177	250	240.89	6500	2.0				
	7.0	148	200	200.66	6500	2.0				
	9.4	111	150	149.32	6500	3.1				
	11.6	93	125	121.02	5980	3.2				
	13.9	73	100	100.81	5520	3.3				
	17.6	56	75	79.41	5040	3.6				
	4.7	217	300	297.21	8300	2.3	CKM58C	63B5	6314	39
	5.8	177	250	240.89	8300	2.8				
	7.0	148	200	200.66	8300	3.2				
	9.3	111	150	151.20	8050	4.5				
0.18	9.6	161	300	291.80	4000	0.81	CKM28C	63B5	6312	36
	11.4	135	250	244.29	3790	0.96				
	14.0	111	200	200.41	3550	1.2				
	19.1	81	150	146.67	3200	1.6				
	23.3	66	125	120.32	2990	2.0				
	27.7	56	100	101.03	2820	1.8				
	37.5	41	75	74.59	2550	1.9				
	11.6	133	125	120.32	3770	0.98	CKM28C	63B5	6324	36
	13.9	112	100	101.03	3560	0.90				
	18.8	82	75	74.59	3220	0.97				

CKM系列

	P _{1n}	n ₂	M _{2n}	i	i	F _{r2}	f _s			Page
	[kW]	[r/min]	[Nm]	公称 Nominal	实际 Actual	[N]				
0.12	24	66	60	58.36	2960	2.0	CKM28B	63B5	6324	36
	29	55	50	48.86	2790	2.4				
	35	45	40	40.08	2610	2.9				
	48	33	30	29.33	2350	3.9				
	58	27	25	24.06	2200	4.8				
	69	23	20	20.21	2080	4.4				
	94	16.9	15	14.92	1880	4.7				
	16.4	103	60	58.36	3430	1.3	CKM28B	71B5/B14	7116	36
	19.6	86	50	48.86	3240	1.5				
	24.0	70	40	40.08	3030	1.8				
	32.7	52	30	29.33	2730	2.5				
	39.9	42	25	24.06	2550	3.1				
	47.5	36	20	20.21	2410	2.8				
	64.3	26	15	14.92	2180	3.1				
	77.0	22	12.5	12.47	2050	5.9	CKM38C	63B5	6312	37
	91.7	18.4	10	10.47	1930	5.4				
	124.2	13.6	7.5	7.73	1750	5.9				
	9.2	167	300	304.46	4650	1.2				
	11.5	135	250	243.57	4330	1.5				
	14.3	109	200	196.43	4030	1.7				
	18.5	84	150	151.56	3690	2.4				
	22.9	68	125	122.22	3440	2.7				
	27.6	56	100	101.27	3230	2.7	CKM38C	63B5	6324	37
	38.2	41	75	73.33	2900	2.7				
	7.1	217	200	196.43	4800	0.83				
	9.2	167	150	151.56	4650	1.2				
	11.5	135	125	122.22	4330	1.3				
	13.8	112	100	101.27	4070	1.3				
	19.0	81	75	73.33	3650	1.4				
	23	68	60	60.89	3430	2.9	CKM38B	63B5	6324	37
	29	55	50	48.71	3190	3.6				
	36	44	40	39.29	2970	4.1				
	7.9	210	125	122.22	4800	0.86	CKM38C	71B5/B14	7116	37
	9.5	174	100	101.27	4720	0.86				
	13.1	126	75	73.33	4230	0.87				
	15.8	106	60	60.89	3970	1.9	CKM38B	71B5/B14	7116	37
	19.7	86	50	48.71	3690	2.3				
	24.4	69	40	39.29	3440	2.6				
	31.7	53	30	30.31	3150	3.8				
	39.3	43	25	24.44	2930	4.2				
	47.4	36	20	20.25	2760	4.2				
	65.4	26	15	14.67	2470	4.3				
	9.4	164	300	297.21	6320	2.1	CKM48C	63B5	6312	38
	11.6	133	250	240.89	5890	2.6				
	14.0	111	200	200.66	5540	2.7				
	18.8	84	150	149.32	5040	4.2				
0.18	4.7	328	300	297.21	6500	1.1	CKM48C	63B5	6324	38
	5.8	266	250	240.89	6500	1.3				
	7.0	222	200	200.66	6500	1.4				
	9.4	167	150	149.32	6500	2.1				
	11.6	139	125	121.02	5980	2.2				
	13.9	110	100	100.81	5520	2.2				
	17.6	83	75	79.41	5040	2.4				

CKM系列

	P _{1n}	n ₂	M _{2n}	i	i	F _{r2}	f _s			Page
	[kW]	[r/min]	[Nm]	公称 Nominal	实际 Actual	[N]				
0.18	4.0 4.8 6.4 7.9 9.5 12.1	414	250	240.89	6500	0.85	CKM48C	71B5/B14	7116	38
		345	200	200.66	6500	0.87				
		260	150	149.32	6500	1.3				
		217	125	121.02	6500	1.4				
		171	100	100.81	6400	1.4				
		130	75	79.41	5840	1.5				
	16.1 18.9 23.9	104	60	59.44	5390	3.4	CKM48B	71B5/B14	7116	38
		85	50	48.18	5030	4.1				
		71	40	40.13	4730	4.3				
	9.4 11.6 14.0	163	300	297.21	7990	3.1	CKM58C	63B5	6312	39
		133	250	240.89	7470	3.8				
		111	200	200.66	7030	4.3				
	4.7 5.8 7.0 9.3 11.1 14.1 18.6	326	300	297.21	8300	1.5	CKM58C	63B5	6324	39
		266	250	240.89	8300	1.9				
		222	200	200.66	8300	2.2				
		167	150	151.20	8050	3.0				
		139	125	125.95	7580	3.4				
		110	100	99.22	7000	3.5				
		83	75	75.45	6390	3.6				
	3.2 4.0 4.8 6.3 7.6 9.7 12.7	507	300	297.21	8300	0.99	CKM58C	71B5/B14	7116	39
		414	250	240.89	8300	1.2				
		345	200	200.66	8300	1.4				
		260	150	151.20	8300	1.9				
		217	125	125.95	8300	2.2				
		171	100	99.22	8110	2.2				
		130	75	75.45	7400	2.3				
	3.0 3.7 4.4 5.9 7.0 8.7 11.9	509	300	296.10	10000	1.5	CKM68C	71B5/B14	7116	40
		402	250	244.29	10000	1.8				
		355	200	206.29	10000	2.1				
		264	150	153.33	10000	2.8				
		223	125	129.48	9840	3.4				
		178	100	103.64	9130	3.6				
		130	75	75.55	8220	4.0				
0.25	19.1 23.3 27.7 37.5	113	150	146.67	3200	1.2	CKM28C	63B5	6322	36
		92	125	120.32	2990	1.4				
		78	100	101.03	2820	1.3				
		57	75	74.59	2550	1.4				
	24 29 35 48 58 69 94	92	60	58.36	2960	1.4	CKM28B	71B5/B14	7114	36
		77	50	48.86	2790	1.7				
		63	40	40.08	2610	2.1				
		46	30	29.33	2350	2.8				
		38	25	24.06	2200	3.4				
		32	20	20.21	2080	3.2				
		23	15	14.92	1880	3.4				
	16.4 19.6 24.0 32.7 40.0 47.5 64.3 77.0 91.7 124.2	142	60	58.36	3430	0.91	CKM28B	71B5/B14	7126	36
		119	50	48.86	3240	1.1				
		98	40	40.08	3030	1.3				
		72	30	29.33	2730	1.8				
		59	25	24.06	2550	2.2				
		49	20	20.21	2410	2.0				
		36	15	14.92	2180	2.2				
		30	12.5	12.47	2050	4.3				
		26	10	10.47	1930	3.9				
		18.9	7.5	7.73	1750	4.2				

CKM系列

P _{1n}	n ₂	M _{2n}	i	i	F _{r2}	f _s			Page	
			公称	实际						[N]
[kW]	[r/min]	[Nm]	Nominal	Actual	[N]					
0.25	9.2	232	300	304.46	4650	0.86	CKM38C	63B5	6322	37
	11.5	187	250	243.57	4330	1.1				
	14.3	151	200	196.43	4030	1.2				
	18.5	116	150	151.56	3690	1.7				
	22.9	94	125	122.22	3440	1.9				
	27.6	78	100	101.27	3230	1.9				
	38.18	56	75	73.33	2900	2.0				
	9.2	233	150	151.56	4650	0.86	CKM38C	71B5/B14	7114	37
	11.5	188	125	122.22	4330	0.96				
	13.8	155	100	101.27	4070	0.97				
	19.0	113	75	73.33	3650	0.98				
	23	95	60	60.89	3430	2.1	CKM38B	71B5/B14	7114	37
	29	76	50	48.71	3190	2.6				
	36	62	40	39.29	2970	2.9				
	46	48	30	30.31	2720	4.2				
	15.8	148	60	60.89	3970	1.4	CKM38B	71B5/B14	7126	37
	19.7	119	50	48.71	3690	1.7				
	24.4	96	40	39.29	3440	1.9				
	31.7	74	30	30.31	3150	2.7				
	39.3	60	25	24.44	2930	3.0				
	47.4	49	20	20.25	2760	3.0				
	65.4	36	15	14.67	2470	3.1				
	9.4	228	300	297.21	6320	1.5	CKM48C	3B5	6322	38
	11.6	185	250	240.89	5890	1.9				
	14.0	154	200	200.66	5540	1.9				
	18.8	116	150	149.32	5040	3.0				
	23.1	97	125	121.02	4750	3.1				
	27.8	76	100	100.81	4380	3.2				
	35.2	58	75	79.41	4000	3.5				
	5.8	370	250	240.89	6500	0.95	CKM48C	71B5/B14	7114	38
	7.0	308	200	200.66	6500	0.97				
	9.4	232	150	149.32	6500	1.5				
	11.6	193	125	121.02	5980	1.6				
	13.9	152	100	100.81	5520	1.6				
	17.6	116	75	79.41	5040	1.7				
	24	93	60	59.44	4660	3.8	CKM48B	71B5/B14	7114	38
	29	76	50	48.18	4340	4.6				
	6.4	361	150	149.32	6500	0.97	CKM48C	71B5/B14	7126	38
	7.9	301	125	121.02	6500	1.00				
	9.5	237	100	100.81	6400	1.0				
	12.1	180	75	79.41	5840	1.1				
	16.1	145	60	59.44	5390	2.4	CKM48B	71B5/B14	7126	38
19.9	118	50	48.18	5030	3.0					
23.9	98	40	40.13	4730	3.1					
9.4	227	300	297.21	7990	2.2	CKM58C	63B5	6322	39	
11.6	185	250	240.89	7470	2.7					
14.0	154	200	200.66	7030	3.1					
18.5	116	150	151.20	6390	4.3					
4.7	453	300	297.21	8300	1.1	CKM58C	71B5/B14	7114	39	
5.8	370	250	240.89	8300	1.4					

CKM系列

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i 公称 Nominal	i 实际 Actual	F _{r2} [N]	f _s				Page
0.25	7.0	308	200	200.66	8300	1.6	CKM58C	71B5/B14	7114	39
	9.3	232	150	151.20	8050	2.2				
	11.1	193	125	125.95	7580	2.5				
	14.1	152	100	99.22	7000	2.5				
	18.6	116	75	75.45	6390	2.6				
	3.2	705	300	297.21	8300	0.71	CKM58C	71B5/B14	7126	39
	4.0	575	520	240.89	8300	0.87				
	4.8	479	200	200.66	8300	1.0				
	6.3	361	150	151.20	8300	1.4				
	7.6	301	125	125.95	8300	1.6				
	9.7	237	100	99.22	8110	1.6				
	12.7	180	75	75.45	7400	1.7				
	16.1	144	60	59.44	6820	3.5	CKM58B	71B5/B14	7126	39
	19.9	118	50	48.18	6370	4.3				
	4.7	454	300	296.10	10000	1.7	CKM68C	71B5/B14	7114	40
	5.7	375	250	244.29	10000	2.0				
	6.8	317	200	206.29	9920	2.4				
	9.1	235	150	153.33	8980	3.2				
	10.8	199	125	129.48	8490	3.8				
	13.5	159	100	103.64	7880	4.1				
	3.0	707	300	296.10	10000	1.1	CKM68C	71B5/B14	7126	40
	3.7	583	250	244.29	10000	1.3				
	4.4	493	200	206.29	10000	1.5				
	5.9	366	150	153.33	10000	2.0				
	7.0	309	125	129.48	9840	2.4				
0.37	8.7	247	100	103.64	9130	2.6	CKM28C	71B5/B14	7112	36
	11.9	180	75	75.55	8220	2.9				
	23.3	137	125	120.32	2990	0.95				
	27.7	115	100	101.03	2820	0.87				
	37.5	85	75	74.59	2550	0.94				
	24	136	60	58.36	2960	0.96	CKM28B	71B5/B14	7124	36
	29	113	50	48.86	2790	1.1				
	35	93	40	40.08	2610	1.4				
	48	68	30	29.33	2350	1.9				
	58	56	25	24.06	2200	2.3				
	69	47	20	20.21	2080	2.1				
	94	35	15	14.92	1880	2.3				
	112	29	12.5	12.47	1770	4.5				
	134	24	10	10.47	1670	4.1				
	181	17.9	7.5	7.73	1510	4.5				
	24.0	145	40	40.08	3030	0.90	CKM28B	80B5/B14	8016	36
	32.7	106	30	29.33	2730	1.2				
	39.9	87	25	24.06	2550	1.5				
	47.5	73	20	20.21	2410	1.4				
	64.3	54	15	14.92	2180	1.5				
	77.0	45	12.5	12.47	2050	2.9				
	91.7	38	10	10.47	1930	2.6				
	124.2	28	7.5	7.73	1750	2.9				
	18.5	172	150	151.56	3690	1.2	CKM38C	71B5/B14	7112	37
	22.9	139	125	122.22	3440	1.3				
	27.6	115	100	101.27	3230	1.3				
	38.1	83	75	73.33	2900	1.3				

CKM系列

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i 公称 Nominal	i 实际 Actual	F _{r2} [N]	f _s				Page
0.25	23	140	60	60.89	3430	1.4	CKM38B	71B5/B14	7124	37
	29	113	50	48.71	3190	1.8				
	36	91	40	39.29	2970	2.0				
	46	70	30	30.31	2720	2.8				
	57	57	25	24.44	2530	3.2				
	69	47	20	20.25	2380	3.2	CKM38B	80B5/B14	8016	37
	95	34	15	14.67	2130	3.2				
	15.8	219	60	60.89	3970	0.92				
	19.7	176	50	48.71	3690	1.1				
	24.4	142	40	39.29	3440	1.3				
	31.7	109	30	30.31	3150	1.8	CKM48C	71B5/B14	7112	38
	39.3	88	25	24.44	2930	2.0				
	47.4	73	20	20.25	2760	2.1				
	65.4	53	15	14.67	2470	2.1				
	75.8	46	12.5	12.67	2360	3.9				
0.37	91.4	38	10	10.50	2210	4.0	CKM48C	71B5/B14	7124	38
	126.3	27	7.5	7.60	1990	4.0				
	9.4	338	300	297.21	6320	1.0				
	11.6	274	250	240.89	5890	1.3				
	14.0	228	200	200.66	5540	1.3	CKM48B	71B5/B14	7124	38
	18.8	172	150	149.32	5040	2.0				
	23.1	143	125	121.02	4750	2.1				
	27.8	113	100	100.81	4380	2.1				
	35.3	86	75	79.41	4000	2.3				
	9.4	343	150	149.32	6500	1.0	CKM48C	71B5/B14	7124	38
	11.6	286	125	121.02	5980	1.0				
	13.9	225	100	100.81	5520	1.1				
	17.6	171	75	79.41	5040	1.2				
	24	138	60	59.44	4660	2.5	CKM48B	71B5/B14	7124	38
	29	112	50	48.18	4340	3.1				
	35	93	40	40.13	4080	3.2				
	16.1	215	60	59.44	5390	1.6				
	19.9	174	50	48.18	5030	2.0	CKM48B	80B5/B14	8016	38
	23.9	145	40	40.13	4730	2.1				
	32.2	109	30	29.86	4310	3.2				
	39.7	91	25	24.20	4050	3.3				
	47.6	72	20	20.16	3740	3.3				
0.55	60.5	55	15	15.88	3410	3.7	CKM58C	71B5/B14	7112	39
	9.4	335	300	297.21	7990	1.5				
	11.6	274	250	240.89	7470	1.8				
	14.0	228	200	200.66	7030	2.1				
	18.5	172	150	151.20	6390	2.9	CKM58C	71B5/B14	7124	39
	22.2	143	125	125.95	6010	3.4				
	28.2	113	100	99.22	5550	3.4				
	37.1	86	75	75.45	5070	3.5				
	4.7	671	300	297.21	8300	0.75	CKM58C	71B5/B14	7124	39
	5.8	547	250	240.89	8300	0.91				
	7.0	456	200	200.66	8300	1.1				
	9.3	343	150	151.20	8050	1.5				
	11.1	286	125	125.95	7580	1.7				
	14.1	225	100	99.22	7000	1.7	CKM58C	71B5/B14	7124	39
	18.6	171	75	75.45	6390	1.8				

CKM系列

	P _{1n}	n ₂	M _{2n}	i	i	F _{r2}	f _s			Page
	[kW]	[r/min]	[Nm]	公称 Nominal	实际 Actual	[N]				
0.37	24	137	60	59.44	5890	3.6	CKM58B	71B5/B14	7124	39
	29	112	50	48.18	5500	4.5				
	6.3	534	150	151.20	8300	0.94	CKM58C	80B5/B14	8016	39
	7.6	445	125	125.95	8300	1.1				
	9.7	351	100	99.22	8110	1.1				
	12.7	267	75	75.45	7400	1.1				
	16.2	213	60	59.44	6820	2.3				
	19.9	174	50	48.18	6370	2.9	CKM58B	80B5/B14	8016	39
	23.9	145	40	40.13	6000	3.3				
	9.5	336	300	296.10	8880	2.2	CKM68C	71B5/B14	7112	40
	11.5	277	250	244.29	8330	2.7				
	13.6	234	200	206.29	7870	3.2				
	18.3	174	150	153.33	7130	4.3				
	4.7	673	300	296.10	10000	1.1	CKM68C	71B5/B14	7124	40
	5.7	555	250	244.29	10000	1.4				
	6.8	469	200	206.29	9920	1.6				
	9.1	348	150	153.33	8980	2.2				
	10.8	294	125	129.48	8490	2.5				
	13.5	235	100	103.64	7880	2.8				
	18.5	172	75	75.55	7090	3.0				
	4.4	729	200	206.29	10000	1.0	CKM68C	80B5/B14	8016	40
	5.9	542	150	153.33	10000	1.4				
	7.0	458	125	129.48	9840	1.6				
	8.7	366	100	103.64	9130	1.8				
	11.9	267	75	75.55	8220	1.9				
	15.2	214	60	59.22	7580	3.5	CKM68B	80B5/B14	8016	40
	18.4	176	50	48.86	7110	4.2				
0.55	35	138	40	40.08	2610	0.94	CKM28B	80B5/B14	8014	36
	48	101	30	29.33	2350	1.3				
	58	83	25	24.06	2200	1.6				
	69	70	20	20.21	2080	1.4				
	94	51	15	14.92	1880	1.6				
	112	43	12.5	12.47	1770	3.0				
	134	36	10	10.47	1670	2.8				
	181	27	7.5	7.73	1510	3.0				
	39.9	129	25	24.06	2550	1.0	CKM28B	80B5/B14	8026	36
	47.5	109	20	20.21	2410	0.92				
	64.3	80	15	14.92	2180	1.00				
	77.0	67	12.5	12.47	2050	1.9				
	91.7	56	10	10.47	1930	1.8				
	124.2	42	7.5	7.73	1750	1.9				
	22.9	206	125	122.22	3440	0.87	CKM38C	71B5/B14	7122	37
	27.6	171	100	101.27	3230	0.88				
	38.2	124	75	73.33	2900	0.89				

CKM系列

	P _{1n}	n ₂	M _{2n}	i	i	F _{r2}	f _s			Page
	[kW]	[r/min]	[Nm]	公称 Nominal	实际 Actual	[N]				
	23	209	60	60.89	3430	0.96	CKM38B	80B5/B14	8014	37
	29	168	50	48.71	3190	1.2				
	36	136	40	39.29	2970	1.3				
	46	105	30	30.31	2720	1.9				
	57	84	25	24.44	2530	2.1				
	69	70	20	20.25	2380	2.1				
	95	51	15	14.67	2130	2.2				
	110	44	12.5	12.67	2030	4.1				
	133	36	10	10.50	1910	4.1				
	184	26	7.5	7.60	1710	4.2				
	24.4	211	40	39.29	3440	0.85	CKM38B	80B5/B14	8026	37
	31.7	163	30	30.31	3150	1.2				
	39.3	131	25	24.44	2930	1.4				
	47.4	109	20	20.25	2760	1.4				
	65.4	79	15	14.67	2470	1.4				
	75.8	68	12.5	12.67	2360	2.6				
	91.4	56	10	10.50	2210	2.7				
	126.3	41	7.5	7.60	1990	2.7				
0.55	11.6	407	250	240.89	5890	0.86	CKM48C	71B5/B14	7122	38
	14.0	339	200	200.66	5540	0.89				
	18.8	255	150	149.32	5040	1.4				
	23.1	213	125	121.02	4750	1.4				
	27.8	168	100	100.81	4380	1.4				
	35.3	127	75	79.41	4000	1.6				
	17.6	255	75	79.41	5040	0.79				
	24	205	60	59.44	4660	1.7	CKM48B	80B5/B14	8014	38
	29	166	50	48.18	4340	2.1				
	35	139	40	40.13	4080	2.2				
	47	104	30	29.86	3720	3.4				
	58	87	25	24.20	3500	3.5				
	69	68	20	20.16	3230	3.5				
	88	52	15	15.88	2950	3.8				
	16.2	319	60	59.44	5390	1.1	CKM48B	80B5/B14	8026	38
	19.9	259	50	48.18	5030	1.4				
	23.9	215	40	40.13	4730	1.4				
	32.2	162	30	29.86	4310	2.2				
	39.7	135	25	24.20	4050	2.2				
	47.6	107	20	20.16	3740	2.3				
	60.5	81	15	15.88	3410	2.5				

CKM系列

P _{1n}	n ₂	M _{2n}	i 公称	i 实际	F _{r2}	f _s			Page	
[kW]	[r/min]	[Nm]	Nominal	Actual	[N]					
0.55	9.4	498	300	297.21	7990	1.0	CKM58C	71B5/B14	7122	39
	11.6	407	250	240.89	7470	1.2				
	14.0	339	200	200.66	7030	1.4				
	18.5	255	150	151.20	6390	2.0				
	22.2	213	125	125.95	6010	2.3				
	28.2	168	100	99.22	5550	2.3				
	37.1	127	75	75.45	5070	2.4				
	9.3	511	150	151.20	8050	0.98	CKM58C	80B5/B14	8014	39
	11.1	425	125	125.95	7580	1.1				
	14.1	335	100	99.22	7000	1.1				
	18.6	255	75	75.45	6390	1.2				
	24	204	60	59.44	5890	2.5	CKM58B	80B5/B14	8014	39
	29	166	50	48.18	5500	3.0				
	35	139	40	40.13	5170	3.5				
	46	104	30	30.24	4710	4.8				
	16.2	317	60	59.44	6820	1.6	CKM58B	80B5/B14	8026	39
	19.9	259	50	48.18	6370	1.9				
	23.9	215	40	40.13	6000	2.2				
	31.7	162	30	30.24	5460	3.1				
	38.1	135	25	25.19	5130	3.5				
	48.4	107	20	19.84	4740	3.6				
	63.6	81	15	15.09	4330	3.7				
	9.5	500	300	296.10	8880	1.5	CKM68C	71B5/B14	7122	40
	11.5	412	250	244.29	8330	1.8				
	13.6	348	200	206.29	7870	2.2				
	18.3	259	150	153.33	7130	2.9				
	22	219	125	129.48	6740	3.4				
	27	175	100	103.64	6260	3.7				
	37	128	75	75.55	5630	4.1				
	5.7	825	250	244.29	10000	0.91	CKM68C	80B5/B14	8014	40
	6.8	697	200	206.29	9920	1.1				
	9.1	518	150	153.33	8980	1.4				
	10.8	437	125	129.48	8490	1.7				
	13.5	350	100	103.64	7880	1.9				
	18.5	255	75	75.55	7090	2.0				
	24	204	60	59.22	6540	3.7	CKM68B	80B5/B14	8014	40
	29	169	50	48.86	6130	4.4				
	5.9	805	150	153.33	10000	0.93	CKM68C	80B5/B14	8026	40
	7.0	680	125	129.48	9840	1.1				
	8.7	544	100	103.64	9130	1.2				
	11.9	397	75	75.55	8220	1.3				
	15.2	318	60	59.22	7580	2.4	CKM68B	80B5/B14	8026	40
	18.4	262	50	48.86	7110	2.9				
	22	222	40	41.26	6720	3.4				
	29	165	30	30.67	6090	4.6				

CKM系列

P _{1n}	n ₂	M _{2n}	i 公称	i 实际	F _{r2}	f _s			Page	
[kW]	[r/min]	[Nm]	Nominal	Actual	[N]					
0.75	48	138	30	29.33	2350	0.94	CKM28B	80B5/B14	8024	36
	58	113	25	24.06	2200	1.1				
	69	95	20	20.21	2080	1.1				
	94	70	15	14.92	1880	1.1				
	112	59	12.5	12.47	1770	2.2				
	134	49	10	10.47	1670	2.0				
	181	36	7.5	7.73	1510	2.2				
	77.0	91	12.5	12.47	2050	1.4	CKM28B	90B5/B14	90S6	36
	91.7	77	10	10.47	1930	1.3				
	124.2	57	7.5	7.73	1750	1.4				
	29	229	50	48.71	3190	0.87	CKM38B	80B5/B14	8024	37
	36	185	40	39.29	2970	0.97				
	46	143	30	30.31	2720	1.4				
	57	115	25	24.44	2530	1.6				
	69	95	20	20.25	2380	1.6				
	95	69	15	14.67	2130	1.6				
	110	60	12.5	12.67	2030	3.0				
	133	49	10	10.50	1910	3.0				
	184	36	7.5	7.60	1710	3.1				
	31.7	222	30	30.31	3150	0.90	CKM38B	90B5/B14	90S6	37
	39.3	179	25	24.44	2930	1.0				
	47.4	148	20	20.25	2760	1.0				
	65.4	107	15	14.67	2470	1.0				
	75.8	93	12.5	12.67	2360	1.9				
	91.4	77	10	10.50	2210	2.0				
	126.3	56	7.5	7.60	1990	2.0				
	18.8	348	150	149.32	5040	1.0	CKM48C	80B5/B14	8012	38
	23.1	290	125	121.02	4750	1.0				
	27.8	228	100	100.81	4380	1.1				
	35.3	174	75	79.41	4000	1.2				
	24	280	60	59.44	4660	1.3	CKM48B	80B5/B14	8024	38
	29	227	50	48.18	4340	1.5				
	35	189	40	40.13	4080	1.6				
	47	142	30	29.86	3720	2.5				
	58	119	25	24.20	3500	2.5				
	69	93	20	20.16	3230	2.6				
	88	71	15	15.88	2950	2.8				
	19.9	353	50	48.18	5030	0.99	CKM48B	90B5/B14	90S6	38
	23.9	294	40	40.13	4730	1.0				
	32.2	221	30	29.86	4310	1.6				
	39.7	184	25	24.20	4050	1.6				
	47.6	145	20	20.16	3740	1.7				
	60.5	110	15	15.88	3410	1.8				
	76.9	91	12.5	12.49	3210	3.3				
	97.6	72	10	9.84	2960	3.3				
	128.3	55	7.5	7.48	2700	3.7				

CKM系列

P _{1n}	n ₂	M _{2n}	i 公称	i 实际	F _{r2}	f _s			Page	
[kW]	[r/min]	[Nm]	Nominal	Actual	[N]					
0.75	11.6	555	250	240.89	7470	0.90	CKM58C	80B5/B14	8012	39
	14.0	462	200	200.66	7030	1.0				
	18.5	348	150	151.20	6390	1.4				
	22.2	290	125	125.95	6010	1.7				
	28.2	228	100	99.22	5550	1.7				
	37.1	174	75	75.45	5070	1.7				
	11.1	580	125	125.95	7580	0.83	CKM58C	80B5/B14	8024	39
	14.1	457	100	99.22	7000	0.83				
	18.6	347	75	75.45	6390	0.86				
	24	278	60	59.44	5890	1.8	CKM58B	80B5/B14	8024	39
	29	227	50	48.18	5500	2.2				
	35	189	40	40.13	5170	2.5				
	46	142	30	30.24	4710	3.5				
	56	119	25	25.19	4430	4.0				
	71	93	20	19.84	4090	4.1				
	93	71	15	15.09	3730	4.2				
	16.2	432	60	59.44	6820	1.2	CKM58B	90B5/B14	90S6	39
	19.9	353	50	48.18	6370	1.4				
	23.9	294	40	40.13	6000	1.6				
	31.7	221	30	30.24	5460	2.3				
	38.1	184	25	25.19	5130	2.6				
	48.4	145	20	19.84	4740	2.6				
	63.6	110	15	15.09	4330	2.7				
	9.5	682	300	296.10	8880	1.1	CKM68C	80B5/B14	8012	40
	11.5	562	250	244.29	8330	1.3				
	13.6	475	200	206.29	7870	1.6				
	18.3	353	150	153.33	7130	2.1				
	22	298	125	129.48	6740	2.5				
	27	239	100	103.64	6260	2.7				
	37	174	75	75.55	5630	3.0				
	91	706	150	153.33	8980	1.1	CKM68C	80B5/B14	8024	40
	10.8	596	125	129.48	8490	1.3				
	13.5	477	100	103.64	7880	1.4				
	18.5	348	75	75.55	7090	1.5				
	24	279	60	59.22	6540	2.7	CKM68B	80B5/B14	8024	40
	29	230	50	48.86	6130	3.3				
	34	194	40	41.26	5800	3.9				
	8.7	742	100	103.64	9130	0.88	CKM68C	90B5/B14	90S6	40
	11.9	541	75	75.55	8220	0.96				
	15.2	434	60	59.22	7580	1.7	CKM68B	90B5/B14	90S6	40
	18.4	358	50	48.86	7110	2.1				
	22	302	40	41.26	6720	2.5				
	29	225	30	30.67	6090	3.3				
	35	190	25	25.90	5750	4.0				
	43	152	20	20.73	5340	4.3				

CKM系列

P _{1n}		n ₂	M _{2n}	i	i	F _{r2}	f _s			Page
[kW]	[r/min]	[Nm]	Nominal	Actual	Actual	[N]				
1.1	112	86	12.5	12.47	1770	1.5	CKM28B	90B5/B14	90S4	36
	134	72	10	10.47	1670	1.4				
	181	53	7.5	7.73	1510	1.5				
	77.0	134	12.5	12.47	2050	0.97	CKM28B	90B5/B14	90L6	36
	92.7	112	10	10.47	1930	0.89				
	124.2	83	7.5	7.73	1750	0.96				
	46	209	30	30.31	2720	0.96	CKM38B	90B5/B14	90S4	37
	57	169	25	24.44	2530	1.1				
	69	140	20	20.25	2380	1.1				
	95	101	15	14.67	2130	1.1				
	110	87	12.5	12.67	2030	2.1				
	133	72	10	10.50	1910	2.1				
	184	52	7.5	7.60	1710	2.1				
	75.8	136	12.5	12.67	2360	1.3	CKM38B	90B5/B14	90L6	37
	91.4	113	10	10.50	2210	1.3				
	126.3	82	7.5	7.60	1990	1.3				
	24	410	60	59.44	4660	0.85	CKM48B	90B5/B14	90S4	38
	29	333	50	48.18	4340	1.1				
	35	277	40	40.13	4080	1.1				
	47	209	30	29.86	3720	1.7				
	58	174	25	24.20	3500	1.7				
	69	137	20	20.16	3230	1.8				
	88	104	15	15.88	2950	1.9				
	112	86	12.5	12.49	2770	3.5				
	142	68	10	9.84	2550	3.5				
	187	52	7.5	7.48	2330	3.9				
	32.2	325	30	29.86	4310	1.1	CKM48B	90B5/B14	90L6	38
	39.7	271	25	24.20	4050	1.1				
47.6	213	20	20.16	3740	1.1					
60.5	162	15	15.88	3410	1.2					
76.9	134	12.5	12.49	3210	2.2					
97.6	106	10	9.84	2960	2.3					
128.3	80	7.5	7.48	2700	2.5					
18.5	511	150	151.20	6390	0.98	CKM58C	80B5/B14	8022	39	
22.2	425	125	125.95	6010	1.1					
28.2	335	100	99.22	5550	1.1					
37.1	255	75	75.45	5070	1.2					
24	408	60	59.44	5890	1.2	CKM58B	90B5/B14	90S4	39	
29	333	50	48.18	5500	1.5					
35	277	40	40.13	5170	1.7					
46	209	30	30.24	4710	2.4					
56	174	25	25.19	4430	2.8					
71	137	20	19.84	4090	2.8					
93	104	15	15.09	3730	2.9					

CKM系列

	P _{1n}	n ₂	M _{2n}	i	i	F _{r2}	f _s			Page
	[kW]	[r/min]	[Nm]	公称 Nominal	实际 Actual	[N]				
1.1	16.2	634	60	59.44	6820	0.79	CKM58B	90B5/B14	90L6	39
	19.9	517	50	48.18	6370	0.97				
	23.9	431	40	40.13	6000	1.1				
	31.7	325	30	30.24	5460	1.5				
	38.1	271	25	25.19	5130	1.8				
	48.4	213	20	19.84	4740	1.8				
	63.6	162	15	15.09	4330	1.9				
	76.9	134	12.5	12.49	4060	3.6				
	97.6	106	10	9.84	3750	3.6				
	128.3	80	7.5	7.48	3420	3.7				
	11.5	825	250	244.29	8330	0.91	CKM68C	80B5/B14	8022	40
	13.6	697	200	206.29	7870	1.1				
	18.3	518	150	153.33	7130	1.4				
	22	437	125	129.48	6740	1.7				
	27	350	100	103.64	6260	1.9				
	37	255	75	75.55	5630	2.0				
	10.8	874	125	129.48	8490	0.86	CKM68C	90B5/B14	90S4	40
	13.5	700	100	103.64	7880	0.93				
	18.5	510	75	75.55	7090	1.0				
	24	409	60	59.22	6540	1.8				
	29	337	50	48.86	6130	2.2	CKM68B	90B5/B14	90S4	40
	34	285	40	41.26	5800	2.6				
	46	212	30	30.67	5250	3.5				
	54	179	25	25.90	4960	4.2				
	68	143	20	20.73	4610	4.5				
	15.2	636	60	59.22	7580	1.2	CKM68B	90B5/B14	90L6	40
	18.4	525	50	48.86	7110	1.4				
	22	443	40	41.26	6720	1.7				
	29	329	30	30.67	6090	2.3				
	35	278	25	25.90	5750	2.7				
	43	223	20	20.73	5340	2.9				
	60	162	15	15.11	4810	3.2				
	112	117	12.5	12.47	1770	1.1	CKM28B	90B5/B14	90L4	36
	134	99	10	10.47	1670	1.0				
	181	73	7.5	7.73	1510	1.1				
1.5	57	230	25	24.44	2530	0.8	CKM38B	90B5/B14	90L4	37
	69	191	20	20.25	2380	0.79				
	95	138	15	14.67	2130	0.80				
	110	119	12.5	12.67	2030	1.5				
	133	99	10	10.50	1910	1.5				
	184	72	7.5	7.60	1710	1.5	CKM48B	90B5/B14	90L4	38
	29	454	50	48.18	4340	0.77				
	35	378	40	40.13	4080	0.79				
	47	285	30	29.86	3720	1.2				
	58	237	25	24.20	3500	1.3				
	69	187	20	20.16	3230	1.3				
	88	142	15	15.88	2950	1.4				
	112	118	12.5	12.49	2770	2.6				
	142	93	10	9.84	2550	2.6				
	187	70	7.5	7.48	2330	2.8				

CKM系列

	P _{1n}	n ₂	M _{2n}	i	i	F _{r2}	f _s			Page
	[kW]	[r/min]	[Nm]	公称 Nominal	实际 Actual	[N]				
1.1	47.6	291	20	20.16	3740	0.83	CKM48B	100B5/B14	100L6	38
	60.5	221	15	15.88	3410	0.91				
	76.9	183	12.5	12.49	3210	1.6				
	97.6	144	10	9.84	2960	1.7				
	128.3	110	7.5	7.48	2700	1.8				
	22.2	580	125	125.95	6010	0.83	CKM58C	90B5/B14	90S2	39
	28.2	457	100	99.22	5550	0.83				
	37.1	347	75	75.45	5070	0.86				
	24	556	60	59.44	5890	0.90	CKM58B	90B5/B14	90L4	39
	29	454	50	48.18	5500	1.1				
	35	378	40	40.13	5170	1.3				
	46	285	30	30.24	4710	1.8				
	56	237	25	25.19	4430	2.0				
	71	187	20	19.84	4090	2.0				
	93	142	15	15.09	3730	2.1				
	112	118	12.5	12.49	3510	4.1				
	142	93	10	9.84	3240	4.1				
	187	70	7.5	7.48	2950	4.3				
1.5	31.7	443	30	30.24	5460	1.1	CKM58B	100B5/B14	100L6	39
	38.1	369	25	25.19	5130	1.3				
	48.4	291	20	19.84	4740	1.3				
	63.6	221	15	15.09	4330	1.4				
	76.9	183	12.5	12.49	4060	2.6				
	97.6	144	10	9.84	3750	2.6				
	128.3	110	7.5	7.48	3420	2.7	CKM68C	90B5/B14	90S2	40
	18.3	706	150	153.33	7130	1.1				
	22	596	125	129.48	6740	1.3				
	27	477	100	103.64	6260	1.4				
	37	348	75	75.55	5630	1.5				
	24	557	60	59.22	6540	1.3	CKM68B	90B5/B14	90L4	40
	29	460	50	48.86	6130	1.6				
	34	388	40	41.26	5800	1.9				
	46	289	30	30.67	5250	2.6				
	54	244	25	25.90	4960	3.1				
	68	195	20	20.73	4610	3.3				
	93	142	15	15.11	4150	3.7				
	15.2	867	60	59.22	7580	0.86	CKM68B	100B5/B14	100L6	40
	18.4	715	50	48.86	7110	1.0				
	22	604	40	41.26	6720	1.2				
	29	449	30	30.67	6090	1.7				
	35	379	25	25.90	5750	2.0				
	43	304	20	20.73	5340	2.1				
	60	221	15	15.11	4810	2.4				
	70	188	12.5	12.84	4550	4.0				
	88	150	10	10.27	4220	4.3				
	120	110	7.5	7.49	3800	4.7				

CKM系列

											Page
P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i 公称 Nominal	i 实际 Actual	F _{r2} [N]	f _s					
2.2	47	418	30	29.86	3720	0.84	CKM48B	100B5/B14	100LA4	38	
	58	348	25	24.20	3500	0.86					
	69	274	20	20.16	3230	0.88					
	88	208	15	15.88	2950	0.96					
	112	172	12.5	12.49	2770	1.7					
	142	136	10	9.84	2550	1.8					
	187	103	7.5	7.48	2330	1.9					
	76.9	268	12.5	12.49	3210	1.1	CKM48B	112B5/B14	112M6	38	
	97.6	211	10	9.84	2960	1.1					
	128.3	161	7.5	7.48	2700	1.2					
	35	554	40	40.13	5170	0.87	CKM58B	100B5/B14	100LA4	39	
	46	418	30	30.24	4710	1.2					
	56	348	25	25.19	4430	1.4					
	71	274	20	19.84	4090	1.4					
	93	208	15	15.09	3730	1.4					
	112	172	12.5	12.49	3510	2.8					
	142	136	10	9.84	3240	2.8					
	187	103	7.5	7.48	2950	2.9					
	38.1	541	25	25.19	5130	0.89	CKM58B	112B5/B14	112M6	39	
	48.4	426	20	19.84	4740	0.89					
	63.6	324	15	15.09	4330	0.93					
	76.9	268	12.5	12.49	4060	1.8					
	97.6	211	10	9.84	3750	1.8					
	128.3	161	7.5	7.48	3420	1.9	CKM68C	90B5/B14	90L2	40	
	22	874	125	129.48	6740	0.86					
	27	700	100	103.64	6260	0.93					
	37	510	75	75.55	5630	1.0	CKM68B	100B5/B14	100LA4	40	
	24	818	60	59.22	6540	0.92					
	29	675	50	48.86	6130	1.1					
	34	570	40	41.26	5800	1.3					
	46	423	30	30.67	5250	1.8					
	54	358	25	25.90	4960	2.1					
	68	286	20	20.73	4610	2.3					
	93	209	15	15.11	4150	2.5					
	109	177	12.5	12.84	3930	4.2					
	136	142	10	10.27	3650	4.6					
	187	103	7.5	7.49	3280	5.0					
	29	659	30	30.67	6090	1.1	CKM68B	112B5/B14	112M6	40	
	35	556	25	25.90	5750	1.3					
	43	445	20	20.73	5340	1.5					
	60	325	15	15.11	4810	1.6					
	70	276	12.5	12.84	4550	2.7					
	88	221	10	10.27	4220	2.9					
	120	161	7.5	7.49	3800	3.2					

CKM系列

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i 公称 Nominal	i 实际 Actual	F _{r2} [N]	f _s			Page	
3	112	235	12.5	12.49	2770	1.3	CKM48B	100B5/B14	100LB4	38
	142	185	10	9.84	2550	1.3				
	187	141	7.5	7.48	2330	1.4				
	46	569	30	30.24	4710	0.88	CKM58B	100B5/B14	100LB4	39
	56	474	25	25.19	4430	1.0				
	71	374	20	19.84	4090	1.0				
	93	284	15	15.09	3730	1.1				
	112	235	12.5	12.49	3510	2.0				
	142	185	10	9.84	3240	2.1				
	187	141	7.5	7.48	2950	2.1				
	34	777	40	41.26	5800	0.97	CKM68B	100B5/B14	100LB4	40
	46	577	30	30.67	5250	1.3				
	54	488	25	25.90	4960	1.5				
	68	390	20	20.73	4610	1.7				
	93	284	15	15.11	4150	1.8				
	109	242	12.5	12.84	3930	3.1				
	136	193	10	10.27	3650	3.4				
	187	141	7.5	7.49	3280	3.7				
	35	759	25	25.90	5750	0.99	CKM68B	132B5/B14	132S6	40
	43	607	20	20.73	5340	1.1				
	60	443	15	15.11	4810	1.2				
	70	376	12.5	12.84	4550	2.0				
	88	301	10	10.27	4220	2.2				
	120	219	7.5	7.49	3800	2.4				
4	112	314	12.5	12.49	2770	0.96	CKM48B	112B5/B14	112M4	38
	142	247	10	9.84	2550	0.97				
	187	188	7.5	7.48	2330	1.1				
	112	314	12.5	12.49	3510	1.5	CKM58B	112B5/B14	112M4	39
	142	247	10	9.84	3240	1.5				
	187	188	7.5	7.48	2950	1.6				
	46	770	30	30.67	5250	0.97	CKM68B	112B5/B14	112M4	40
	54	650	25	25.90	4960	1.2				
	68	520	20	20.73	4610	1.2				
	93	379	15	15.11	4150	1.4				
	109	322	12.5	12.84	3930	2.3				
	136	258	10	10.27	3650	2.5				
	187	188	7.5	7.49	3280	2.8				
	5.5	68	716	20	20.73	4610	0.91	CKM68B	132B5/B14	132S4
93		522	15	15.11	4150	1.00				
109		443	12.5	12.84	3930	1.7				
136		354	10	10.27	3650	1.8				
187		259	7.5	7.49	3280	2.0				

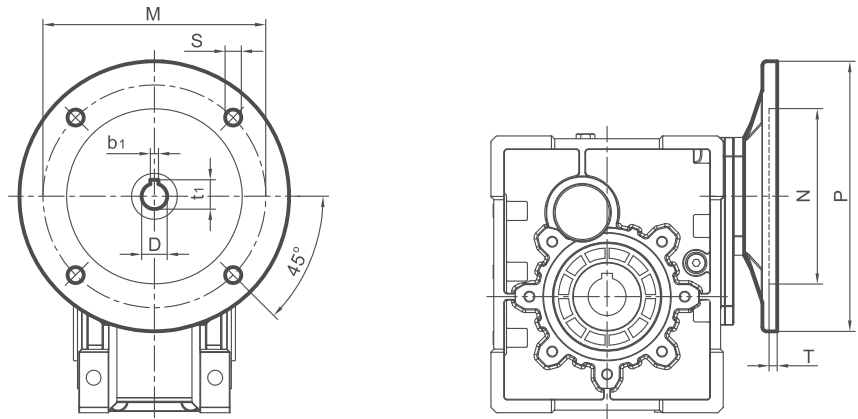
CKM.. HS性能参数 / Performance parameter

n₁=1400r/min

M ₂ max [Nm]	n ₂ [r/min]	i 公称 Nominal	i 实际 Actual	P _{1n} [kW]	Fr ₂ [N]	Fr ₁ [N]			Page ←→
130	4.8	300	291.80	0.07	4100	400	CKM28C..HS		41
130	5.7	250	244.29	0.09	4100	400			
130	7.0	200	200.41	0.11	4100	400			
130	9.5	150	146.67	0.14	4000	400			
130	11.6	125	120.32	0.18	3770	400			
100	13.9	100	101.03	0.16	3560	400			
80	18.8	75	74.59	0.17	3220	400			
130	24	60	58.36	0.35	2960	400	CKM28B..HS		41
130	29	50	48.86	0.42	2790	400			
130	35	40	40.08	0.52	2610	400			
130	48	30	29.33	0.71	2350	400			
130	58	25	24.06	0.86	2200	400			
100	69	20	20.21	0.79	2080	400			
80	94	15	14.92	0.85	1880	400			
130	112	12.5	12.47	1.7	1770	400			
100	134	10	10.47	1.5	1670	400			
80	181	7.5	7.73	1.6	1510	400			
200	4.6	300	304.46	0.11	4800	400	CKM38C..HS		41
200	5.7	250	243.57	0.13	4800	400			
180	7.1	200	196.43	0.15	4800	400			
200	9.2	150	151.56	0.21	4650	400			
180	11.5	125	122.22	0.24	4330	400			
150	13.8	100	101.27	0.24	4070	400			
110	19.0	75	73.33	0.24	3650	400			
200	23	60	60.89	0.53	3430	530	CKM38B..HS		41
200	29	50	48.71	0.65	3190	530			
180	36	40	39.29	0.73	2970	530			
200	46	30	30.31	1.1	2720	530			
180	57	25	24.44	1.2	2530	530			
150	69	20	20.25	1.2	2380	530			
110	95	15	14.67	1.2	2130	530			
180	110	12.5	12.67	2.3	2030	530			
150	133	10	10.50	2.3	1910	530			
110	184	7.5	7.60	2.3	1710	530			
350	4.7	300	297.21	0.19	6500	560	CKM48C..HS		41
350	5.8	250	240.89	0.24	6500	560			
300	7.0	200	200.66	0.24	6500	560			
350	9.4	150	149.32	0.38	6500	560			
300	11.6	125	121.02	0.39	5980	560			
240	13.9	100	100.81	0.39	5520	560			
200	17.6	75	79.41	0.43	5040	560			

输入尺寸图表 / INPUT SIZE DIAGRAM

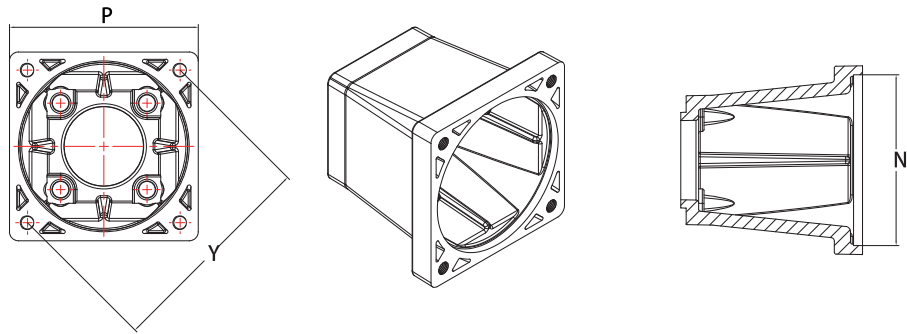
CKM..IEC 输入法兰尺寸/Input Flange Dimension



CKM	IEC接口							键槽/keyway		i(速比/ratio)																							
	PAM-IEC	N	M	P	S	T	b1	t1	7.5	10	12.5	15	20	25	30	40	50	60	75	100	125	150	200	250	300								
									D																								
									B									C															
28	63B5	95	115	140	9	4	4	12.8	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11						
	71B5	110	130	160	9	5	5	16.3	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14						
	71B14	70	85	105	7	5	5	16.3	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14						
	80B5	130	165	200	11	5	6	21.8	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19						
	80B14	80	100	120	7	5	6	21.8	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19						
	90B5	130	165	200	11	5	8	27.3	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24					
	90B14	95	115	140	9	5	8	27.3	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24					
38	63B5	95	115	140	9	4	4	12.8	-	-	-	-	-	-	11	11	11	11	11	11	11	11	11	11	11	11	11	11					
	71B5	110	130	160	9	5	5	16.3	-	-	-	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14					
	71B14	70	85	105	7	5	5	16.3	-	-	-	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14					
	80B5	130	165	200	11	5	6	21.8	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19					
	80B14	80	100	120	7	5	6	21.8	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19					
	90B5	130	165	200	11	5	8	27.3	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24					
	90B14	95	115	140	9	5	8	27.3	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24					
48	63B5	95	115	140	9	4	4	12.8	-	-	-	-	-	-	-	-	-	-	11	11	11	11	11	11	11	11	11	11					
	71B5	110	130	160	9	5	5	16.3	-	-	-	-	-	-	-	-	14	14	14	14	14	14	14	14	14	14	14	14					
	80B5	130	165	200	11	5	6	21.8	-	-	-	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19					
	80B14	80	100	120	7	5	6	21.8	-	-	-	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19					
	90B5	130	165	200	11	5	8	27.3	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24					
	90B14	95	115	140	9	5	8	27.3	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24					
	100/112B5	180	215	250	13	5	8	31.3	28	28	28	28	28	28	28	28/-	28/-	-	-	-	-	-	-	-	-	-	-	-					
	100/112B14	110	130	160	9	5	8	31.3	28	28	28	28	28	28	28	28/-	28/-	-	-	-	-	-	-	-	-	-	-	-					

CKM	IEC接口						键槽/keyway		i(速比/ratio)																			
	PAM-IEC	N	M	P	S	T	b1	t1	7.5	10	12.5	15	20	25	30	40	50	60	75	100	125	150	200	250	300			
									D																			
									B									C										
58	63B5	95	115	140	9	4	4	12.8	-	-	-	-	-	-	-	-	-	-	11	11	11	11	11	11	11	11		
	71B5	110	130	160	9	5	5	16.3	-	-	-	-	-	-	-	-	14	14	14	14	14	14	14	14	14	14		
	80B5	130	165	200	11	5	6	21.8	-	-	-	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19		
	80B14	80	100	120	7	5	6	21.8	-	-	-	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19		
	90B5	130	165	200	11	5	8	27.3	24	24	24	24	24	24	24	24	24	24	-	-	-	-	-	-	-	-		
	90B14	95	115	140	9	5	8	27.3	24	24	24	24	24	24	24	24	24	24	-	-	-	-	-	-	-	-		
	100/112B5	180	215	250	13	5	8	31.3	28	28	28	28	28	28	28	28	28	28/-	28/-	-	-	-	-	-	-	-		
68	100/112B14	110	130	160	9	5	8	31.3	28	28	28	28	28	28	28	28	28	28/-	28/-	-	-	-	-	-	-	-		
	71B5	110	130	160	9	6	5	16.3	-	-	-	-	-	-	-	-	-	-	14	14	14	14	14	14	14	14		
	80B5	130	165	200	11	6	6	21.8	-	-	-	-	-	-	19	19	19	19	19	19	19	19	19	19	19	19		
	80B14	80	100	120	7	6	6	21.8	-	-	-	-	-	-	19	19	19	19	19	19	19	19	19	19	19	19		
	90B5	130	165	200	11	6	8	27.3	-	-	-	24	24	24	24	24	24	24	24	24	24	24	24	-	-	-		
	90B14	95	115	140	9	6	8	27.3	-	-	-	24	24	24	24	24	24	24	24	24	24	24	24	-	-	-		
	100/112B5	180	215	250	13	6	8	31.3	28	28	28	28	28	28	28	28	28/-	28/-	28/-	-	-	-	-	-	-	-		
	100/112B14	110	130	160	9	6	8	31.3	28	28	28	28	28	28	28	28	28/-	28/-	28/-	-	-	-	-	-	-	-		
	132B5	230	265	300	15	6	10	41.3	38	38	38	38	38	38	-	-	-	-	-	-	-	-	-	-	-	-		
	132B14	130	165	200	11	6	10	41.3	38	38	38	38	38	38	-	-	-	-	-	-	-	-	-	-	-	-		

CKM..IEC 输入法兰尺寸/Input Flange Dimension



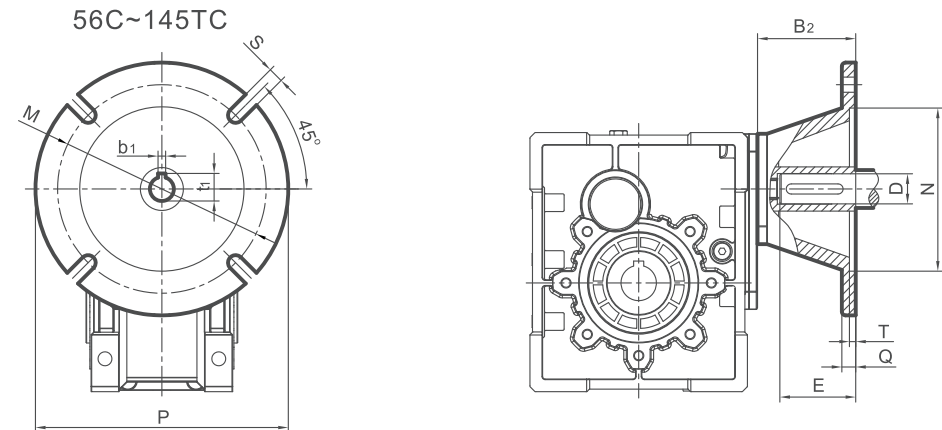
CKM	伺服/步进电机方法兰 Servo/Stepper Motor Square Flange	轴-键 shaft key	N	P	Y
KM28B/C KM38B/C	60	14-5	50	60	70
	80	19-6	70	80	90
	90	16-5	80	88	100
	100	19-6	95	105	115
	110	19-6	95	105	130
	130	22-6/8	110	130	145
	86	14-5	73	88	98.4
	110	19-6	85	105	131.5
	130	24-8	100	130	155
	90	11-4	83	88	104
	104	14-5	94	105	120

CKM	伺服/步进电机方法兰 Servo/Stepper Motor Square Flange	轴-键 shaft key	N	P	Y
KM48B/C KM58B/C	80	19-6	70	80	90
	90	16-5	80	86	100
	100	19-6	95	105	115
	110	19-6	95	105	130
	130	22-6	110	130	145
	180	35-10	114.3	180	200
	86	14-5	73	86	98.4
	110	19-6	85	105	131.5
	130	24-8	100	130	155
	90	11-4	83	86	104
	104	14-5	94	105	120

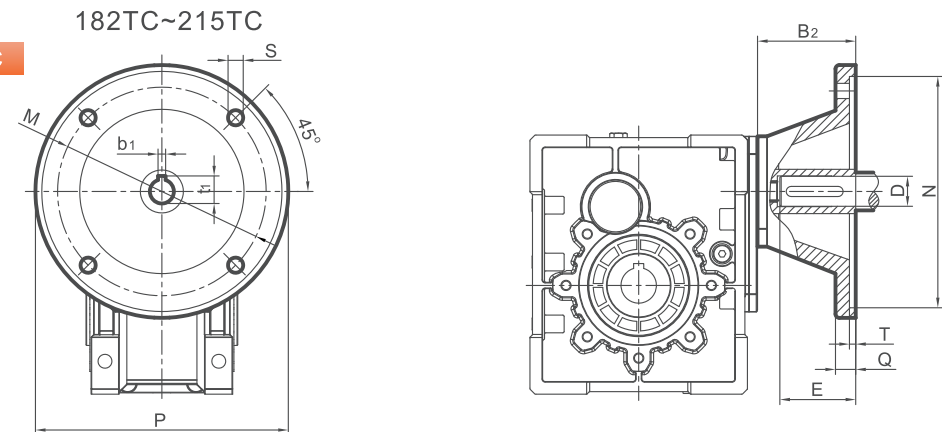
输入尺寸图表 / INPUT SIZE DIAGRAM

CKM..NEMA输入法兰尺寸 / Input Flange Dimension

56C-145TC



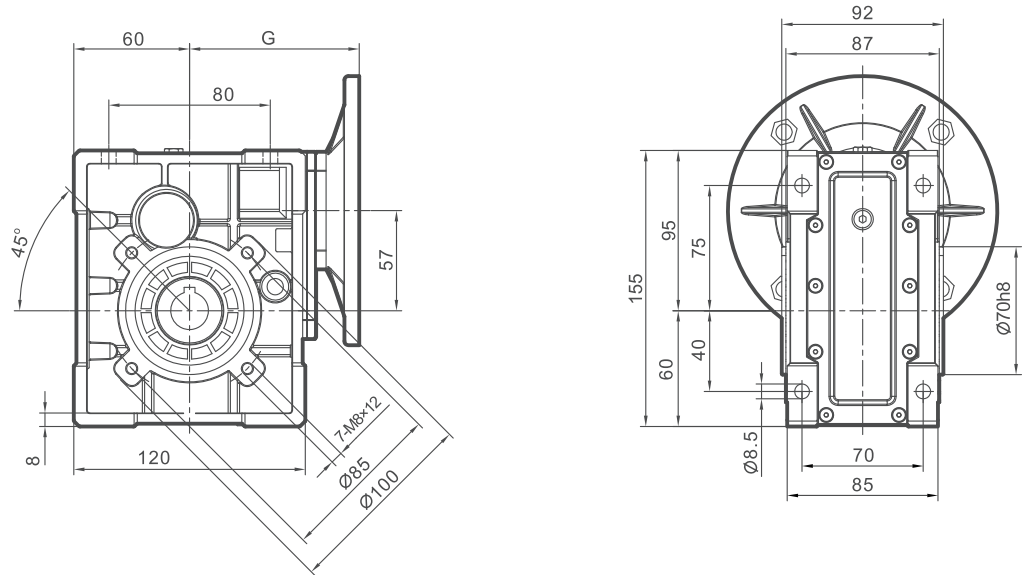
182TC-215TC



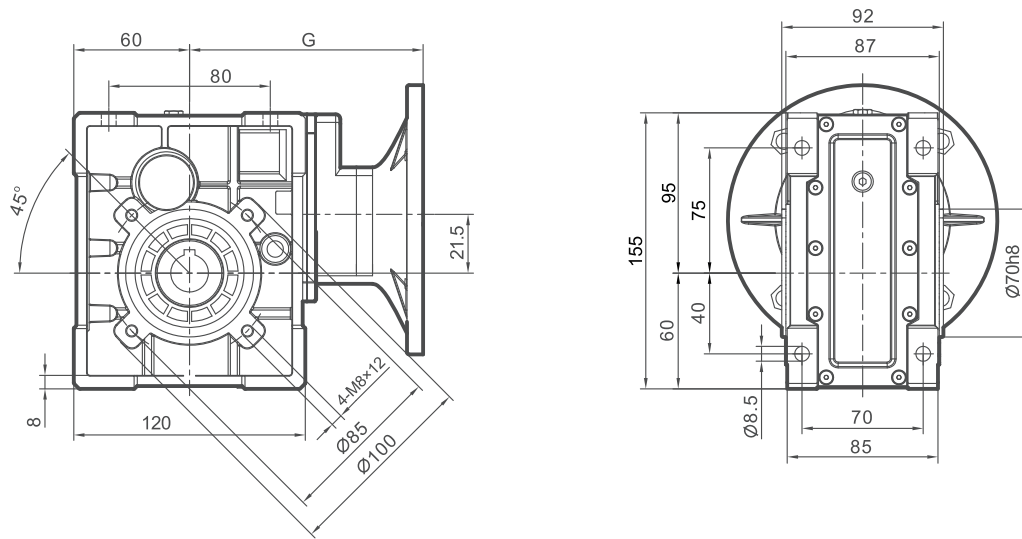
CKM	NEMA Flange	B ₂	D	E	b ₁	t ₁	M	N	P	Q	S	T
CKM28	56C	2.953	0.625	2.06	0.188	0.713	5.875	4.5	6.5	0.433	0.413	0.177
CKM38	56C	2.953	0.625	2.06	0.188	0.713	5.875	4.5	6.5	0.433	0.413	0.177
	143TC	2.953	0.875	2.12	0.188	0.963	5.875	4.5	6.5	0.433	0.413	0.177
	145TC											
CKM48 CKM58	56C	3.228	0.625	2.06	0.188	0.713	5.875	4.5	6.5	0.433	0.413	0.177
	143TC	3.228	0.875	2.12	0.188	0.963	5.875	4.5	6.5	0.433	0.413	0.177
	145TC											
	182TC 184TC	3.937	1.125	2.62	0.250	1.240	7.250	8.5	9.0	0.472	0.551	0.197
CKM68	143TC	3.425	0.875	2.12	0.188	0.963	5.875	4.50	6.50	0.433	0.413	0.177
	145TC											
	182TC 184TC	4.134	1.125	2.62	0.250	1.240	7.250	8.50	9.00	0.472	0.551	0.197
	213TC	4.646	1.375	3.12	0.312	1.517	7.250	8.50	9.00	0.472	0.551	0.197
	215TC											

外形尺寸图表 / OUTLINE DIMENSION SHEET

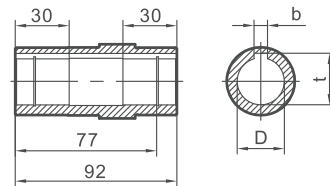
CKM28..B..IEC



CKM28..C..IEC



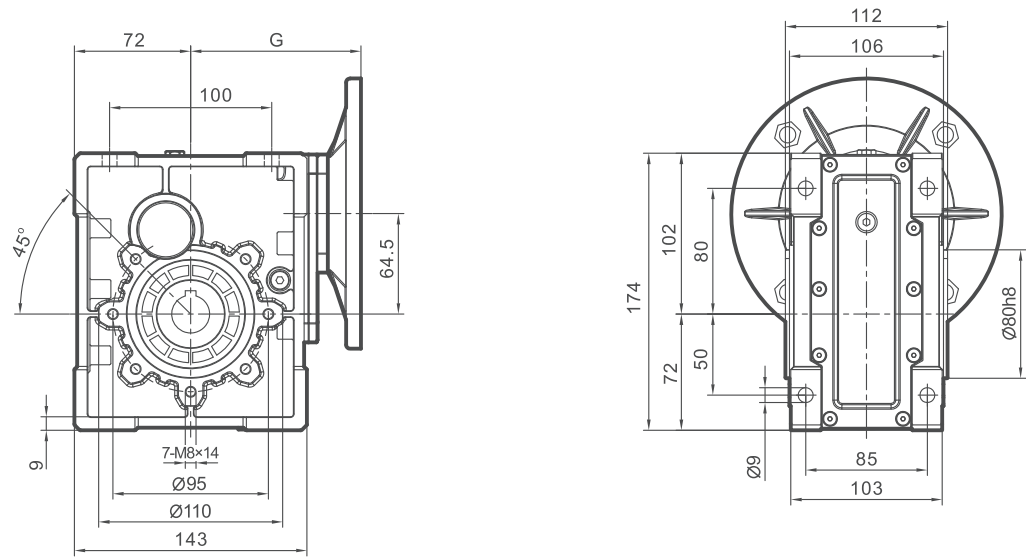
输出孔/Output hole



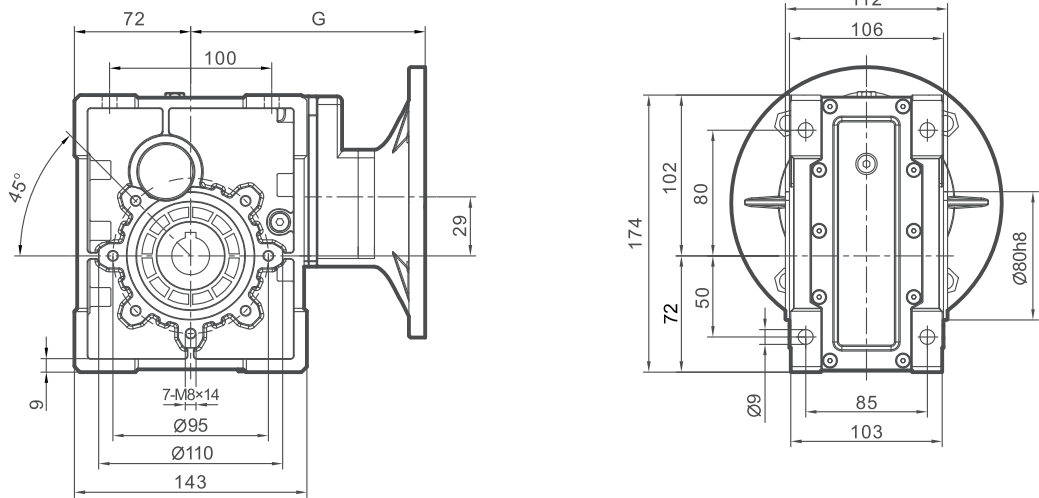
IEC	CKM	G	D _{H8}	b	t	CKM	Kg(重量)
63B5	28B	133	20*	6	22.8	28B	4.2
	28C	167	25	8	28.3	28C	5
71B5/B14	28B	113	*非标孔，订单时请说明。 *Only on request				不包括马达 Weight without motor
	28C	147					
80B5/B14	28B	133					
90B5/B14	28B	167					

外形尺寸图表 / OUTLINE DIMENSION SHEET

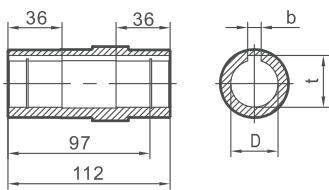
CKM38..B..IEC



CKM38..C..IEC



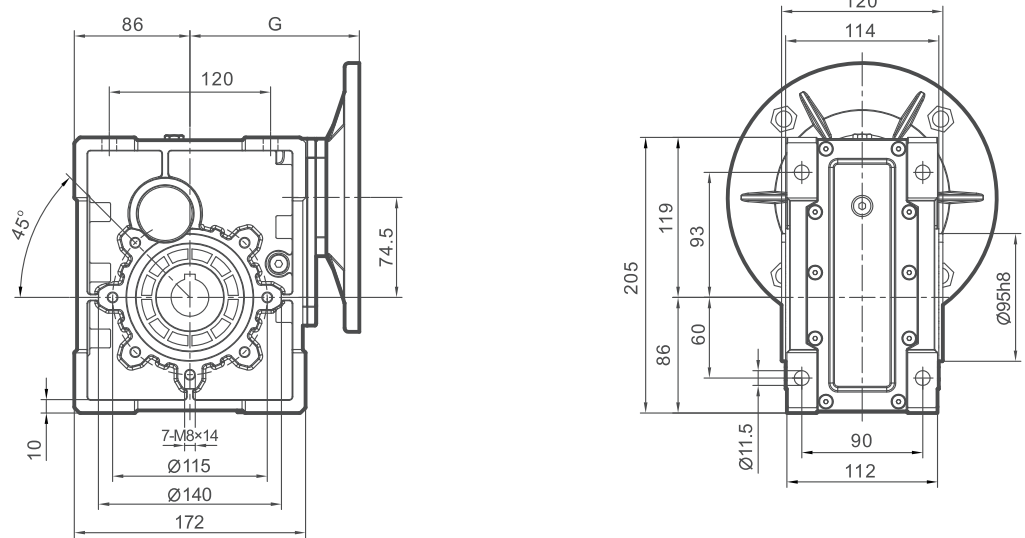
输出孔/Output hole



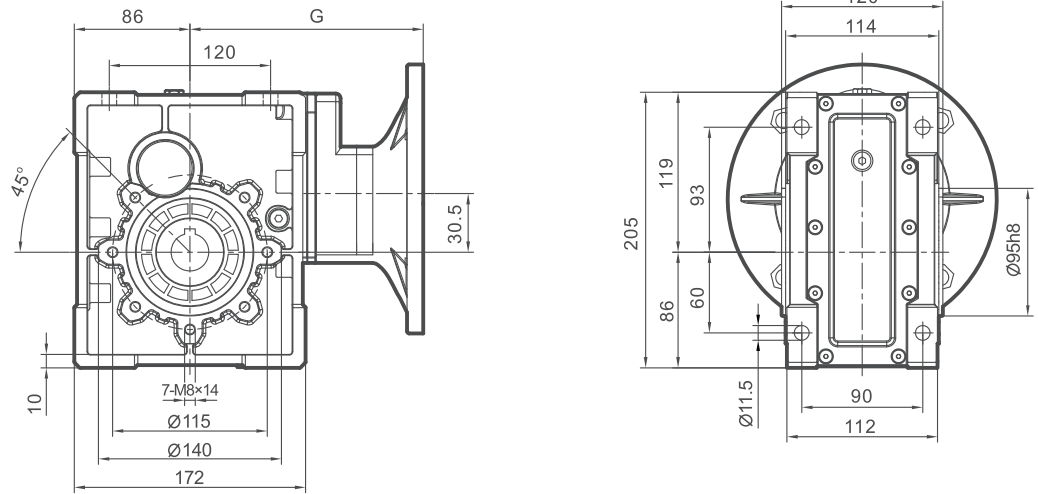
IEC	CKM	G	D _{H8}	b	t	CKM	Kg(重量)
63B5	38B	144	25	8	28.3	38B	6.0
	38C	178	28*	8	31.3	38C	6.8
71B5/B14	38B	124	*非标孔，订单时请说明。 *Only on request			不包括马达 Weight without motor	
	38C	158					
80B5/B14	38B	144					
	38C	178					
90B5/B14	38B	144					

外形尺寸图表 / OUTLINE DIMENSION SHEET

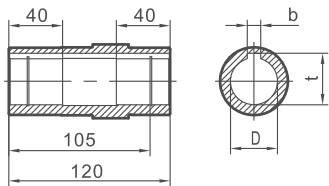
CKM48..B..IEC



CKM48..C..IEC



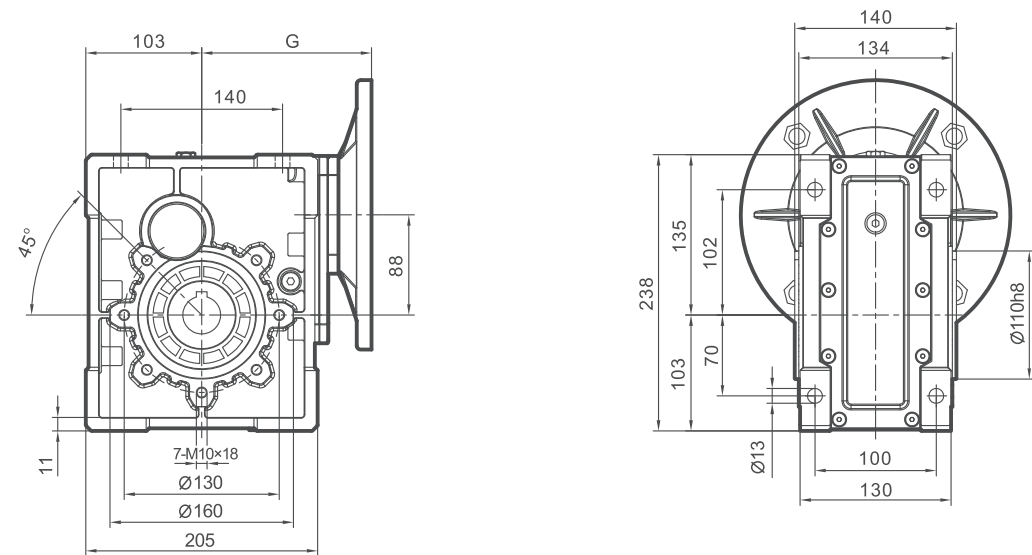
输出孔/Output hole



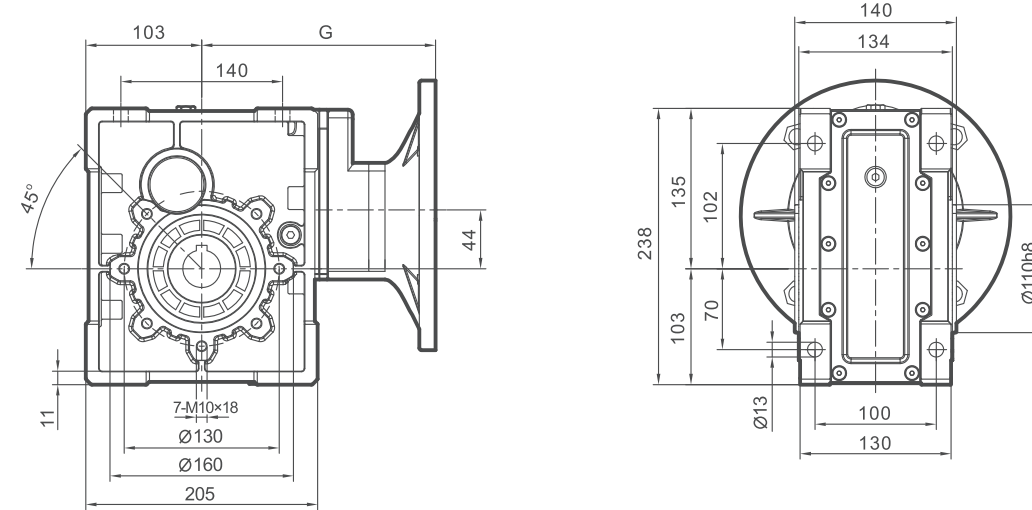
IEC	CKM	G	D _{H8}	b	t	CKM	Kg(重量)
63B5	48C	166	28	8	31.3	48B	9.2
71B5	48B	146	30*	8	33.3	48C	10.8
	48C	216	35*	10	38.3	不包括马达 Weight without motor	
80B5/B14	48B	166	*非标孔，订单时请说明。 *Only on request				
	48C	206					
90B5/B14	48B	166					
	48C	206					
100/112B5	48B	176					
100/112B14	48B	176					

外形尺寸图表 / OUTLINE DIMENSION SHEET

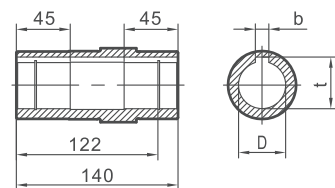
CKM58..B..IEC



CKM58..C..IEC



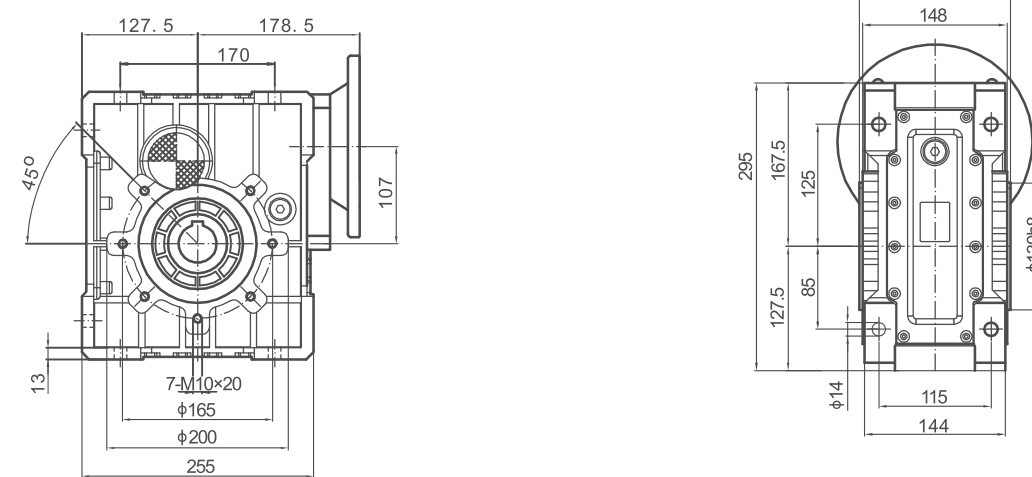
输出孔/Output hole



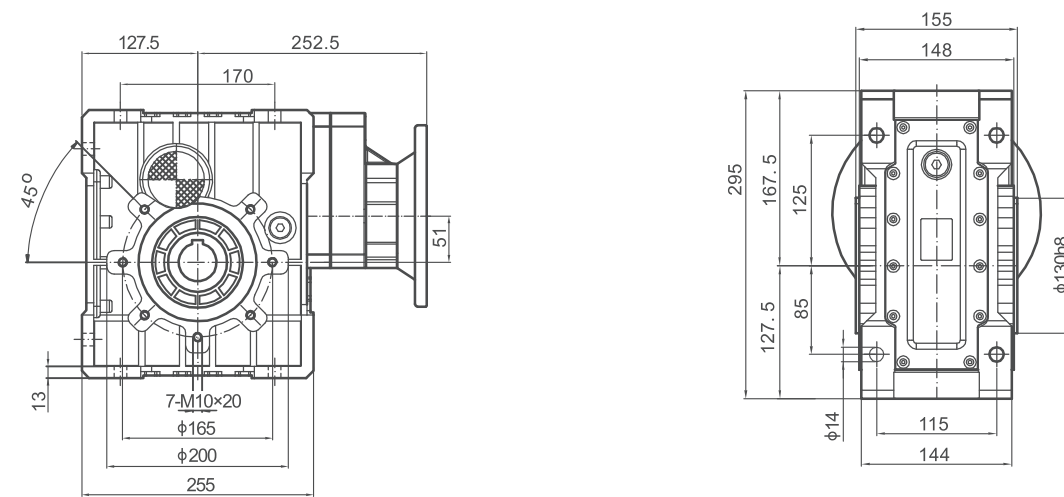
IEC	CKM	G	DH8			b	t	CKM	Kg(重量)
63B5	58C	222	35	10	38.3			58B	13.3
71B5	58B	162	38*	10	41.3			58C	14.8
	58C	232	*非标孔，订单时请说明。 *Only on request					不包括马达 Weight without motor	
80B5/B14	58B	182							
	58C	222							
90B5/B14	58B	182							
	58C	222							
100/112B5	58B	192							
100/112B14	58B	192							

外形尺寸图表 / OUTLINE DIMENSION SHEET

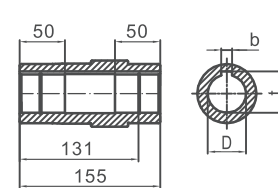
CKM68..B..IEC



CKM68..C..IEC

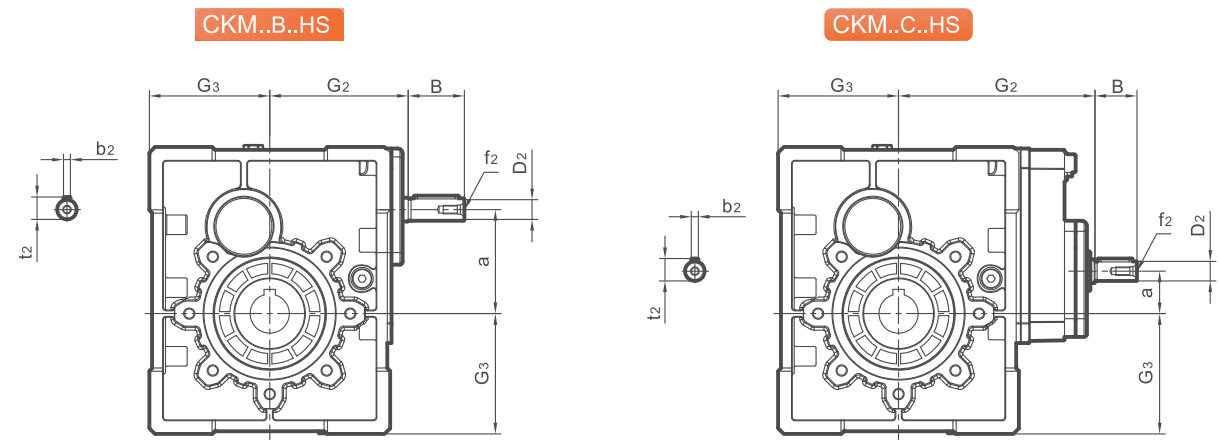


输出孔/Output hole



DH8	b	t	CKM	Kg(重量)
40*	12	43.3	68B	39.5
42	12	45.3	68C	45
*非标孔，订单时请说明。 *Only on request		不包括马达 Weight without motor		

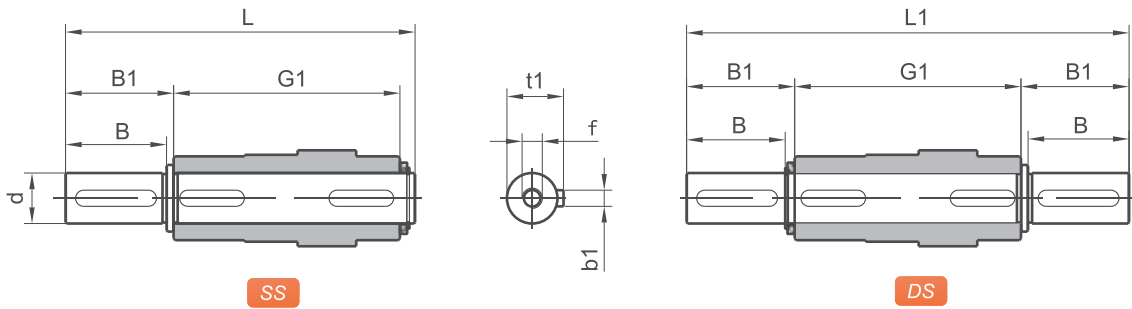
外形尺寸图表 / OUTLINE DIMENSION SHEET



CKM	B	D _{2j6}	G ₂	G ₃	a	b ₂	t ₂	f ₂
28B	23	11	70	60	56.5	4	12.5	—
28C	23	11	88	60	28	4	12.5	—
38B	30	14	85	72	69.1	5	16	M6
38C	23	11	110	72	35.6	4	12.5	—
48B	40	16	99	86	80	5	18	M6
48C	30	14	129	86	41.5	5	16	M6
58B	40	19	112	103	93	6	21.5	M6
58C	30	14	152	103	52.5	5	16	M6
68B	50	24	160.5	127.5	107	8	27	M8
68C	40	19	234	127.5	51	6	21.5	M6

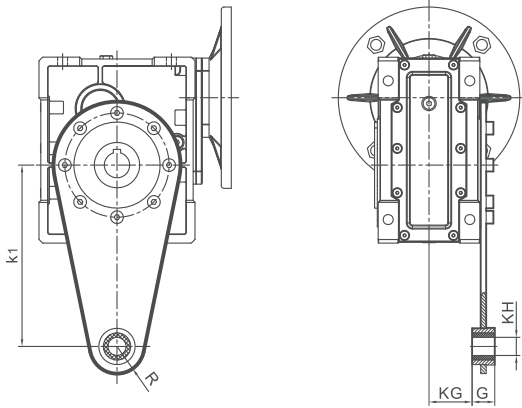
附件尺寸图表 / ACCESSORIES DIMENSION SHEET

输出轴/Output Shafts



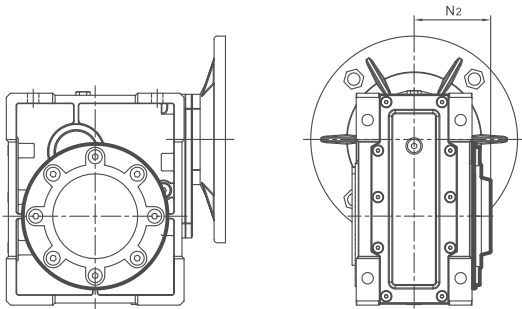
CKM	d _{h6}	B	B ₁	G ₁	L	L ₁	f	b ₁	t ₁
28	25	50	53.5	92	153	199	M10*27	8	28
38	25	50	53.5	112	173	219	M10*27	8	28
48	28	60	63.5	120	192	247	M10*27	8	31
58	35	80	84.5	140	234	309	M12*34	10	38
68	42	80	84.5	155	249	324	M16*42	12	45

扭力臂/Torque Arm



CKM	K ₁	G	KG	KH	R
28	100	14	38.5	10	18
38	150	14	49	10	18
48	200	25	47.5	20	30
58	200	25	57.5	20	30
68	250	30	62	25	35

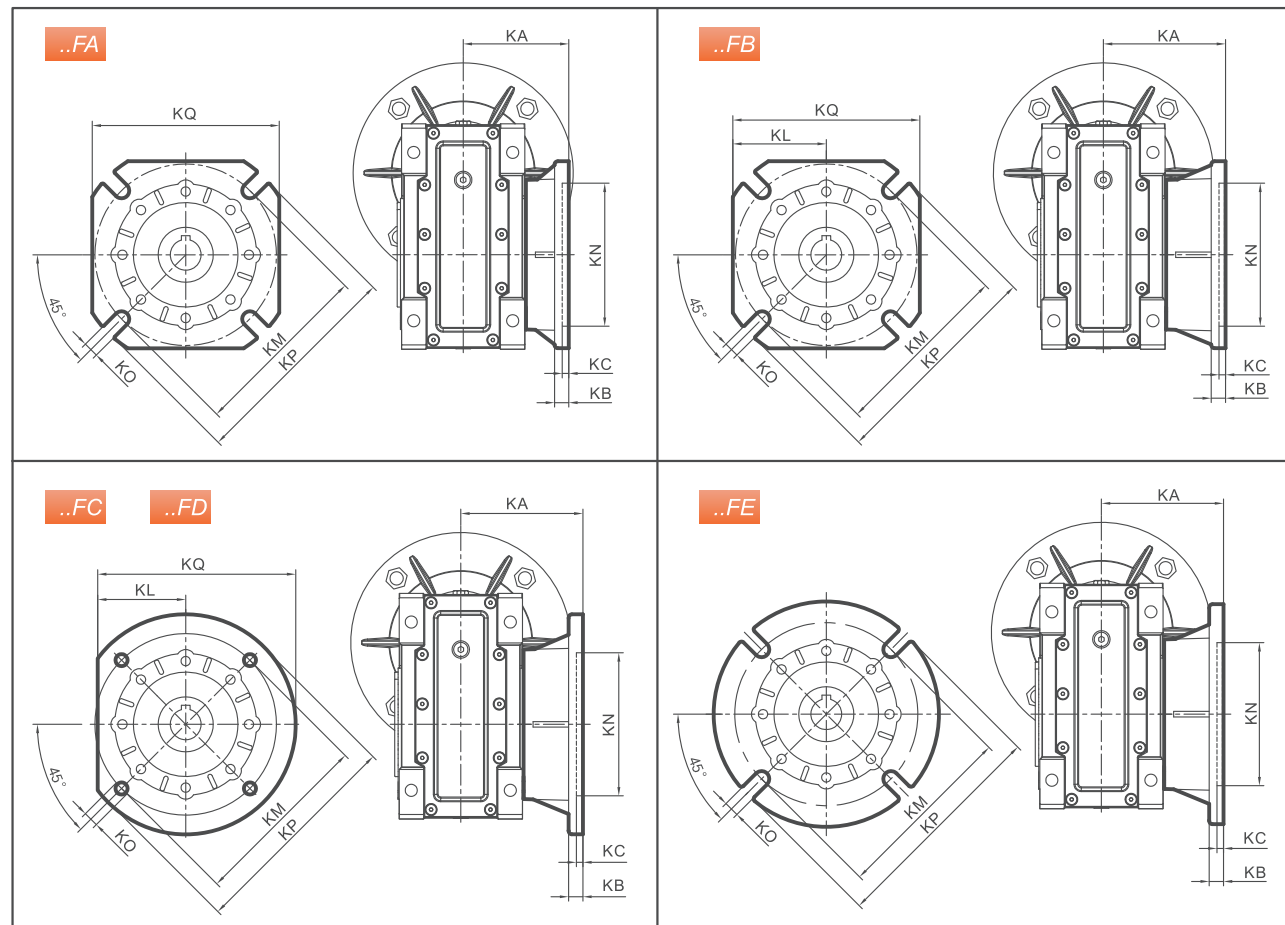
防尘盖/Cover



CKM	N ₂
28	58
38	69
48	74
58	85
68	94

附件尺寸图表 / ACCESSORIES DIMENSION SHEET

输出法兰 / Output flange



CKM	FA							
	KA	KB	KC	KM	KN _{H8}	KO	KP	KQ
28	90	9	5	85	70	11(n=4)	125	110
38	82	10	6	150	115	11(n=4)	180	142
48	111	13	6	165	130	14(n=4)	200	170
58	111	13	6	175	152	14(n=4)	210	200
68	139	15	6	230	170	14(n=8)	280	260

CKM	FB								
	KA	KB	KC	KM	KN _{H8}	KO	KP	KQ	KL
28	120	9	5	85	70	11(n=4)	125	110	-
38	112	10	6	150	115	11(n=4)	180	142	-
48	90	13	6	130	110	11(n=4)	160	-	-
58	122	18	6	215	180	14(n=4)	250	-	105

CKM	FC								
	KA	KB	KC	KM	KN _{H8}	KO	KP	KQ	KL
28	89	10	5	130	110	9(n=4)	160	-	66
38	98	10	5	165	130	11(n=4)	200	-	80
58	110	17	6	165	130	11(n=4)	200	-	-

CKM	FD								
	KA	KB	KC	KM	KN _{H8}	KO	KP	KQ	KL
28	72	14.5	5	115	95	11(n=4)	140	-	60
38	107	10	5	165	130	11(n=4)	200	-	80
58	151	13	6	175	152	14(n=4)	210	200	-

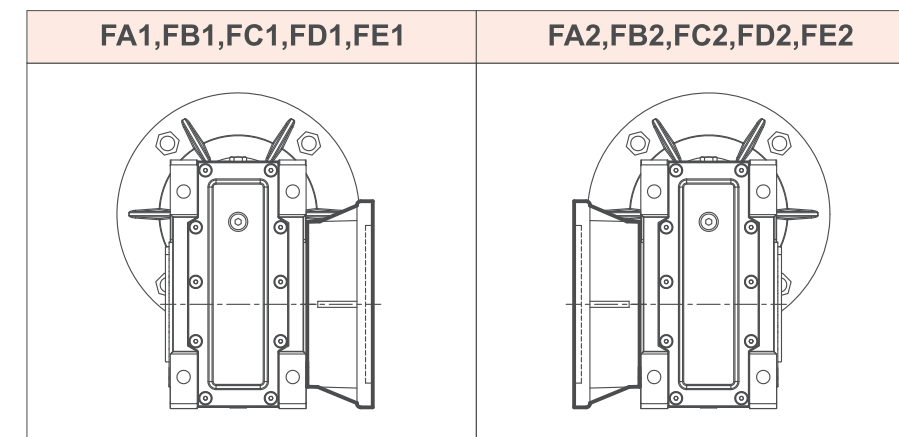
CKM	FE						
	KA	KB	KC	KM	KN _{H8}	KO	KP
38	80.5	16.5	5	130	110	11(n=4)	160

* 当KQ不存在时，说明法兰为圆形。
* If KQ isn't existing, the flange is circular.

* 当KL存在时，说明法兰为圆形且切边。
* If KQ is existing, the flange isn't completely circular.

安装方位图 / INSTALLATION POSITIONS DIAGRAM

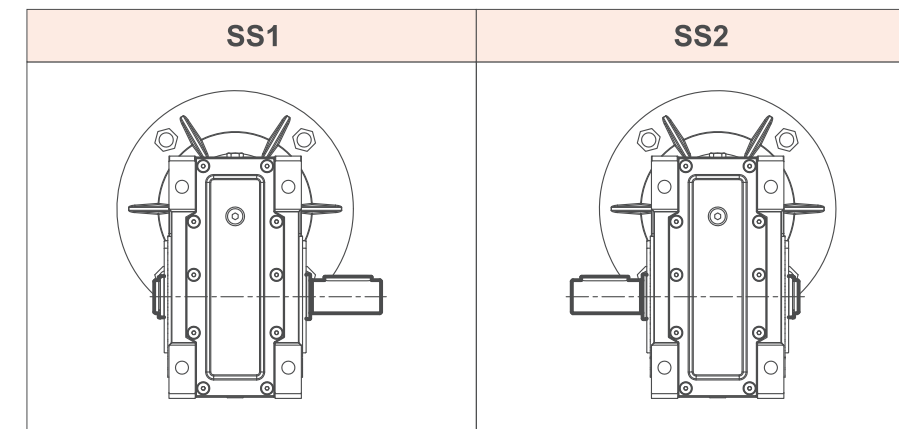
输出法兰位置 / Position diagram for output flange



如果没有特殊要求，一般按出厂标准位置如图F.1方式和B3位置提供。

Unless specified otherwise, the gear units is supplied with the flange in pos. **F.1** referred to position **B3**.

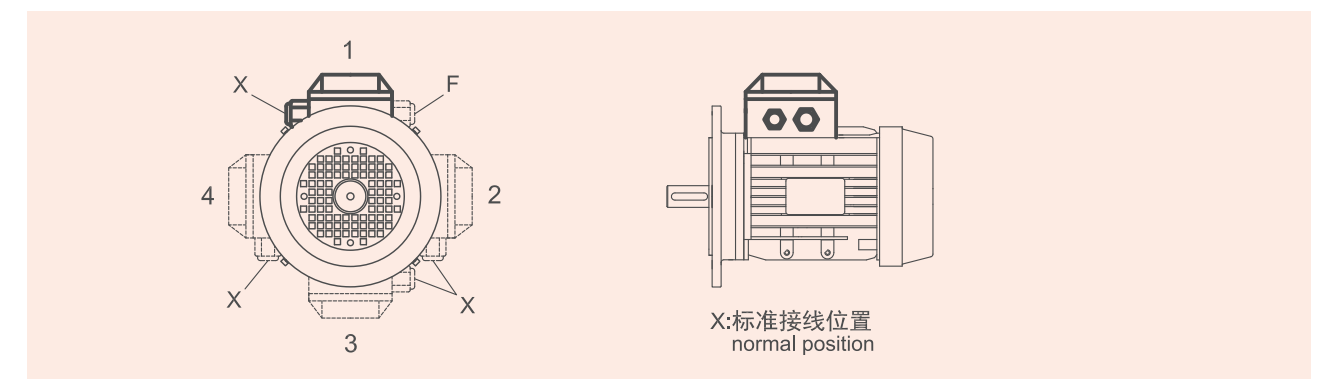
单向输出轴位置 / Position diagram for single output shaft



如果没有特殊要求，一般按出厂标准位置如图SS1方式和B3位置提供。

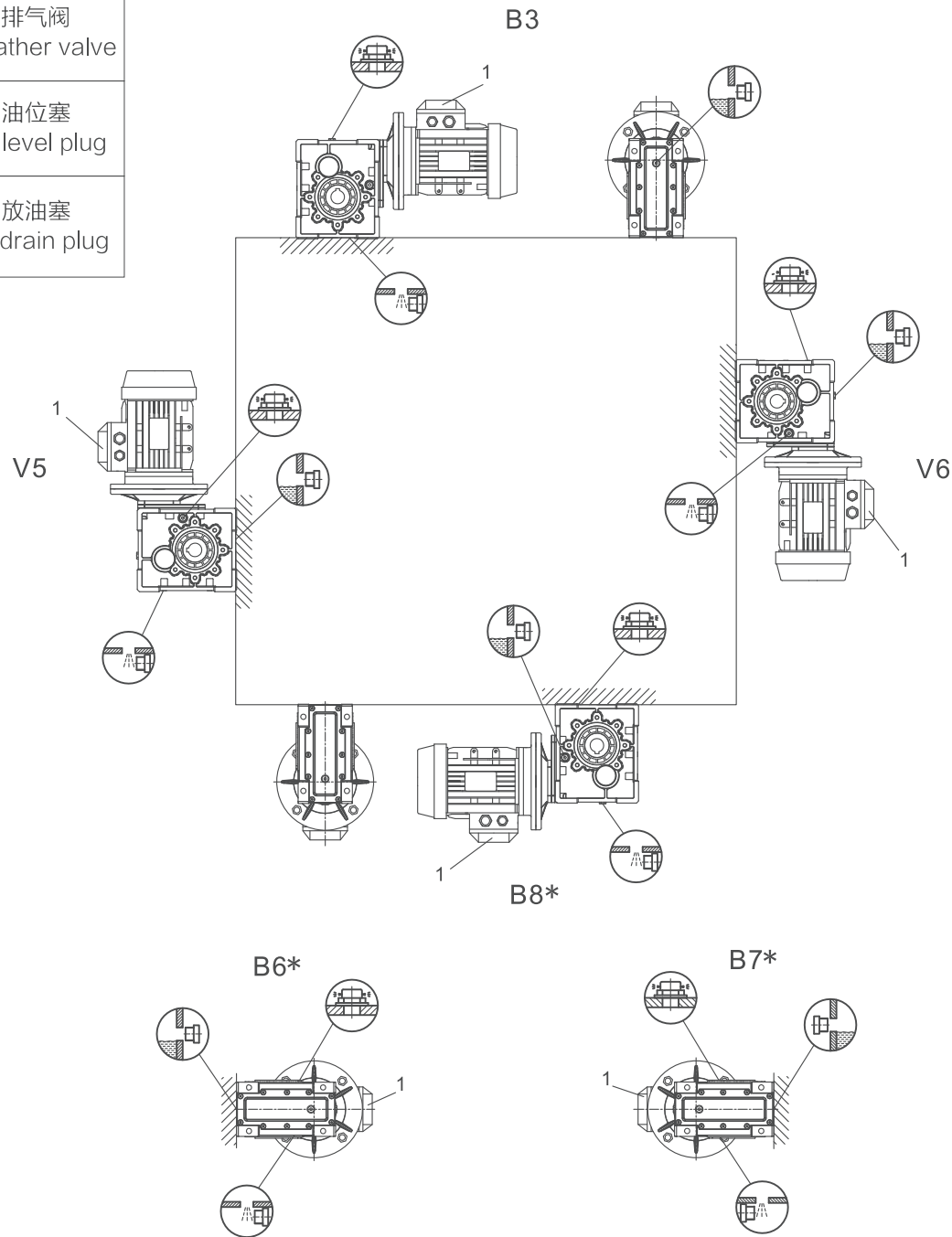
Unless specified otherwise, the gear units is supplied with the flange in pos. **SS1** referred to position **B3**.

电机接线盒方位/Position of motor terminal box



安装方位图 / INSTALLATION POSITIONS DIAGRAM

符号/Symbol	含义/Meaning
	排气阀 Breather valve
	油位塞 Oil level plug
	放油塞 Oil drain plug



* 表示在此安装方式，不能仅凭油位塞加注润滑油，油位需高出油位塞，加注量按表内所示。
* It means the lubricant can't be added according to the oil level line plug, but also higher the plug to fill quantity as shown in the table.

安装方位图 / INSTALLATION POSITIONS DIAGRAM

旋转方向 / Direction of rotation



减速机在使用时，电机可正反转输入使用，推荐使用上图所示输入轴旋转方向为准双曲面齿轮最佳啮合方向。
The motor can be run either CW or CCW while using with gearbox, the left chart is recommended.

安装 / INSTALLATION

注意事项 / Matters needing attention

安装减速机时要注意以下一些事项：

- 1. 减速机与机械设备装配之前，要检查减速机输出轴的旋转方向是否正确；
- 2. 减速机与原动机、设备装配之前，应检查各轴径、孔径、键和键槽的偏差尺寸，避免装配过紧、过松影响减速机性能；
- 3. 减速机必须牢固地安装在机械设备上，避免有松动或振动；
- 4. 尽可能地避免减速机暴露在烈日阳光下和恶劣环境中；
- 5. 如果减速机存放时间长达4-6个月，应检查油封是否浸润在润滑油中，可能油封唇口会粘在轴上，甚至失去了弹性，由于适合的弹性是油封必须的工作条件，所以推荐更换油封；
- 6. 所有橡胶件和透气孔不能沾有油漆；
- 7. 与减速机的空心轴或实心轴配合连接时，应在轴上配合部分涂上润滑油，以免卡死或氧化；
- 8. 使用时必须检查油位（如油位镜孔或打开油塞，小型号是没有的）；
- 9. 使用新减速机时，不能满负载起动，应该逐步增大负载；
- 10.使用各类电机直连型减速机时，若电机重量偏大，应设支撑装置；
- 11. 确保电机风扇附近有良好的通风环境，以免影响散热效果；
- 12. 减速机的标准工作环境温度是-5℃至40℃，如果不在这范围时，请与我们技术服务人员联系。

To install the gear units it is necessary to note the following recommendations:

- 1. Check the correct direction of rotation of the gear units output shaft before fitting the unit to the machine.
- 2. Before mount with the prime mover and device,please check the reducer's every axial diameter,aperture,key and not key and key slot,to be sure their dimensions are not deviation,and avoid assembling too tight or too loose,unless it will influence the reducer's performance.
- 3. The mounting on the machine must be stable to avoid any vibration.
- 4. Whenever possible,protect the gear units against solar radiation and bad weather.
- 5. In the case of particularly lengthy periods of storage(4-6 months),if the oil seal is not immersed in the lubricant inside the unit,it is recommended to change it since the rubber could stick to the shaft or may even have lost the elasticity it needs to function properly.
- 6. Painting must definitely not go over rubber parts and the holes on the breather plugs,if any.
- 7. When connect with hollow or solid shaft,please grease the joint to avoid lock or oxidation.
- 8. Check the correct level of the lubricant through the indicator,if there is one.
- 9. Starting must take place gradually,without immediately applying the maximum load.
- 10.Supporting unit is required when using various of reducer matched with motor directiy and the weight of motor is a little bigger than common.
- 11. Ensure the motor cools correctly by assuring good passage of air form the fan side.
- 12. In the case of ambient temperatures <-5℃ or > +40℃ call the Technical Service.

安装 / INSTALLATION

使用限制/Critical applications

这本样本给出的参数基本上是按B3安装方位来编的，即第一级没有完全浸入油中。对于其他安装方位和输入转速，请参考下面表格中相应参数。当遇到下列应用情况时，如有必要请与我们技术服务人员联系。

- 1. 在原有上提高转速时；
- 2. 应用在惯性特别大的设备上时；
- 3. 应用在如升降机（需要自锁考虑）时；
- 4. 当减速机出现故障有可能会对操作者造成危害时；
- 5. 应用在减速机过度疲劳状态时；
- 6. 工作环境温度低于-5℃或高于40℃时；
- 7. 在化学腐蚀环境中使用时；
- 8. 在盐性环境中使用时；
- 9. 在辐射性高的环境中使用时；
- 10.在环境气压不在正常大气压力下使用时；
- 11.安装方位在这样本中没有被提到时。

避免把减速机部分或整台浸入水中或其他液体中。

减速机承受的最大负载扭矩不能超过两倍于性能参数表中规定的正常扭矩（当使用系数fs=1时）；这里最大负载扭矩是指承受瞬间短暂的过载，他出现在过载启动、刹车、振动或其他动态操作环境中。

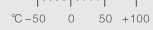
- 1. As a speed increasing;
- 2. Applications with especially high inertia;
- 3. Use as a lifting winth;
- 4. Use in services thant could be hazardous for people if the reductions unit dails.
- 5. Applications with high dynamic strain on the case of the reduction unit.
- 6. In places with T°under -5 º or over 40 º .
- 7. Use in chemically aggressive environments.
- 8. Use in a salty environment.
- 9. Use in raadioactive environments.
- 10.Use in environments pressures other than atmospheric pressure.
- 11.Mounting positions not envisaged in the catalogue.

Avoid applications where even partial immersion of the reduction unit is required.

The maximum torque that the gear reducer can support must not exceed two times the nominal torque (fs=1) stated in the performance tables.Intended for momentary overloads due to starting at full load,braking,shocks or other causes,particularly those are dynamic.

润滑油 / LUBRICATION

润滑油型号 / Types of lubrication

CKM	环境温度(°C) Ambient Tempreatur(°C)	ISO粘度 ISO Viscosity Class	 SHELL	 MOBIL	 BP	润滑油类型 Lubrication type
						
	-10 +40	VG220	Shell Omala S2G220	Mobil gear 630	BP Energol GX-XP 220	矿物油 Mineral oil
	-20 +25	VG150 VG100	Shell Omala S2G220	Mobil gear 627	BP Energol GX-XP 100	
	-30 +10	VG68-46 VG32	Shell Tellus S2V32	Mobil D.T.E.13M		
	-40 -20	VG22 VG15	Shell Tellus S2V15	Mobil D.T.E.11M	BP Energol HLP-HM 15	
	-40 +80	VG220	Shell Omala S4GX220	Mobil SHC630		合成油 Synthetic oil
	-40 +40	VG150		Mobil SHC629		
	-40 +10	VG32		Mobil SHC624		

润滑油加注量/Lubricant fill quantity

减速机型号 Gear units		加注量 Fill quantity in liters						单位：升（L）
		B3	B6	B7	B8	V5	V6	
CKM	CKM28B	0.22	0.20*	0.13*	0.15	0.25	0.14	
	CKM28C#	0.07	0.04	0.04	0.05	0.08	0.09	
	CKM38B	0.42	0.35*	0.24*	0.22	0.46	0.25	
	CKM38C#	0.07	0.04	0.04	0.05	0.08	0.09	
	CKM48B	0.70	0.58*	0.42*	0.42	0.75	0.45	
	CKM48C#	0.13	0.09	0.09	0.09	0.15	0.17	
	CKM58B	1.21	0.95*	0.72*	0.67	1.30	0.74	
	CKM58C#	0.13	0.09	0.09	0.09	0.15	0.17	
	CKM68B	2.15	1.70*	1.10*	1.25	2.20	1.20	
	CKM68C#	0.25	0.17	0.17	0.20	0.32	0.36	

规定的加注量为参考值。精准值的变化与级数和传动比有关。请您在加注润滑油时一定要注意油位螺栓所指示的精确油量。后期调整安装方式时，您必须根据改变后的安装方式相应调整加注润滑剂。下表中列出了不同安装方式（B3、B6、B7.....）的减速机相应的标准参考润滑油注入量值。

The specified fill quantities are recommended values.The precise values vary depending on the number of stages and gear ratio.When filling,it is essential to check the oil level plug since it indicates the precise oil capacity. The following tables show guide values for lubricant fill quantities in relation to the mounting position （B3、B6、B7.....）

#: 采用3级传动减速机时，各自加注3级箱体和2级箱体的润滑油，润滑油互不相通，表中的加注量为3级箱体润滑油加注量。
#: Means the oil quantity in the 3rd stage housing,as this one is separated from the 2nd housing,please fill them separately while in 3 stages.

*: 表示在此安装方式，不能仅凭油位塞加注润滑油，油位需高出油位塞，加注量按表中所示。
*: It means the lubricat can't be according to the oil level line plug, but also higher the plug the fill quantity sa shown in the table.

维护 / MAINTENANCE

- 1) 对于齿轮箱，首次换油必须在工作大约300小时（齿轮磨合期）后进行，在换油时应使用合适的清洗剂小心的冲洗齿轮箱，不得将矿物油和合成油混合。

2) 每3000工作小时，最低程度半年，应检测油以及油位，有密封不严引起滴漏的常规检测，若是IEC输入的减速机，则检测检查弹性体，必要时进行更换。

3) 格局不同的工作条件（见下图）而定，最长每三年检测一次，更换矿物油，更换轴承润滑油脂。

4) 根据不同的工作条件而定，更换输出轴上的油封。

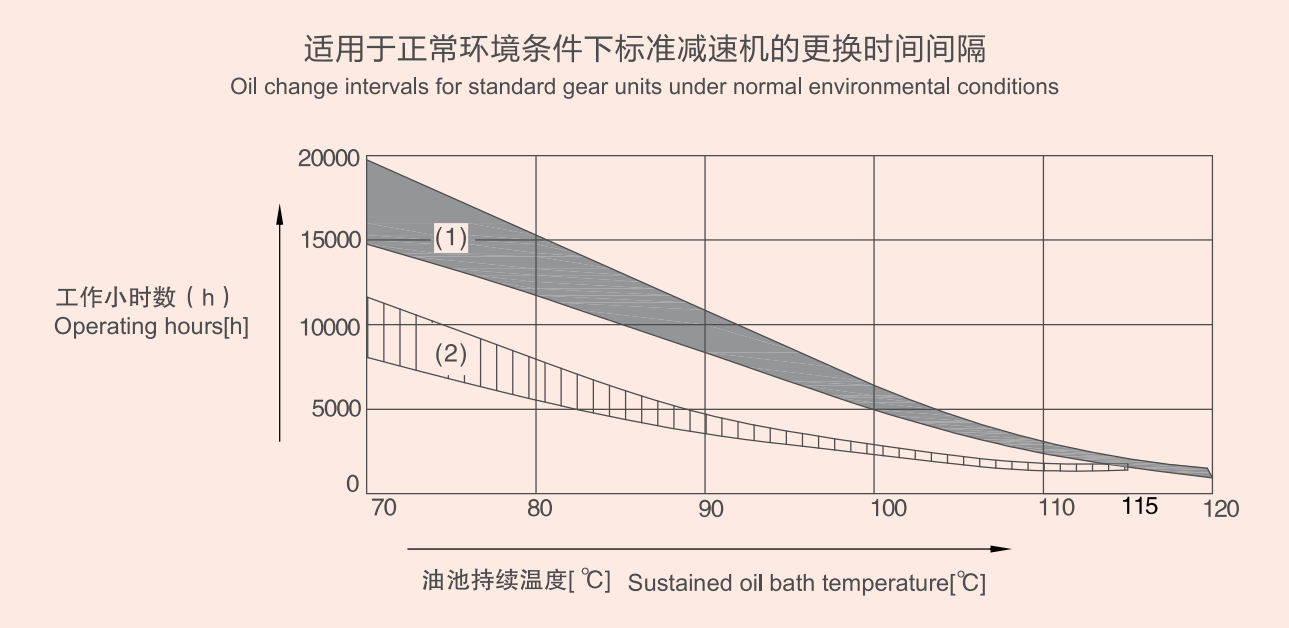
5) 产品出现故障时，不要拆卸部件，与本公司销售服务部门联系（需提供减速机规格、出厂日期、编号、已使用时间、主机名称、主机生产单位和故障类型）后，再采取合理的措施。
- 1) For gear units,first oil change should be after about 300 hours (run-in period).The right lotion is required to clean the gear units with care.Never mix the synthetic oil and mineral oil together.

2) Every 3000 working time,at least every 6 months,you have to check the oil and oil level,the seals visually for leakage.For IEC input gear units,the elastomer should be tested or replaced if necessary.

3) Depending on the operating conditions(see chart below),every 3 years at the latest for inspection is needed.Then change the mineral oil and replace the bearing grease.

4) Depending on the operating conditions,change the oil seals on output shaft.

5) Once the malfunctions appear,stop disassembling the parts,and firstly please contact the customer service (the information about specification,delivery date,series number,time used,name of machine,machine manufacturer,malfunction problems is required), then take the reasonable measures.



- 每种机油类型的平均值为70°C / Average value per oil type at 70°C
（1）合成油 / Synthetic oil （2）矿物油 / Mineral oil

维护 / MAINTENANCE

存放 / Storage

1. 有顶棚，防雨雪，无振动。

2. 在设备和地面之间垫放木块或其他材料。

3. 开箱后暂不使用的减速机在其加工表面涂上防锈油，并应及时放回包装箱内。

4. 在定期检查的情况下，两年以及更长时间。在进行检查时，应检查清洁度和机械损伤，检查防锈层是否完好。

1. Under roof"protected against rain and snow"no shock loads.

2. Underlay the block and other material between the ground and equipment.

3. The opened but not used gear units should be added with the anti-corrosive oil on its surface,and then return to the packing containers timesly.

4. Two years or more given regular inspections.Check for cleanliness and mechanical damage as part of the inspection,Check corrosion protection.

定货须知 / NOTICE FOR ORDER

减速机订单请向我们提供以下信息：

1. 减速机型号标记（减速机类型、速比、功率和安装方式）。

2. 减速机表面喷涂颜色，一般按银白色提供。

3. 订购数量。

4. 其他特殊要求。
- 单位名称、联系人、联系电话。

Please offer the following information when place the orders:

1. The model mark of the gear units(type, ratio, power and mounting position).

2. Generally the gear units paint in silver.

3. Quantity ordered.

4. Qther special requirements.
- Company, contact and telephone.

减速机运转故障 / GEAR UNIT MALFUNCTIONS

故障 Problem	可能的原因 Possible cause	解决方法 Remedy
异常、均匀的运转噪声 Unusual, regular running noise	A. 滚动/碾压噪声: 轴承损坏 B. 冲击型噪声: 齿轮啮合不均匀 A. Meshing/grinding noise: Bearing damage. B. Knocking noise: Irregularity in the gearing	A. 检测润滑油, 更换轴承 B. 请向客户服务部咨询 A. Check the oil, change bearings B. Contact customer service
异常、不均匀的运转噪声 Unusual, irregular running noise	机油中有异物 Foreign bodies in the oil	A. 检测润滑 B. 停止运转传动装置, 向客户服务部咨询 A. Check the oil B. Stop the drive, contact customer service
机油泄漏 A. 在减速机盖上 B. 在电机凸缘上 C. 在电机轴密封圈上 D. 在减速机凸缘上 F. 在输出端轴密封圈上 Oil leaking A. From the gear cover plate B. From the motor flange C. From the motor oil seal D. From the gear unit flange F. From the output end oil sea	A. 减速机底座上的橡胶密封发生渗漏 B. 密封圈损坏 C. 减速机没有排气 A. Rubber seal on the gear cover plate leaking B. Seal defective C. Gear unit not vented	A. 拧紧各个外盖上的螺钉并且观察减速机。如果机油继续泄露，请向客服服务部咨询 B. 请向客户服务部咨询 C. 给减速机排气(参见"安装方式") A. Tighten the bolts on the gear cover plate and observe the gear unit. Oil still leaking: Contact customer service B. Contact customer service C. Vent the gear unit (see "Mounting Positions")
机油从排气阀门旁渗出 Oil leaking from breaking valve	A. 机油太多 B. 传动装置安装方式错误 C. 频繁冷起动（机油起泡沫）和/或者较高的油位 A. Too much oil B. Drive operated in incorrect mounting position C. Frequent cold starts (oil foams) and/or high oil level	A. 修正油量(参见"润滑油") B. 正确安装排气阀并且矫正油位（参见"安装方式") A. Correct the oil level ("see Sec. Inspection and Maintenance") B. Mount the breather valve correctly (see Sec. "Mounting Positions") and correct the oil level (see "Lubricants")
尽管电机在运转或者传动轴已经被驱动，但是传动轴不转动 Oil leaking from breaking valve	减速机中的轴轮毂联接断裂 Connection between shaft and hub in gear unit interrupted	将减速机或减速电机送修 Send in the gear unit/gearmotor for repair

- 在磨合试运转阶段（24小时的运转时间内），轴密封圈有可能出现短期内的漏油/油脂的现象
Short-term oil/grease leakage at the oil seal is possible in the run-in phase (24 hours running time)

减速机负载特征表(参考件) / MCHARGE CHARACTERISTIC CHART(FOR REFEREBCCE)

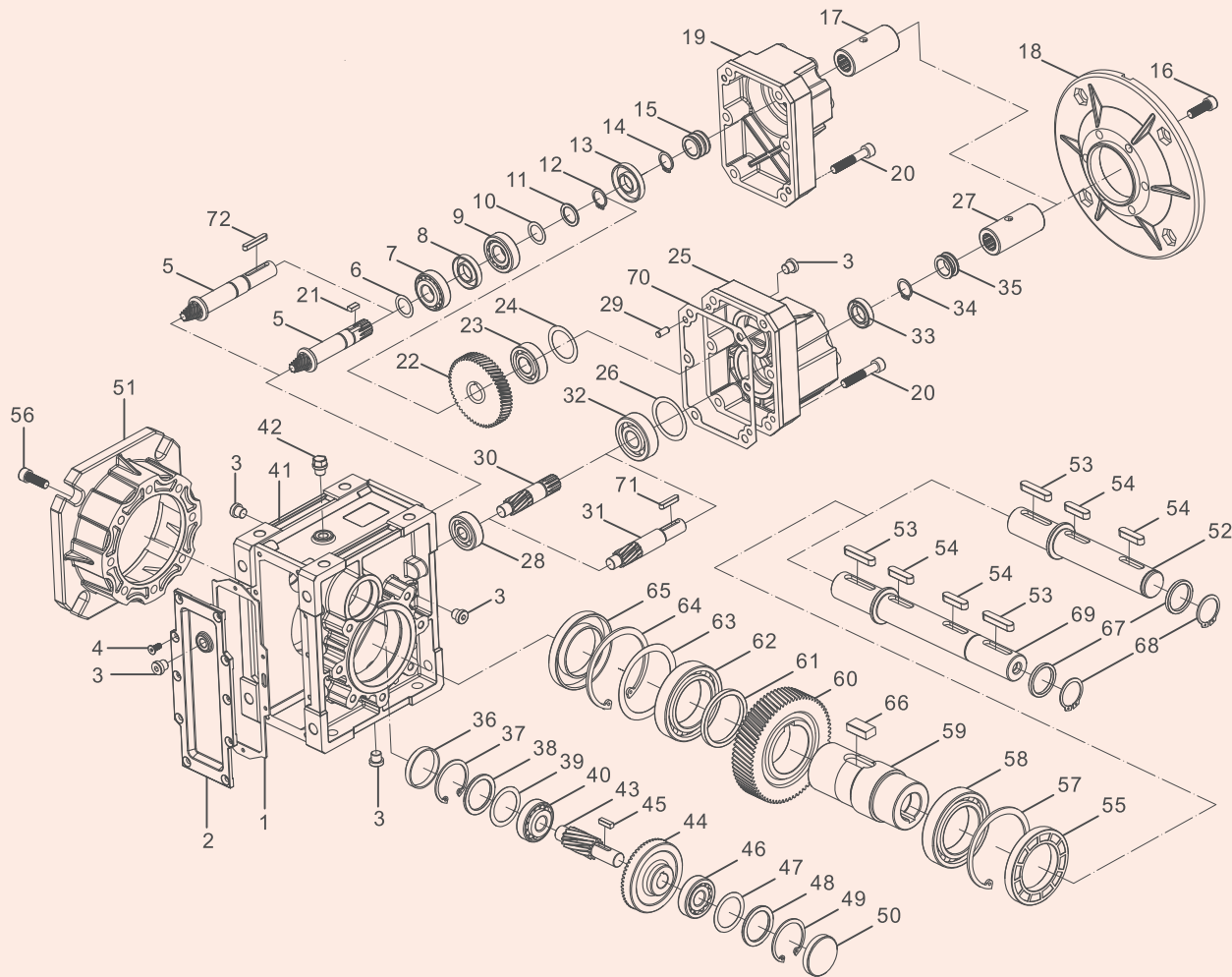
风机类 AIR BLOWERS		转臂式起重传动齿轮装置 Bracket swing gear assembly	B
风机（轴向和径向） Air blower（axial or radial）	A	吊杆起落齿轮传动装置 Derrick gear assembly	B
冷却塔风扇 Fan of cooling tower	B	转向齿轮传动装置 Steering gear assembly	B
引风机 Induced draught fan	B	行走齿轮传动装置 Moving gear assembly	C
螺旋活塞式风机 Rotary piston type fan	B	挖泥机类 LAND DREDGER	
蜗轮式风机 Turbo-fan	A	筒式传送机 Drum-type conveyer	C
建筑机械类 CONSTRUCTION MACHINERY		筒式转动机 Drum-type rotation wheel	C
混凝土搅拌机 Concrete mixer	B	挖泥头 Dredger head	C
卷扬机 Hoist	B	机动绞车 Powered crab	B
路面建筑机械 Road building machinery	B	泵 Pump	B
钻孔机 Boring mill	B	泵转向齿轮传动装置 Pump turning gear assembly	B
化工机械类 CHEMICAL MACHINERY		行走齿轮传动装置（履带） Moving gear assembly（apron wheel）	C
搅拌机（液体） Mixer（liquid）	A	行走齿轮传动装置（铁轨） Moving gear assembly（track）	B
搅拌机（半液体） Mixer（half liquid）	B	食品工业机械类 FOODSTUFF PROCESSING MACHINERY	
离心机（重型） Centrifuge（heavy）	B	灌注及装箱机器 Placer or box filler	A
离心机（轻型） Centrifuge（light）	A	甘蔗压榨机 Cane crusher	A
冷却滚筒** Cooling rolling drum	B	甘蔗切断机** Cane cutter	B
干燥滚筒** Dry rolling drum	B	甘蔗粉碎机** Cane crusher	C
搅拌机 Mixer	B	搅拌机 Mixer	B
压缩机类 COMPRESSOR		酱状物吊筒 Paste bucket	B
活塞式压缩机 Piston type compressor	C	装包机 Packager	A
蜗轮式压缩机 Turbo-compressor	B	糖甜菜切断机 Beet slicer	B
传送运输机类 TRANSMISSION FREIGHTER		糖和甜菜清洗机 Beet washing machine	B
平板传送机 Pan conveyer	B	发动机及转换器类 MOTOR AND CONVERSION EQUIPMENTS	
平衡块升降机 Balance lifter	B	频率转换器 Frequency converter	C
槽式传送机Trough conveyer	B	发动机 Motor	C
带式传送机（大件） Ribbon conveyer（large piece）	C	焊接发动机 Welding motor	C
带式传送机（碎料） Ribbon conveyer（small piece）	B	洗衣机类 WASHING MACHINE	
筒式面粉传送机 Drum-type flour conveyer	A	滚筒 Rolling drum	B
链式传送机 Chain conveyer	B	洗衣机 Washing machine	B
环式传送机 Ring type conveyer	B	金属滚轧机类 METAL ROLLER MACHINE	
货物升降机 Lifter	B	钢坯剪断机** Steel cutter	C
卷扬机 Hoist	B	链式输送机** Chain converter	B
连杆式传送机 Crank-connecting conveyer	B	冷轧机** Cold mill	C
载入升降机 Lifter	B	连铸成套设备 Continuous casting equipments	B
螺旋式传送机 Worm conveyer	B	冷床** Cold bed	B
钢带式传送机 Steel-band conveyer	B	剪料机头** Cropper	C
链式槽型传送机 Chain reed-type conveyer	B	交叉转弯输送机** Cross steering transmitter	B
绞车运输机 Crab freighter	B	除锈机** Druster	C
起重机械类 HOIST		重型和中型板轧机** Heavy and medium steel mill	C
卷扬机齿轮传动装置 Hoist gear assembly	A	棒坯切轧机** Bar mill	C

减速机负载特征表(参考件) / MCHARGE CHARACTERISTIC CHART(FOR REFEREBCCE)

棒坯转运机类 BAR TRANSMISSION EQUIPMENTS		B	泵类 PUMPS	
棒坯推料机 Bar pusher	B		离心泵（稀液体） Centrifugal pump(thin liquid)	A
推床 Push bed	B		离心泵（半液体） Centrifugal pump(half liquid)	B
剪板机** Shears	C		活塞泵 Displacement pump	C
板材摆升降台** Lumber elevator platform	B		柱塞泵 Plunger pump	C
轧辊调整装置 Roll adjusting equipments	B		压力泵 Force pump	C
辊式矫直机 Roller leveling machine	B	塑料机械类 PLASTIC EQUIPMENTS		
轧钢机辊道（重型）** Mill rolling way(heavy)	C		压光机** Glazing press	B
轧钢机辊道（轻型）** Mill rolling way(light)	B		挤压机** Ejecting press	B
薄板轧机** Sheet rolling mill	C		螺旋压出机** Spiral extruding machine	B
修整剪切机** Trimming shears	B		混合机** Mixing machine	B
焊管机 Pipe welder	C	橡胶机械类 RUBBER EQUIPMENT		
焊管机（带材和线材） Soldering machine(belt material and wire rod)	B		压光机** Glazing press	B
线材拉拔机 Wire drawbench	B		挤压机** Ejecting press	C
金属加工机床类 METAL PROCESSING MACHINE TOOLS			混合搅拌机** Mixing stir machin	B
动力轴 Power shaft	A		捏合机 Kneading machine	B
锻造机** Forging machine	C		滚压机** Roller machine	C
锻锤 Drop hammer	C	石料、瓷土料加工机械类 STONE PORCELAIN CLAY PROCESSING EQUIPMENTS		
机床及辅助装置 Machine tool and necessary	A		球磨机 Ball crusher	B
机床及主要传动装置 Machine tool and main driving equipment	B		挤压料碎机 Ejecting press and breaker	C
金属刨床 Metal facing machine	C		破碎机 Breaker	C
板材矫直机床 Plate-leveling machine tool	C		压砖机 Brick press	C
冲床 Backing-out punch	C		锤料碎机** Beating crusher	C
冲压机床 Press machine tool	C		转炉** Converter	C
剪床 Cutting machine	B		筒型磨机** Cylinder mill	C
薄板弯曲机床 Sheet bending machine tool	B	石油工业机械类 PETROLEUM PROCESSING MACHINERY		
石油工业机械类 PETROLEUM PROCESSING MACHINERY			纺织机械类 TEXTILE MACHINERY	
输油管油泵** Pump of oil pipe line	B		送料机 Feeding machine	B
转子钻井设备 Rotary drilling equipment	C		织布机 Loom machine	B
制纸机类 PAPERING MACHINE			印染机 Dyeing machine	B
压光机** Glazing press	C		精致筒 Purified drum	B
多层纸板机** Multilayer paper board machine	C		威罗机 Welon machine	B
干燥滚筒** Drying cylinder	C	水处理设备类 WASTER TREATMENT EQUIPMENTS		
上光滚筒** Glazing cylinder	C		鼓风机** Air blast	B
搅浆机** Masher	C		螺杆泵 Screw pump	B
搅浆擦碎机** Mashing and breaking machine	C	木料加工机床 WOOD PROCESSING MACHINE TOOL		
吸水滚** Suction oil	C		剥皮机 Barker	C
潮纸滚压机** Wet paper roller machine	C		刨床 Facing machine	B
吸水滚压机木** Water absorbing roller machine	C		锯床 Saw bench	C
威罗机 Welon machine	C		木材加工机床 Wood processing machine tool	A

注：A—均匀冲击负载；B—中等冲击负载；C—重冲击负载；**—用于24小时工作制。
Note：A-Uniform load；B-Moderate shock load；C-Heavy shock load；**-for 24hour system.

产品构造原理 / PRODUCT STRUCTURE PRINCIPLE



1	橡胶垫 / Rubber gasket	38	垫圈 / Washer
2	齿轮箱盖板 / Gearcase cover	39	调整垫片 / Shim ring
3	油塞 / Oil plug	40	轴承 / Bearing
4	内六角沉头螺钉 / Hexagon sunk screw	41	齿轮箱体 / Gearcase
5	主动齿轮轴 / Pinion shaft	42	透气阀 / Breather valve
6	调整垫片 / Shin ring	43	主动齿轮轴 / Pinion shaft
7	轴承 / Bearing	44	从动齿轮 / Gear
8	油封 / Oil seal	45	键 / Key
9	轴承 / Bearing	46	轴承 / Bearing
10	调整垫片 / Shin ring	47	调整垫片 / Shim ring
11	垫圈 / Washer	48	垫圈 / Washer
12	轴用挡圈 / Shaft-circlip	49	孔用挡圈 / Hole-circlip
13	油封 / Oil seal	50	油封盖 / Closing cap
14	轴用挡圈 / Shaft-circlip	51	输出法兰 / Output flange
15	橡胶套 / Rubber boot	52	单向输出轴 / Single output shaft
16	内六角螺钉 / Inner hex screw	53	键 / Key
17	输入轴 / Input shaft	54	键 / Key
18	输入法兰 / Input flange	55	油封 / Oil seal
19	两级输入箱盖 / 2 stage input box cover	56	内六角螺钉 / Inner hex screw
20	内六角螺钉 / Inner hex screw	57	孔用挡圈 / Hole-circlip
21	键 / Key	58	轴承 / Bearing
22	从动齿轮 / Gear	59	输出轴 / Hollow shaft
23	轴承 / Bearing	60	从动齿轮 / Gear
24	调整垫片 / Shim ring	61	垫圈 / Washer
25	三级输入箱盖 / 3 stage input box cover	62	轴承 / Bearing
26	调整垫片 / Shim ring	63	调整垫片 / Shim ring
27	输入轴 / Input shaft	64	孔用挡圈 / Hole-circlip
28	轴承 / Bearing	65	油封 / Oil seal
29	圆柱销 / Stifte	66	键 / Key
30	主动齿轮 / Pinion	67	垫圈 / Washer
31	主动齿轮轴 / Pinion shaft	68	轴用挡圈 / Shaft-circlip
32	轴承 / Bearing	69	输出双向轴 / Double output shaft
33	油封 / Oil sea	70	密封纸垫 / Housing gasket
34	轴用挡圈 / Shaft-circlip	71	键 / Key
35	橡胶套 / Rubber boot	72	键 / Key
36	油封盖 / Closing cap		
37	孔用挡圈 / Hole-circlip		



产品概述 / PRODUCTS OVERVIEW

产品特点

NMRV系列蜗轮蜗杆减速机具有以下一些主要特点：

1. 优质铝合金铸造，重量轻，不生锈；
2. 输出扭矩大；
3. 传动平稳，噪音小，适合在恶劣环境中长期连续工作；
4. 散热效率高；
5. 美观耐用，体积小；
6. 可适应全方位安装。

主要材料

1. 外壳：铝合金（机座：025 - 090），铸铁（机座：110 - 150）；
2. 蜗杆：20Cr，渗碳淬火，齿面硬度56 - 62HRC，精磨后保持渗碳层厚度0.3 - 0.5mm；
3. 蜗轮：耐磨锡青铜。

表面涂装

铝合金外壳：

1. 先抛丸处理，再经特种防腐处理，保持银白金属感，并耐汽油、二甲苯等有机溶剂的腐蚀；
2. 磷化处理后，再喷RAL5010蓝色或银白色涂料。

铸铁外壳：先涂红色防锈漆，后喷涂RAL5010蓝色涂料。

PRODUCTS CHARACTERISTICS

NMRV series worm gear units is a new-generation of product developed by our company on the basis of perfecting WJ series products with a compromise of advanced technology both at home and abroad. Its main features are as follows;

1. Made of high-quality aluminum alloy, light weight and non-rusting.
2. Large output torque.
3. Smooth in running and low in noise, can work long time in dreadful conditions.
4. High in radiating efficiency.
5. Good-looking in appearance, durable in service life and small in volume.
6. Suitable for omnibearing installation.

MAIN MATERIALS

1. Housing: die-cast aluminum alloy(frame size 025 to 090);cast iron(frame size:110 to 150);
2. Worm: 20Cr, carbonize&quencher heat treatment make the hardness of gear's surface up to 56-62HRC,retain carburation layer's thickness between 0.3 and 0.5mm after precise grinding.
3. Worm wheel: wearable stannum bronze alloy.

SURFACE PAINTING

Aluminum alloy housing:

1. Shot blasting and special antiseptic treat-ment on the aluminum alloy surface.
2. After phosphating, paint with RAL5010 blue or silvery white paint.

Cast iron housing: First paint with red antirust paint, then paint white RAL5010 blue or silvery white paint.

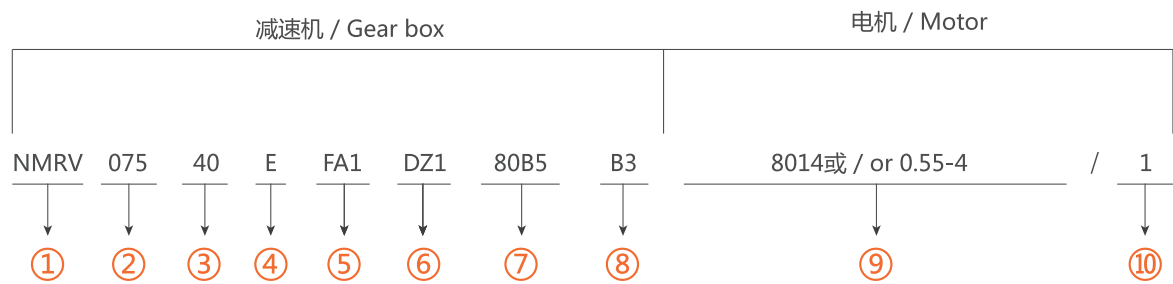
NMRV SERIES

NMRV系列

应用领域: 自动流水线

型号说明 / MODEL ILLUMINATE

NMRV/NRV 蜗轮蜗杆减速电机与减速机
WORM GEARED MOTOS AND WORM GEAR UNITS



NO	说明	Comments
1	型号代码： 1. RV孔输入带输入法兰 2. NRV轴输入不带输入法兰	Model code 1. RV:Hole input with flange 2. NRV:Shaft input without flange
2	蜗轮蜗杆减速机中心距（规格）	Central distance of worm gear units(spec)
3	减速机速比 (i=5,7.5,10,15,20,25,30,40,50,60,80,100)	Speed ratio of reducer r(i=5,7.5;10;15;20;25;30;40;50;60;80;100)
4	1. 无代号表示不带蜗杆同向尾出轴 2. E：带蜗杆同向尾出轴	1. No mark means single extension worm shaft 2. E: Double extension worm shaft
5	1. 无代号表示不带输出法兰 2. FA,FB,FC,FD,FE(1/2):输出法兰号和位置	1. No mark means without output flange 2. FA,FB,FC,FD,FE(1/2):output Flange and position
6	1. 无代号表示孔输出 2. DZ (1/2)：单向输出轴和位置 3. SZ：双向输出轴	1. No mark means hole output 2. DZ(1/2):Single output shaft and position 3. SZ:Double output shaft
7	输入法兰规格型式（不带电机时）	Normalized from of input flange(without motor)
8	安装方位代号	Installation position code
9	1. 无代号表示不带电机 2. 电机型号或功率，极数	1. No mark means without motor 2. Model motors(poles of power)
10	电机接线盒位置，默认位置1可以不写	Position diagram for motor terminal box default position 1 not to write out is ok

选型相关参数 / RELEVANT PARAMETER

功率 P

$P_1=P_2/\eta$ (kw)
 $P_{1n} \geq P_1 \cdot fs(kw)$

P₁ 输入功率
P₂ 输出功率
P_{1n} 输入电机额定功率
fs 使用系数
η 传动效率

在NMRV蜗轮蜗杆减速机选型表中，这个功率P_{1n}是指在输入转速为n₁并且对应的使用系数fs=1时，减速机的安全输入功率，单位kw。
传动效率η值是减速机经过足够长时间的跑合后计算得到的。跑合后在动转过程中，表面温度下降并最终稳定。需要特别强调的是样本中给定的额定转矩值M_{2n}应该考虑到传动效率η的关系。

Power P

$P_1=P_2/\eta$ (kw)
 $P_{1n} \geq P_1 \cdot fs(kw)$

P₁ Input power
P₂ Output power
P_{1n} Rated input motor power
fs Service factor
η Transmission efficiency

The parameter can be found in the NMRV gear-box rating charts and represents the kw that can be safely transmitted to the gearbox, based on input speed n₁ and service factor fs=1.
Values of η are calculated for gearboxes after a sufficiently in operation reduces and finally stabilizes. It may be worth high lighting that values of rated torque M_{2n} given in the catalogue take the transmission efficiency η into consideration.

转速 n

n₁ 减速机输入转速
n₂ 减速机输出转速
若是减速箱外部传动装置驱动，为了优化工作条件和提高使用寿命，建议使用1400r/min或更低转速。

ROTATION SPEED N

n₁ Gear units input speed
n₂ Gear units output speed
If driven by the external gearing, 1400r/min or lower rotation speed is suggested so as to optimize the working conditions and prolong the service life.

传动比 i

$i=n_1/n_2$

TRANSMISSION RATIO I

$i=n_1/n_2$

扭矩 M

$M_2=9550 \cdot P_1 \cdot \eta / n_2(Nm)$
 $M_{2n} \geq M_2 \cdot fs(Nm)$

M₂ 输出扭矩
M_{2n} 额定输出扭矩
P₁ 输入功率
η 传动效率
fs 使用系数

TORQUE M

$M_2=9550 \cdot P_1 \cdot \eta / n_2(Nm)$
 $M_{2n} \geq M_2 \cdot fs(Nm)$

M₂ Output torque
M_{2n} Rated output trque
P₁ Input power
η Transmission efficiency
fs Service factor

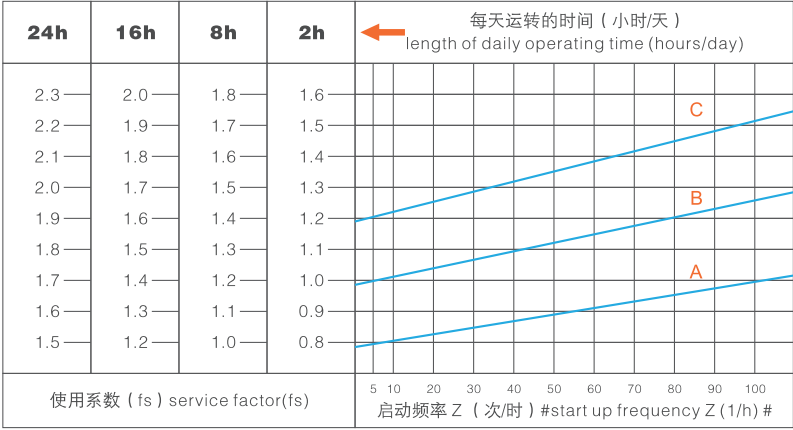
选型相关参数 / RELEVANT PARAMETER

使用系数 fs

减速机上的从动机构的受驱动效果是使用使用系数fs 这个系数来衡量的。该使用系数根据每天的运转时间和启动频率Z而定的。三种负载分类取决于惯性加速系数，在下图中可读取实际应用的使用系数，按此图表选取的使用系数必须小于或者等于性能参数表中提供的使用系数。

SERVICE FACTOR FS

The effect of the driven machine on the gear unit is taken into account to a sufficient level of accuracy using the service factor fs.The service factor is determined according to the daily operating time and the starting frequency Z. Three load classifications are considered depending on the mass acceleration factor.You can read off the service factor applicable to your application in following figure.The service factor selected using this diagram must be less than or equal to the service factor as given in the performance parameter table.



启动频率Z：周期包括所有启动，制动的次数以及变速电机高低速变化时的次数。
Starting frequency Z:The cycles include all starting and braking procedures as well as change overs from low to high speed.

负载类型

负载性质：
A 均匀冲击负载，允许惯性加速系数Fa≤0.3
B 中等冲击负载，允许惯性加速系数Fa≤3
C 重冲击负载，允许惯性加速系数Fa≤10

LOAD CLASSIFICATIONS

Type of load:
A Uniform,permitted mass acceleration factor Fa≤0.3
B Moderate shock load,permitted mass acceleration factor Fa≤3
C Heavy shock load,permitted mass acceleration factor Fa≤10

负载类型：

轻负载的螺杆输送，风扇，装备线，输送带，小型搅拌机，电梯，清洗机器，过滤器，控制驱动。
卷扬机，木工机器进料器，货物起重機，平衡器，绞螺纹机器，中型搅拌机，重型输送带，绞盘，滑动闸门，刮料机，包装机械，混凝土搅拌机，行车驱动装置，铣床，齿轮泵。
大型搅拌机，剪床，压机，离心机，旋转支撑装置，重型绞盘和起重機，磨床，石材打磨机，翻斗机，钻床，冲床，凸轴压机，擢床，机床转盘，翻桶装置，振荡装置，破碎机。

Load Classifications:
Screw feeders for light materials,fans,assembly lines,conveyor belts for light materials,small mixers,lifts,cleaning machines, medium mixers,conveyor belts for heavy materials,winches,sliding doors,fertilizer scrapers,packing machines,concrete mixers, crane mechanisms,milling cutters,folding machines,gear pumps.
Mixers for heavy materials,shears,presses centrifuges,rotating supports,winches and lifts for heavy materials,grinding lathes, stone mills,bucket elevators,drilling machines,hammer mills,campresses,folding machines,turntables,tumbling barrels, vibrators,shredders

选型相关参数 / RELEVANT PARAMETER

惯性加速系数

惯性加速系数计算如下：

Fa=Jc/Jm

Fa 惯性加速系数
Jc 所有外部传动惯量 (kgm²)
Jm 驱动电机的传动惯量 (kgm²)
如果惯性加速系数fa > 10，请与我们技术部联系。

受环境温度影响，使用系数fs 仍须按以下调整：
1.环境温度30~40℃：fs × (1.1~1.2)
2.环境温度40~50℃：fs × (1.3~1.4)
3.环境温度50~60℃：fs × (1.5~1.6)
4.环境温度 > 60℃，请与我们技术服务人员联系。

为了保持减速机的使用寿命，从产品样本中所选择的使用系数fs应等于或略高于计算出的使用系数fs。

MASS ACCELERATION FACTOR

The mass acceleration factor is calculated as follows :

Fa=Jc/Jm

Fa Mass acceleration factor
Jc All external mass moments of inertia (kgm²)
Jm Mass moment of inertia on the motor end (kgm²)
If mass acceleration factors fa > 10，please call our Technical Service.

Service factor fs should be adjusted as followings:
1.ambient temperature is 30~40℃：fs × (1.1~1.2)
2.ambient temperature is 40~50℃：fs × (1.3~1.4)
3.ambient temperature is 50~60℃：fs × (1.5~1.6)
4.ambient temperature is > 60℃,please call our Technical Service.

To keep the service-life of gear units,the use factor fs selected from the catalogue must be equal or slightly higher than the calculated use factor fs

径向载荷Fr

在决定影响径向载荷时，安装在轴端上的传动件类型必须考虑在内，不同类型的传动对应不同的传动附加系数fz,列表如下：

RADIAL LOADS FR

When determining the resulting radial loads,the type of transmission elements,mounted on the shaft end must be considered,Varous transmission elements are corresponding with following transmission element factors fz.

传动件 Transmission element	传动附加系数 fz Transmission element factor fz	注释 Comments
齿轮Gears	1.00	≥17齿 teeth
	1.15	< 17齿 teeth
链轮 Chain sprockets	1.00	≥20齿 teeth
	1.25	< 20齿 teeth
	1.40	< 13齿 teeth
V带轮Narrow V-belt pulleys	1.75	有预紧力作用 Influence of the tensile force
平带轮 Flat belt pulleys	2.50	有预紧力作用 Influence of the tensile force
齿带轮 Toothed belt pulleys	2.50	有预紧力作用 Influence of the tensile force

作用在轴上的径向载荷按如下公式计算：

$$Fr = \frac{M \cdot 2000 \cdot fz}{d_o} \text{ (N)}$$

Fr 作用在轴上的载荷 (N)
M 作用在轴上的扭矩 (Nm)
d_o 安装在轴上传动件的平均直径 (mm)
fz 传动附加系数

The overhung loads exerted on the motor or gear shaft is then calculated as follows.

$$Fr = \frac{M \cdot 2000 \cdot fz}{d_o} \text{ (N)}$$

Fr Resulting radial load (N)
M Torque on the shaft (Nm)
d_o Mean diameter of the mounted transmis ion element in (mm)
fz Transmission element factor

选型相关参数 / RELEVANT PARAMETER

当径向负荷不作用在轴中点时，按以下公式计算有效负荷：

$$F \times L \leq \frac{Fr_2 \cdot a}{(b+x)} \text{ (N)}$$

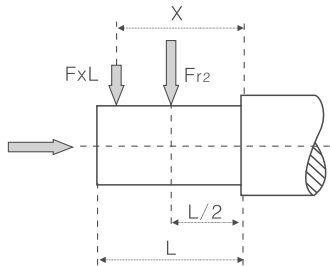
Fr₂ 依据下面表格给出中底脚安装式齿轮减速器的许可径向载荷（X=L/2）（N）
a,b 齿轮减速器径向换算常量(mm)
X 轴户到实际作用点的距离(mm)
a,b,Fr₂ 的数值在下面表格给出：

The allowed radial load force on the shaft is calculated with the following formula:

$$F \times L \leq \frac{Fr_2 \cdot a}{(b+x)} \text{ (N)}$$

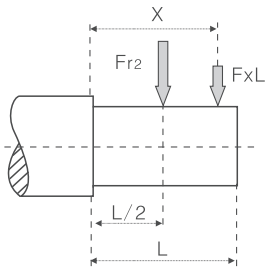
Fr₂ Permitted overhung load(x=L/2)for foot-mounted gear units according to the selection tables in (N)
A,b Gear unit constant for overhung load conversion(mm)
X Distance form the shaft shouldert to the force application point in(mm)
The values of a, b Fr₂ are biven in the following tables:

输出轴径向载荷 / Out put shafts radial loads



NMRV	025	030	040	050	063	075	090	110	130	150
a	50	65	84	101	120	131	162	176	188	215
b	38	50	64	76	95	101	122	136	148	174
Fr ₂ max	1350	1830	3490	4840	6270	7380	8180	12000	13500	18000

输入轴径向载荷 / Input shafts radial loads



NMRV	030	040	050	063	075	090	110	130	150
a	86	106	129	159	192	227	266	314	350
b	76	94.5	114	139	167	202	236	274	310
Fr ₂ max	210	350	490	700	980	1270	1700	2100	2800

选型相关参数 / RELEVANT PARAMETER

选型表注释 / SELECTION TABLES COMMENTS

P _{1n} (kw)	n ₂ (r/min)	i	M _{2n} (Nm)	M _{2n} (Nm)	f _s		
P _{1n}	输入电机额定功率 (kw)；				P _{1n}	Rated power driving motor (kw)	
n ₂	输出转速(r/min)；				n ₂	Output speed (r/min)	
M _{2n}	额定输出扭矩(Nm)；				M _{2n}	Rated output torque(Nm)	
M ₂ max	最大允许输出扭矩 (Nm)；				M ₂ max	Permissible output torque(Nm)	
i	减速机速比；				i	Gear unit ratio	
f _s	使用系数；				f _s	Service factor	
	减速机型号；					Gear unit type	
	电机型号；					Motor type	

选型举例 / SELECTION EXAMPLE

减速电机

例：被驱动设备所需功率0.5KW, n₁ = 1400r/min, 均匀冲击负载，启动频率20次/小时，24小时连续运行，环境温度32℃，输出转速n₂ =93.3r/min，减速电机要求B3安装方位，则：

$$i = \frac{n_1}{n_2} = \frac{1400}{93.3} = 15$$

查P19页啮合参数表，估算当i=15时，η_d =0.82
查图调整使用系数得f_s =1.53 × 1.12 =1.714
P_{1n} ≥ P₂ / η_d · f_s = 0.5/0.82 × 1.714 =1.045(kw)
查NMRV系列性能参数表可确定减速电机型号为：NMRV075-15-B3-1.1-4
输出扭矩M₂ 计算：

$$M_2 = \frac{9550 \cdot P_2}{n_2} = \frac{9550 \times 0.5}{93.3} = 51.18 \text{ (Nm)}$$

$$M_{2n} = 95 \geq M_2 \cdot f_s = 51.18 \times 1.714 = 87.72 \text{ (Nm)}$$

减速机

例：被驱动设备所需扭矩为300Nm，工作8小时连续运行，均匀冲击负载，启动频率5次/小时，环境温度30℃，即可选用系数f_s =1.2 × 1.1 =1.32，减速机输入转速n₁ =900r/min,输出转速n₂ =22.5 r/min.

$$M_{2n} \geq M_2 \cdot f_s = 300 \times 1.32 = 396 \text{ (Nm)}$$

$$i = \frac{n_1}{n_2} = \frac{900}{22.5} = 40$$

查NMRV系列性能参数表可确定减速机型号为：NMRV 090-40

GEAR MOTOR

Example:The input power of driver machine is 0.5kw, n₁ =1400r/min, uniform, start up frequency 20(1/h),continuous running for 24 hous, the ambient temperature is 32℃,n₂ =93.3r/min,B3 mounted so:

$$i = \frac{n_1}{n_2} = \frac{1400}{93.3} = 15$$

Check mash table on P19 ,estimate when the i=15, η_d =0.82
Check and adjust the service factor ,will get f_s =1.53 × 1.12 =1.714
P_{1n} ≥ P₂ / η_d · f_s =0.5/0.82 × 1.714 =1.045(kw)
Choose type:
NMRV075-15-B3-1.1-4

$$M_2 = \frac{9550 \cdot P_2}{n_2} = \frac{9550 \times 0.5}{93.3} = 51.18 \text{ (Nm)}$$

$$M_{2n} = 95 \geq M_2 \cdot f_s = 51.18 \times 1.714 = 87.72 \text{ (Nm)}$$

GEAR UNITS

Example:Required torque 300um on driven machine, continuous running for 8 hours,uniform loda,the ambient temperature is 30 ℃, then choose the service factor f_s =1.2 × 1.1 =1.32,n₁ =900r/min, n₂ =22.5r/min.

$$M_{2n} \geq M_2 \cdot f_s = 300 \times 1.32 = 396 \text{ (Nm)}$$

$$i = \frac{n_1}{n_2} = \frac{900}{22.5} = 40$$

Choose type:
NMRV 090-40

选型相关参数 / RELEVANT PARAMETER

效率与自锁特性 / EFFICIENCY & IRREVERSIBILITY CHARACTER

效率是减速机一个重要参数，效率 η 的值取决于下列参数1.蜗轮蜗杆的螺旋角；2.输入转速；3.蜗轮蜗杆的磨合时间；4.油品、油封和轴承的性能。在第21页上的啮合参数表列出了动态效率（ $n_1=1400$ ）及静态效率参数。请注意：这些参数是指减速机磨合后性能稳定的计算值。另外，样本中规定的扭矩 M_{2n} 也是减速机磨合性能稳定的计算值。上述的实际值可能会有上下偏差。

Efficiency is an important parmeter of reducer,Efficiency η depends on the following parameters:1.helix angle of gearing;2.driving speed;3.running-in of gearing;4.The performance of oil,oil seal and bearing,The mesh date table on page 21 shows dynamic efficiency ($n_1=1400$)and static efficiency values.Remember that these values are only achieved after the unit has been run in.Torque values M_{2n} indicated in the catalogue are calculated by considering the steady-state performance of the gearboxes.The actual values mentioned above may be have deflection.

动态自锁

动态自锁是指当马达输入轴突然停止时，输出轴能同步停止。此条件要求动态效率 $\eta_d < 0.5$ （参见第21页表格）

DYNAMIC IRREVERSIBILITY

Dynamic irreversibility is achieved when the output shaft stops instantly when drive is no longer transmitted through the worm shaft..This condition requires a dynamic efficiency of $\eta_d < 0.5$ （see table on page 21）.

静态自锁

静态自锁是指当减速器处于静止状态时，输出轴上的负载不能把蜗轮推动。此条件要求静态效率 $\eta_s < 0.5$ （参见第21页表格）

STATIC IRREVERSIBILITY

Static irreversibility is achieved when the gear reducer at a standstill.the application of aload to the output shaft can't drive the worm shaft.This condition requires a static efficiency of $\eta_s < 0.5$ (see table on page 21)

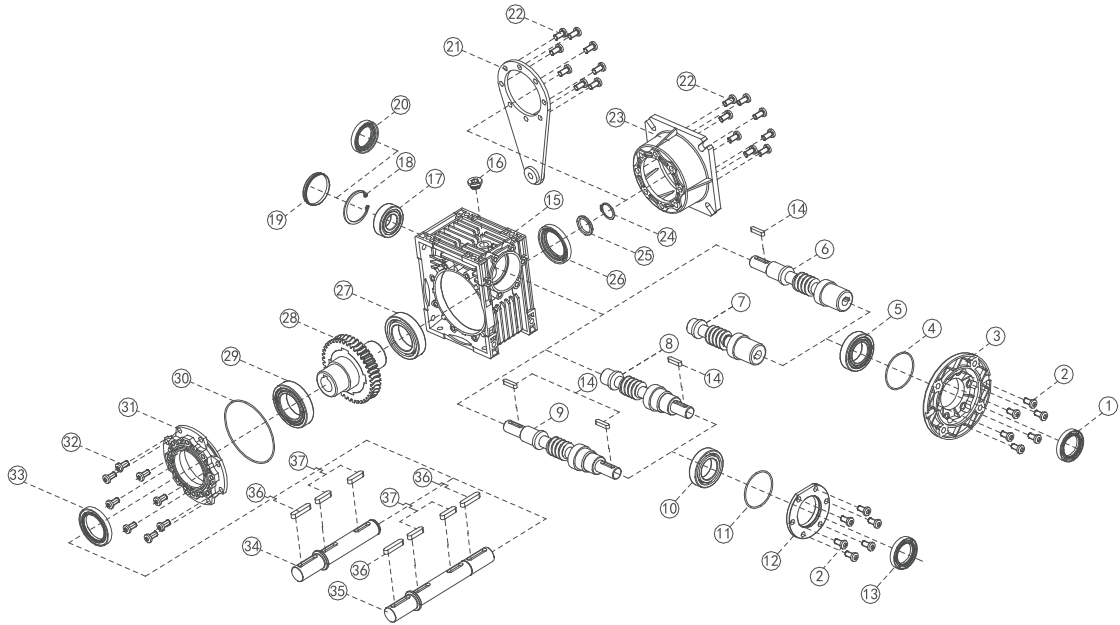
η_d		0.5~0.6	0.4~0.5	< 0.4
动态自锁效果	动态不自锁	动态自锁很低	动态自锁良好	动态自锁
Dynamic irreversibilityv	Dynamic reversibility	Low dynamic reversibility	Good dynamic irreversibility	Dynamic irreversibility

η_s	> 0.55	0.5~0.55	< 0.5
静态自锁效果	静态不自锁	静态自锁很低	静态自锁
Static irreversibility	Static reversibility	Low static reversibility	Static irreversibility

上述表格中所有参数只是供大概参考，振动和冲击也会影响减速机的自锁功能。事实上要保证完全自锁是不可能的，我们建议需要时安装外部的安全制动的装置。对于一个组合减速机自锁条件时，必须考虑单减速机的自锁功能效率，因为整体自锁功能是： $\eta_{tot} = \eta_1 \times \eta_2$ 。

The table shows approximate irreversibility classes.Vibrations and shocks can affect a gear reducer's irreversibility.As it is virtually impossible to provide and guarantee total non reversing,we recommend the use of an external brake with sufficient capability to prevent vibrations in duced starting,where these circumstances are required.For the irreversibility conditions of a combined geared unit one must consider that the efficiency of the group is given by the product of the efficiencies of each single reducer : $\eta_{tot} = \eta_1 \times \eta_2$ 。

NMRV结构分解图 / NMRV STRUCTURE DIAGRAM



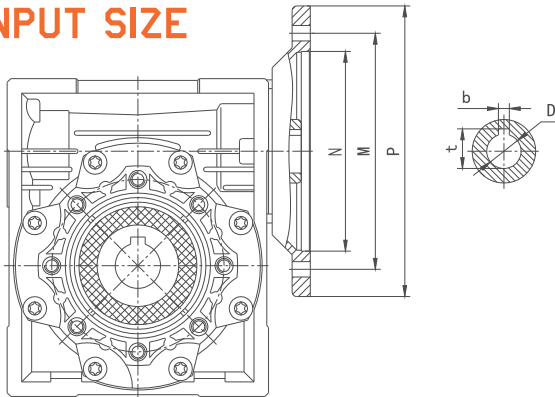
1 油封	11 O型橡胶密封圈	21 扭力臂	31 输出端盖
2 内六角圆柱头螺栓	12 轴承座	22 内六角圆柱头螺栓	32 内六角圆柱头螺栓
3 电机法兰	13 油封	23 输出法兰	33 油封
4 O型橡胶密封圈	14 平键	24 轴用弹性挡圈	34 单向输出轴
5 轴承	15 箱体	25 挡圈	35 双向输出轴
6 孔输入轴输入蜗杆	16 油塞	26 油封	36 平键
7 孔输入蜗杆	17 轴承	27 轴承	37 平键
8 轴输入蜗杆	18 孔用弹性挡圈	28 蜗轮	
9 双轴输入蜗杆	19 平面油封	29 轴承	
10 轴承	20 油封	30 O型橡胶密封圈	
1 Oil seal	11 O-ring	21 Torque arm	31 Bearing support cover
2 Hexgon socket head cap screw	12 Bearing block	22 Hexgon socket head cap screw	32 Hexgon socket head cap screw
3 Flange PAM	13 Oil seal	23 Output flange	33 Oil seal
4 O-ring	14 Parallel key	24 Circlip for shaft	34 Single output shaft
5 Bearing	15 Cablint	25 Washer	35 Double output shaft
6 Double ext. RV Worm	16 Plug cock	26 Oil seal	36 Parallel key
7 PAM worm	17 Bearing	27 Bearing	37 Parallel key
8 RV worm	18 Circlip for hole	28 Worm wheel	
9 Double ext. RV worm	19 Oil seal	29 Bearing	
10 Bearing	20 Oil seal	30 O-ring	

减速机啮合参数 / MESH DATA

NMRV	i	5	7.5	10	15	20	25	30	40	50	60	80	100
025	Z1	6	4	3	2	2	—	1	1	1	1	—	—
	γ	30° 58′	21° 48′	16° 42′	11° 19′	10° 53′	—	5° 43′	5° 29′	4° 34′	3° 23′	—	—
	m	1.25	1.25	1.25	1.25	1	—	1.25	1	0.8	0.65	—	—
	η _d (1400)	0.87	0.85	0.83	0.79	0.75	—	0.67	0.62	0.58	0.55	—	—
	η _s	0.72	0.71	0.68	0.61	0.56	—	0.46	0.41	0.36	0.34	—	—
030	Z1	6	4	3	2	2	1	1	1	1	1	1	—
	γ	29° 03′	20° 19′	15° 31′	10° 29′	5° 42′	6° 10′	5° 17′	2° 52′	3° 26′	2° 52′	1° 58′	—
	m	1.5	1.5	1.5	1.5	1	1.75	1.5	1	0.9	0.75	0.55	—
	η _d (1400)	0.87	0.85	0.82	0.77	0.73	0.68	0.65	0.59	0.55	0.51	0.44	—
	η _s	0.72	0.67	0.63	0.55	0.5	0.43	0.39	0.35	0.31	0.27	0.23	—
040	Z1	6	4	3	2	2	2	1	1	1	1	1	1
	γ	30° 58′	21° 48′	16° 42′	11° 19′	11° 19′	8° 08′	5° 43′	5° 43′	4° 0.5′	2° 52′	2° 52′	2° 29′
	m	2	2	2	2	1.6	1.25	2	1.6	1.25	1	0.8	0.65
	η _d (1400)	0.89	0.87	0.85	0.82	0.78	0.75	0.7	0.65	0.62	0.58	0.52	0.47
	η _s	0.74	0.71	0.67	0.6	0.55	0.51	0.45	0.4	0.36	0.32	0.28	0.24
050	Z1	4	4	3	2	2	2	1	1	1	1	1	1
	γ	23° 49′	21° 48′	16° 42′	11° 19′	11° 19′	9° 05′	5° 43′	5° 43′	4° 21′	2° 52′	2° 52′	2° 17′
	m	3.4	2.5	2.5	2.5	2	1.6	2.5	2	1.6	1.25	1	0.8
	η _d (1400)	0.89	0.88	0.86	0.82	0.79	0.76	0.72	0.67	0.63	0.59	0.53	0.49
	η _s	0.74	0.7	0.66	0.59	0.55	0.51	0.44	0.39	0.35	0.32	0.27	0.23
063	Z1	—	4	3	2	2	2	1	1	1	1	1	1
	γ	—	24° 31′	18° 53′	12° 51′	11° 19′	8° 45′	6° 30′	5° 43′	4° 24′	3° 03′	2° 52′	2° 12′
	m	—	3.25	3.25	3.25	2.5	2	3.25	2.5	2	1.6	1.25	1
	η _d (1400)	—	0.88	0.87	0.83	0.81	0.78	0.74	0.7	0.66	0.62	0.57	0.51
	η _s	—	0.71	0.67	0.6	0.55	0.51	0.45	0.4	0.36	0.33	0.28	0.24
075	Z1	—	4	3	2	2	2	1	1	1	1	1	1
	γ	—	28° 4′	21° 48′	14° 56′	11° 19′	11° 19′	7° 36′	5° 43′	5° 43′	3° 49′	4° 21′	2° 52′
	m	—	4	4	4	3	2.5	4	3	2.5	2	1.6	1.25
	η _d (1400)	—	0.89	0.88	0.85	0.82	0.80	0.76	0.72	0.69	0.65	0.60	0.55
	η _s	—	0.71	0.68	0.61	0.57	0.53	0.46	0.42	0.38	0.35	0.29	0.26
090	Z1	—	4	3	2	2	2	1	1	1	1	1	1
	γ	—	28° 04′	26° 34′	18° 26′	14° 02′	11° 19′	9° 28′	7° 08′	5° 43′	4° 46′	3° 53′	2° 52′
	m	—	4.8	5	5	3.75	3	5	3.75	3	2.5	1.9	1.5
	η _d (1400)	—	0.9	0.89	0.86	0.84	0.82	0.78	0.75	0.72	0.69	0.63	0.59
	η _s	—	0.73	0.7	0.64	0.6	0.56	0.49	0.45	0.41	0.38	0.32	0.28
110	Z1	—	4	3	2	2	2	1	1	1	1	1	1
	γ	—	28° 46′	22° 22′	15° 21′	14° 20′	14° 02′	7° 49′	7° 17′	7° 08′	5° 48′	4° 54′	3° 37′
	m	—	5.9	5.9	5.9	4.6	3.75	5.9	4.6	3.75	3.15	2.4	1.9
	η _d (1400)	—	0.9	0.89	0.86	0.85	0.84	0.79	0.78	0.75	0.72	0.67	0.63
	η _s	—	0.72	0.69	0.63	0.62	0.59	0.48	0.48	0.44	0.41	0.36	0.32
130	Z1	—	4	3	2	2	2	1	1	1	1	1	1
	γ	—	29° 15′	22° 47′	15° 39′	13° 47′	12° 24′	7° 58′	7° 00′	6° 17′	6° 07′	3° 56′	3° 41′
	m	—	7	7	7	5.4	4.4	7	5.4	4.4	3.75	2.75	2.25
	η _d (1400)	—	0.91	0.89	0.87	0.86	0.84	0.8	0.78	0.75	0.72	0.68	0.64
	η _s	—	0.72	0.69	0.63	0.61	0.58	0.49	0.46	0.43	0.39	0.34	0.3
150	Z1	—	6	4	3	2	2	2	1	1	1	1	1
	γ	—	29° 37′	24° 41′	15° 52′	12° 56′	11° 19′	9° 56′	6° 34′	5° 43′	5° 00′	3° 45′	2° 52′
	m	—	5.4	6.16	5.4	6.16	5	4.2	6.16	5	4.2	3.15	2.5
	η _d (1400)	—	0.91	0.9	0.88	0.86	0.84	0.83	0.78	0.76	0.73	0.68	0.64
	η _s	—	0.73	0.71	0.66	0.6	0.57	0.54	0.45	0.42	0.39	0.33	0.29

备注: i-速比, Z1-蜗杆头数; γ-导程角, m-模数, η_d动态效率, η_s静态效率。

减速机输入尺寸 / NMRV REDUCER INPUT SIZE

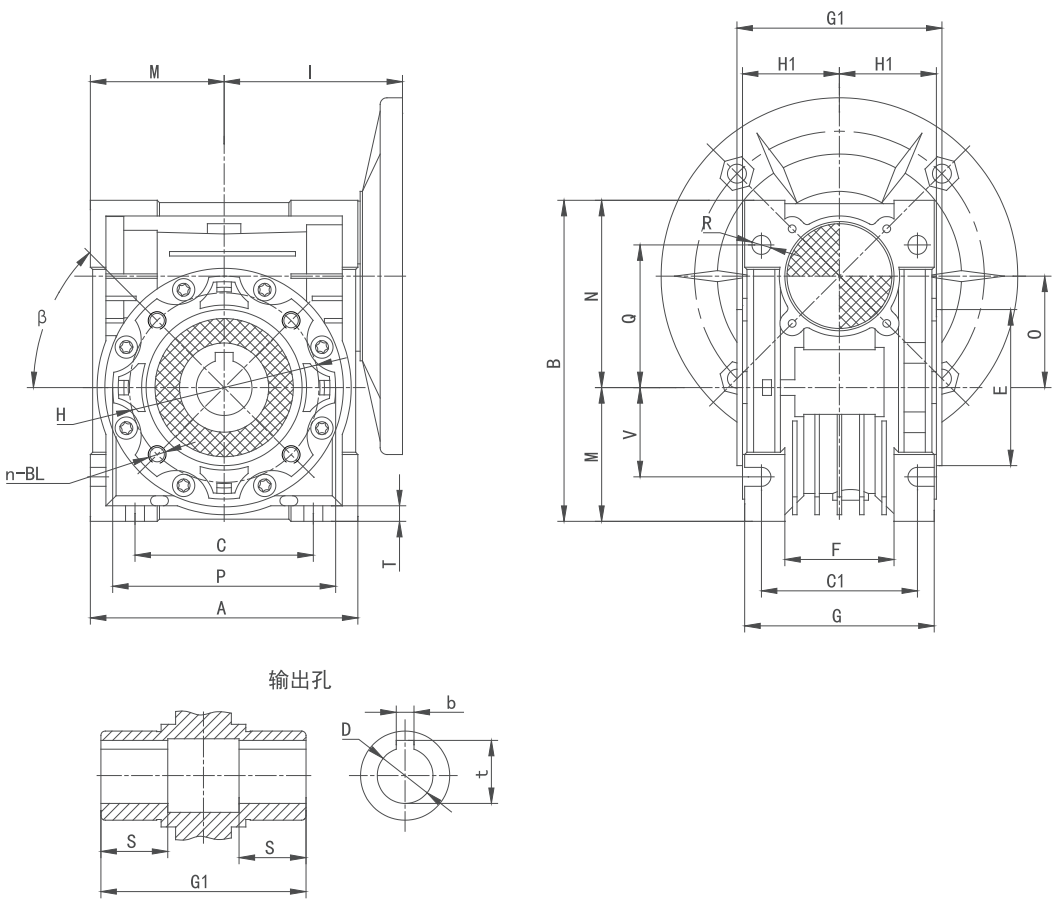


NMRV	IEC接口				键槽		传动比 (i)												
	PAM-IEC	N	M	P			5	7.5	10	15	20	25	30	40	50	60	80	100	
	孔径 (D)																		
025	56B14	50	65	80	3	10.4	9	9	9	9	9	/	9	9	9	9	/	/	
030	56B14	50	65	80	3	10.4	9	9	9	9	9	9	9	9	9	9	9	/	
	56B5	80	100	120	4	12.8	11	11	11	11	11	11	11	11	11	/	/	/	
	63B14	60	75	90															
	63B5	95	115	140															
040	56B5	80	100	120	3	10.4	/	/	/	/	/	/	/	/	9	9	9	9	
	63B14	60	75	90	4	12.8	11	11	11	11	11	11	11	11	11	11	11	11	
	63B5	95	115	140	5	16.3	14	14	14	14	14	14	14	/	/	/	/		
	71B14	70	85	105															
050	71B5	110	130	160	4	12.8	/	/	/	/	/	/	/	/	11	11	11	11	
	63B5	95	115	140	5	16.3	14	14	14	14	14	14	14	14	14	14	14	/	
	71B14	70	85	105															
	71B5	110	130	160															
	80B14	80	100	120	6	21.8	19	19	19	19	19	19	19	/	/	/	/	/	
80B5	130	165	200																
063	71B14	70	85	105	5	16.3	/	/	/	/	/	/	/	14	14	14	14	14	
	71B5	110	130	160															
	80B14	80	100	120	6	21.8	/	19	19	19	19	19	19	19	19	19	19		
	80B5	130	165	200															
	90B14	95	115	140	8	27.3	/	24	24	24	24	24	24	/	/	/	/	/	
	90B5	130	165	200															
075	71B5	110	130	160	5	16.3	/	/	/	/	/	/	/	/	14	14	14	14	
	80B14	80	100	120	6	21.8	/	/	/	/	19	19	19	19	19	19	19	19	
	80B5	130	165	200															
	90B14	95	115	140	8	27.3	/	24	24	24	24	24	24	/	/	/	/	/	
	90B5	130	165	200															
	100/112B14	110	130	160	8	31.3	/	28	28	28	/	/	/	/	/	/	/	/	/
100/112B5	180	215	250																
090	80B14	80	100	120	6	21.8	/	/	/	/	/	/	19	19	19	19	19	19	
	80B5	130	165	200															
	90B14	95	115	140	8	27.3	/	/	/	/	/	24	24	24	24	24	/	/	
	90B5	130	165	200															
	100/112B14	110	130	160	8	31.3	/	28	28	28	28	28	28	/	/	/	/	/	/
	100/112B5	180	215	250															
110	80B5	130	165	200	8	21.8	/	/	/	/	/	/	/	/	/	/	/	19	19
	90B5	130	165	200	8	27.3	/	/	/	/	/	/	/	24	24	24	24	24	24
	100/112B5	180	215	250	8	31.3	/	28	28	28	28	28	28	28	28	28	28	/	/
	132B5	230	265	300	10	41.3	/	38	38	38	38	38	/	/	/	/	/	/	/
	90B5	130	165	200	8	27.3	/	/	/	/	/	/	/	/	/	/	/	/	24
130	100/112B5	180	215	250	8	31.3	/	/	/	/	/	/	28	28	28	28	28	28	28
	132B5	230	265	300	10	41.3	/	38	38	38	38	38	38	38	38	/	/	/	/
	100/112B5	180	215	250	8	31.3	/	/	/	/	/	/	/	/	/	28	28	28	28
150	132B5	230	265	300	10	41.3	/	/	/	/	/	38	38	38	38	38	38	38	/
	160B5	250	300	350	12	45.3	/	42	42	42	42	42	/	/	/	/	/	/	/

RV产品介绍 / RV PRODUCT INTRODUCTION



RV尺寸/ RV SIZE

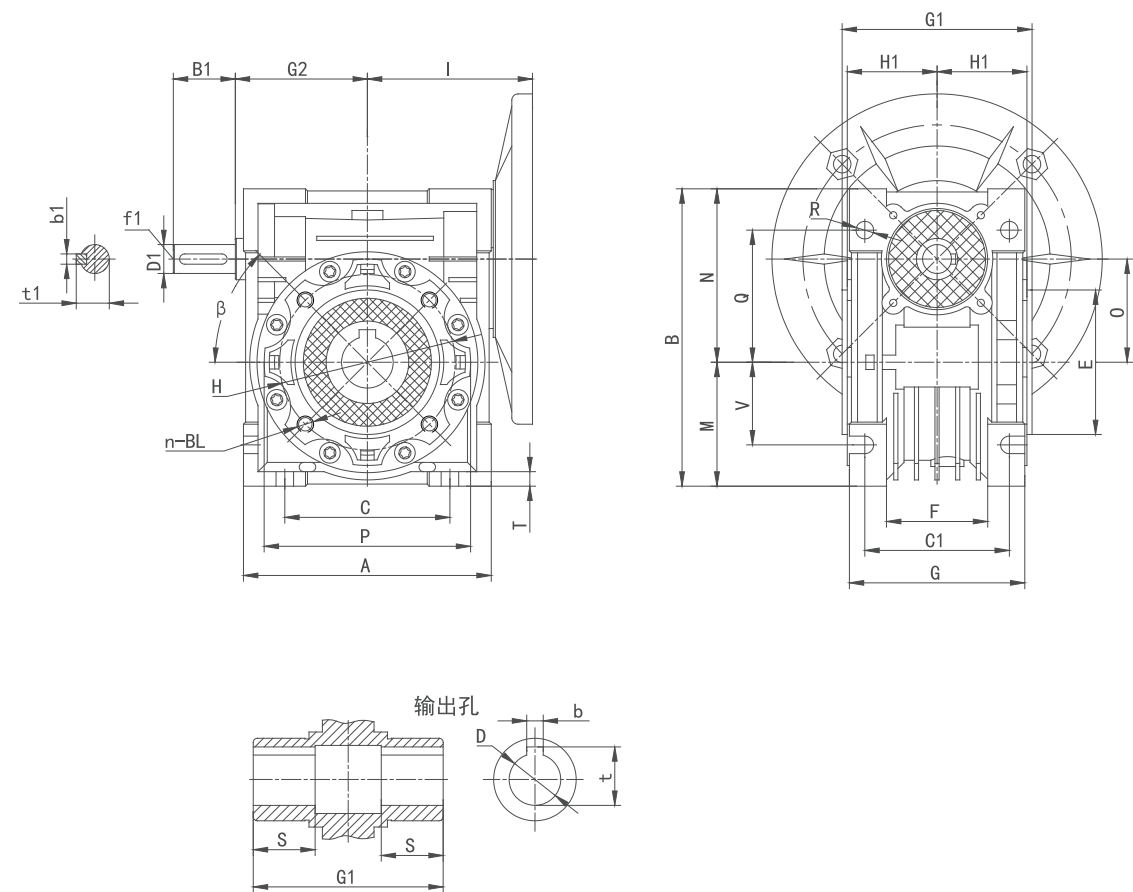


RV	A	B	C	C1	D (F8)	E (h8)	F	G	G1	H	H1	I	M	N	O	P	Q	R	S	T	BL	β	b	t	V
030	80	97	54	44	14	55	32	56	63	65	29	55	40	57	30	75	44	6.5	21	5.5	M6X10 (n=4)	0°	5	16.3	27
040	100	121.5	70	60	18 (19)	60	43	71	78	75	36.5	70	50	71.5	40	87	55	6.5	26	6.5	M6X10 (n=4)	45°	6	20.8 (21.8)	35
050	120	144	80	70	25 (24)	70	49	85	92	85	43.5	80	60	84	50	100	64	8.5	30	7	M8X12 (n=4)	45°	8	28.3 (27.3)	40
063	144	174	100	85	25 (28)	80	67	103	112	95	53	95	72	102	63	110	80	8.5	36	8	M8X12 (n=8)	45°	8	28.3 (31.3)	50
075	172	205	120	90	28 (35)	95	72	112	120	115	57	112.5	86	119	75	140	93	11	40	10	M8X14 (n=8)	45°	8 (10)	31.3 (38.3)	60
090	206	238	140	100	35 (38)	110	74	130	140	130	67	129.5	103	135	90	160	102	13	45	11	M10X16 (n=8)	45°	10	38.3 (41.3)	70
110	255	295	170	115	42	130	—	144	155	165	74	160	127.5	167.5	110	200	125	14	50	14	M10X18 (n=8)	45°	12	45.3	85
130	293	335	200	120	45	180	—	155	170	215	81	179	146.5	188.5	130	250	140	16	60	15	M12X20 (n=8)	45°	14	48.8	100
150	340	400	240	145	50	180	—	185	200	215	96	210	170	230	150	250	180	18	72.5	18	M12X22 (n=8)	45°	14	53.8	120

RV-E产品介绍 / RV-E PRODUCT INTRODUCTION



RV-E尺寸 / RV-E SIZE

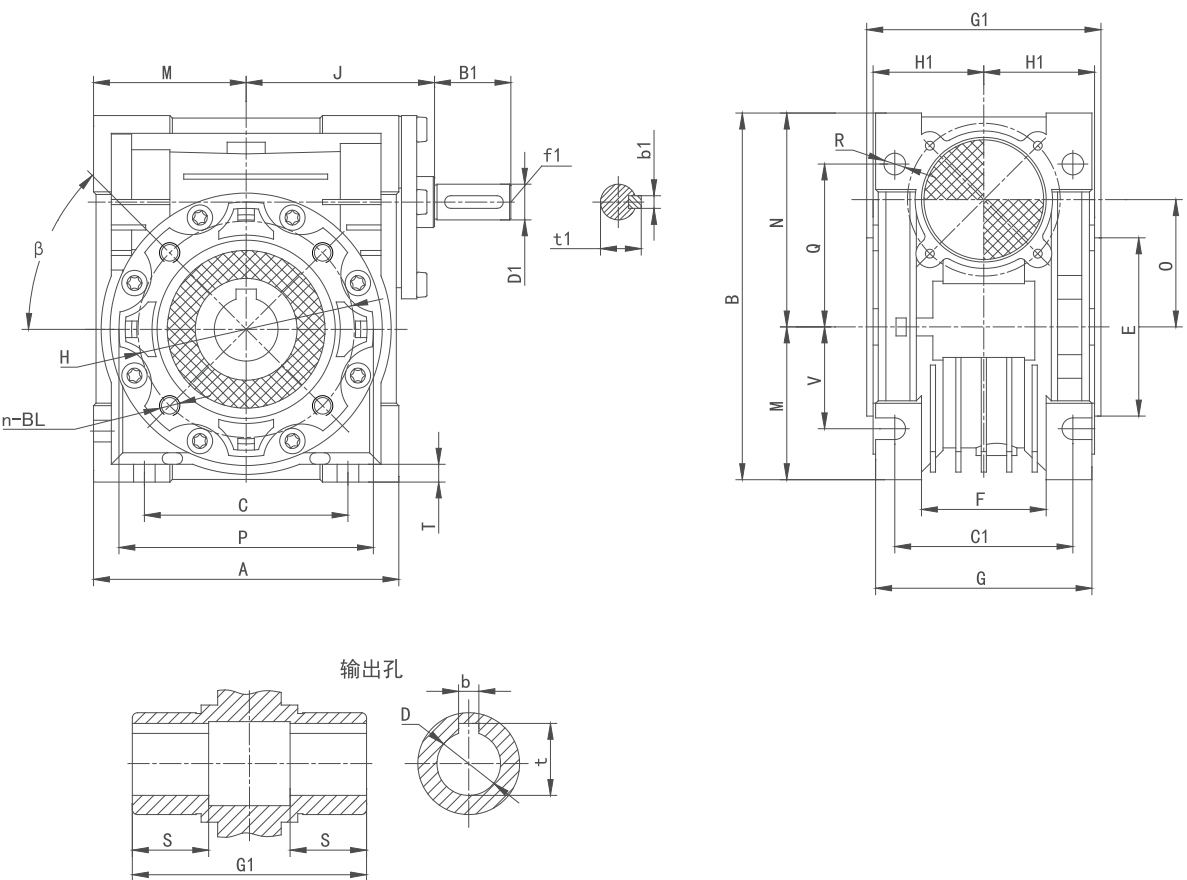


RV-E	A	B	B1	C	C1	D(F8)	D1(h6)	E(h8)	F	G	G1	G2	H	H1	I	M	N	O	P	Q	R	S	T	BL	β	b	b1	t	t1	f1	V
030	80	97	20	54	44	14	9	55	32	56	63	45	65	29	55	40	57	30	75	44	6.5	21	5.5	M6X10 (n=4)	0°	5	3	16.3	10.2	—	27
040	100	121.5	23	70	60	18(19)	11	60	43	71	78	53	75	36.5	70	50	71.5	40	87	55	6.5	26	6.5	M6X10 (n=4)	45°	6	4	20.8(21.8)	12.5	—	35
050	120	144	30	80	70	25(24)	14	70	49	85	92	64	85	43.5	80	60	84	50	100	64	8.5	30	7	M8X12 (n=4)	45°	8	5	28.3(27.3)	16	M6	40
063	144	174	40	100	85	25(28)	19	80	67	103	112	75	95	53	95	72	102	63	110	80	8.5	36	8	M8X12 (n=8)	45°	8	6	28.3(31.3)	21.5	M6	50
075	172	205	50	120	90	28(35)	24	95	72	112	120	91	115	57	112.5	86	119	75	140	93	11	40	10	M8X14 (n=8)	45°	8(10)	8	31.3(38.3)	27	M8	60
090	206	238	50	140	100	35(38)	24	110	74	130	140	109	130	67	129.5	103	135	90	160	102	13	45	11	M10X16 (n=8)	45°	10	8	38.3(41.3)	27	M8	70
110	255	295	60	170	115	42	28	130	—	144	155	135	165	74	160	127.5	167.5	110	200	125	14	50	14	M10X18 (n=8)	45°	12	8	45.3	31	M10	85
130	293	335	80	200	120	45	30	180	—	155	170	155	215	81	179	146.5	188.5	130	250	140	16	60	15	M12X20 (n=8)	45°	14	8	48.8	33	M10	100
150	340	400	80	240	145	50	35	180	—	185	200	175	215	96	210	170	230	150	250	180	18	72.5	18	M12X22 (n=8)	45°	14	10	53.8	38	M12	120

NRV产品介绍 / NRV PRODUCT INTRODUCTION



NRV尺寸 / NRV SIZE

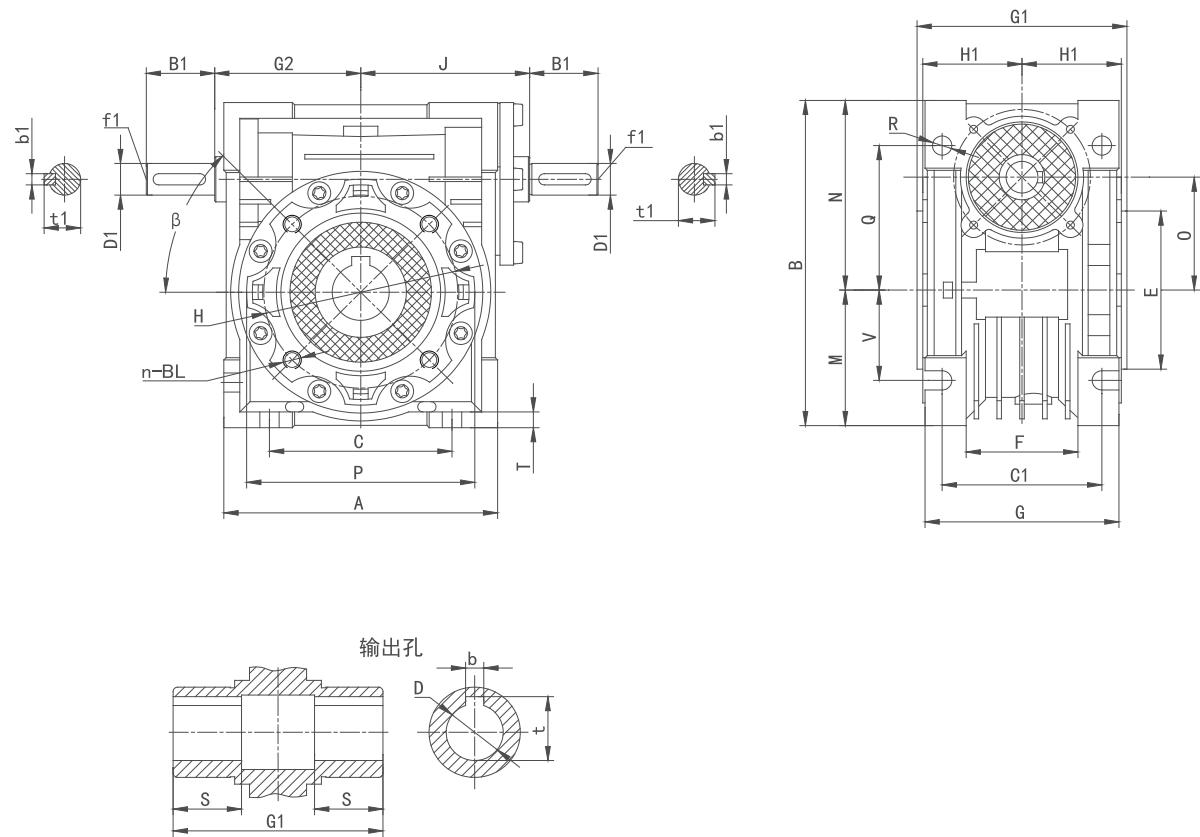


NRV	A	B	B1	C	C1	D (F8)	D1 (h6)	E (h8)	F	G	G1	H	H1	J	M	N	O	P	Q	R	S	T	BL	β	b	b1	t	t1	f1	V
030	80	97	20	54	44	14	9	55	32	56	63	65	29	51	40	57	30	75	44	6.5	21	5.5	M6X10 (n=4)	0°	5	3	16.3	10.2	—	27
040	100	121.5	23	70	60	18 (19)	11	60	43	71	78	75	36.5	60	50	71.5	40	87	55	6.5	26	6.5	M6X10 (n=4)	45°	6	4	20.8 (21.8)	12.5	—	35
050	120	144	30	80	70	25 (24)	14	70	49	85	92	85	43.5	74	60	84	50	100	64	8.5	30	7	M8X12 (n=4)	45°	8	5	28.3 (27.3)	16	M6	40
063	144	174	40	100	85	25 (28)	19	80	67	103	112	95	53	90	72	102	63	110	80	8.5	36	8	M8X12 (n=8)	45°	8	6	28.3 (31.3)	21.5	M6	50
075	172	205	50	120	90	28 (35)	24	95	72	112	120	115	57	104	86	119	75	140	93	11	40	10	M8X14 (n=8)	45°	8 (10)	8	31.3 (38.3)	27	M8	60
090	206	238	50	140	100	35 (38)	24	110	74	130	140	130	67	124	103	135	90	160	102	13	45	11	M10X16 (n=8)	45°	10	8	38.3 (41.3)	27	M8	70
110	255	295	60	170	115	42	28	130	—	144	155	165	74	142	127.5	167.5	110	200	125	14	50	14	M10X18 (n=8)	45°	12	8	45.3	31	M10	85
130	293	335	80	200	120	45	30	180	—	155	170	215	81	161	146.5	188.5	130	250	140	16	60	15	M12X20 (n=8)	45°	14	8	48.8	33	M10	100
150	340	400	80	240	145	50	35	180	—	185	200	215	96	195	170	230	150	250	180	18	72.5	18	M12X22 (n=8)	45°	14	10	53.8	38	M12	120

NRV-E产品介绍 / NRV-EPRODUCT INTRODUCTION

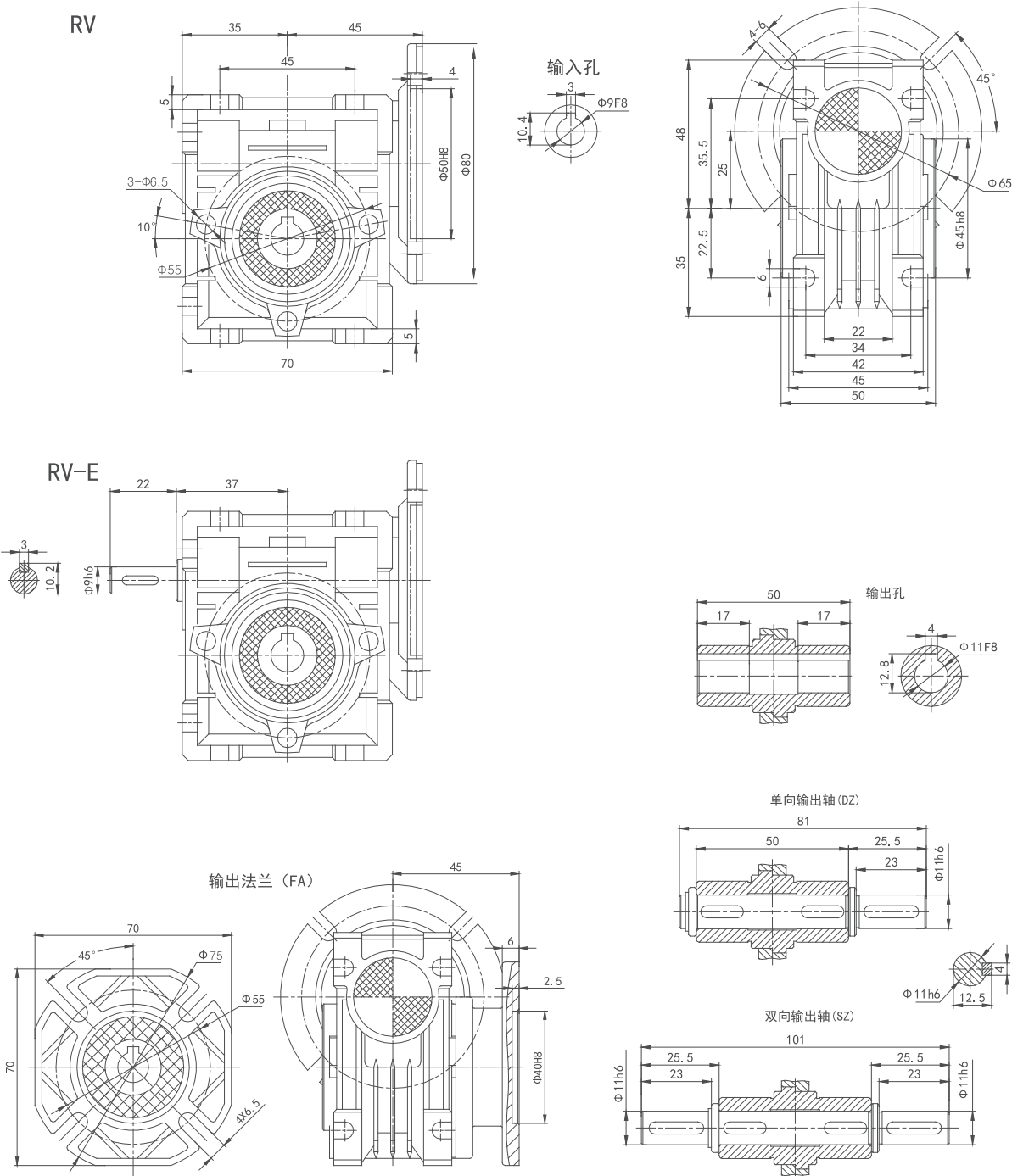


NRV-E尺寸 / NRV-E SIZE



NRV-E	A	B	B1	C	C1	D (F8)	D1 (h6)	E (h8)	F	G	G1	G2	H	H1	J	M	N	O	P	Q	R	S	T	BL	β	b	b1	t	t1	f1	V
030	80	97	20	54	44	14	9	55	32	56	63	45	65	29	51	40	57	30	75	44	6.5	21	5.5	M6X10 (n=4)	0°	5	3	16.3	10.2	—	27
040	100	121.5	23	70	60	18 (19)	11	60	43	71	78	53	75	36.5	60	50	71.5	40	87	55	6.5	26	6.5	M6X10 (n=4)	45°	6	4	20.8 (21.8)	12.5	—	35
050	120	144	30	80	70	25 (24)	14	70	49	85	92	64	85	43.5	74	60	84	50	100	64	8.5	30	7	M8X12 (n=4)	45°	8	5	28.3 (27.3)	16	M6	40
063	144	174	40	100	85	25 (28)	19	80	67	103	112	75	95	53	90	72	102	63	110	80	8.5	36	8	M8X12 (n=8)	45°	8	6	28.3 (31.3)	21.5	M6	50
075	172	205	50	120	90	28 (35)	24	95	72	112	120	91	115	57	104	86	119	75	140	93	11	40	10	M8X14 (n=8)	45°	8 (10)	8	31.3 (38.3)	27	M8	60
090	206	238	50	140	100	35 (38)	24	110	74	130	140	109	130	67	124	103	135	90	160	102	13	45	11	M10X16 (n=8)	45°	10	8	38.3 (41.3)	27	M8	70
110	255	295	60	170	115	42	28	130	—	144	155	135	165	74	142	127.5	167.5	110	200	125	14	50	14	M10X18 (n=8)	45°	12	8	45.3	31	M10	85
130	293	335	80	200	120	45	30	180	—	155	170	156	215	81	161	146.5	188.5	130	250	140	16	60	15	M12X20 (n=8)	45°	14	8	48.8	33	M10	100
150	340	400	80	240	145	50	35	180	—	185	200	175	215	96	195	170	230	150	250	180	18	72.5	18	M12X22 (n=8)	45°	14	10	53.8	38	M12	120

NMRV025 小机型 / NMRV025 SMALL MODEL



减速机选型表 / GEAR UNIT SELECTION TABLES

NMRV...IEC...性能参数 / PERFORMANCE PARAMETER

P_{in} (kw)	n_2 (r/min)	i	M_{2n} (Nm)	F_{r2} (N)	f_s	  
0.06	280	5	1.8	439	6.2	NMRV025 56B14 5614
	186.7	7.5	2.6	503	4.2	
	140	10	3.4	553	3.5	
	93.3	15	4.9	633	2.5	
	70	20	6.2	697	1.9	
	46.7	30	8.3	798	1.6	
	35	40	10	878	1.2	NMRV030 56B5/B14 5614
	28	50	12	946	0.9	
	23.3	60	14	1006	0.7	
	186.7	7.5	2.6	683	7.0	
	140	10	3.4	752	5.4	
	93.3	15	4.7	861	3.9	
	70	20	6	948	3.1	
	56	25	7	1021	3.1	
	46.7	30	8	1085	2.5	
	35	40	9.7	1194	1.9	
	28	50	11	1286	1.5	
	23.3	60	13	1367	1.3	
	17.5	80	14	1504	0.9	
0.09	373.3	7.5	2.0	399	3.9	NMRV025 56B14 5612
	280	10	2.6	439	3.4	
	186.7	15	3.8	503	2.4	
	140	20	4.9	553	1.8	
	93.3	30	6.7	633	1.3	
	70	40	8.5	697	1.1	NMRV025 56B14 5624
	56	50	10	751	0.9	
	186.7	7.5	3.9	503	2.8	
	140	10	5.1	553	2.4	
	93.3	15	7.3	633	1.6	
	70	20	9.3	697	1.3	NMRV030 56B5/B14 5612
	46.7	30	13	798	1.0	
	35	40	16	878	0.8	
	373.3	7.5	2.0	542	6.5	
	280	10	2.6	597	5.0	
	186.7	15	3.7	683	3.5	
	140	20	4.7	752	2.5	
	112	25	5.5	810	2.9	
	93.3	30	6.4	861	2.3	
	70	40	8.0	948	1.8	
	56	50	9.4	1021	1.4	
	46.7	60	10	1085	1.1	
	35	80	13	1194	0.9	

减速机选型表 / GEAR UNIT SELECTION TABLES

P_{1n} (kw)	n_2 (r/min)	i	M_{2n} (Nm)	F_{r2} (N)	fs	 
0.09	186.7	7.5	3.9	683	4.7	NMRV030 56B5/B14 5624
	140	10	5.0	752	3.6	
	93.3	15	7.0	861	2.6	
	70	20	8.8	948	2.0	
	56	25	10	1021	2.1	
	46.7	30	12	1085	1.7	
	35	40	14	1194	1.2	
	28	50	17	1286	1.0	
	23.3	60	18	1367	0.9	
	28	50	19	2475	2.1	
	23.3	60	21	2630	1.7	NMRV040 56B5 5624
	17.5	80	25	2895	1.3	
	14	100	29	3118	1.0	
0.12	373.3	7.5	2.7	399	3.0	NMRV025 56B14 5622
	280	10	3.5	439	2.6	
	186.7	15	5.1	503	1.8	
	140	20	6.5	553	1.4	
	93.3	30	9.0	633	1.0	
	70	40	11	697	0.8	
	186.7	7.5	5.2	683	3.5	NMRV030 63B5/B14 6314
	140	10	6.6	752	2.7	
	93.3	15	9.3	861	1.9	
	70	20	12	948	1.5	
	56	25	14	1021	1.6	
	46.7	30	16	1085	1.3	
	35	40	19	1194	0.9	
	28	50	22	1286	0.8	
	46.7	30	17	2087	2.7	
	35	40	21	2298	1.9	NMRV040 63B5/B14 6314
	28	50	25	2475	1.6	
	23.3	60	28	2630	1.3	
	17.5	80	33	2895	1.0	
	14	100	38	3118	0.8	
	23.3	60	29	3610	2.3	
	17.5	80	35	3973	1.9	NMRV050 63B5 6314
	14	100	39	4280	1.4	
0.18	373.3	7.5	4.0	542	3.2	NMRV030 63B5/B14 6312
	280	10	5.2	597	2.5	
	186.7	15	7.4	683	1.8	
	140	20	9.5	752	1.3	
	112	25	11	810	1.4	
	93.3	30	13	861	1.2	
	70	40	16	948	0.9	
	186.7	7.5	7.7	683	2.3	NMRV030 63B5/B14 6324
	140	10	10	752	1.8	
	93.3	15	14	861	1.3	
	70	20	18	948	1.0	
	56	25	20	1021	1.0	
	46.7	30	24	1085	0.8	

减速机选型表 / GEAR UNIT SELECTION TABLES

P_{1n} (kw)	n_2 (r/min)	i	M_{2n} (Nm)	F_{r2} (N)	fs	 
0.18	93.3	30	14	1657	2.5	NMRV040 63B5/B14 6312
	70	40	17	1824	1.8	
	56	50	21	1964	1.4	
	70	20	19	1824	2.1	NMRV040 63B5/B14 6324
	56	25	23	1964	1.7	
	46.7	30	25	2087	1.8	
	35	40	32	2298	1.3	
	28	50	37	2475	1.0	
	23.3	60	42	2630	0.9	
	45	20	28	2113	1.6	NMRV040 71B5/B14 7116
	36	25	34	2276	1.3	
	30	30	38	2419	1.3	
	22.5	40	47	2662	1.0	
	46.7	60	24	2865	2.1	NMRV050 63B5 6312
	35	80	30	3153	1.5	
	28	100	34	3397	1.2	NMRV050 63B5 6324
	35	40	33	3153	2.3	
	28	50	39	3397	1.9	
	23.3	60	43	3610	1.6	
	17.5	80	52	3973	1.2	
	14	100	59	4280	0.9	NMRV050 71B5/B14 7116
	18	50	56	3936	1.4	
	15	60	63	4183	1.1	
0.25	11.3	80	75	4604	0.9	NMRV050 71B5/B14 7116
	15	60	66	5467	2.1	
	11.3	80	79	6018	1.6	NMRV063 71B5/B14 7116
	9	100	90	6270	1.4	
	373.3	7.5	5.6	542	2.3	NMRV030 63B5/B14 6322
	280	10	7.2	597	1.8	
	186.7	15	10	683	1.3	
	140	20	13	752	0.9	
	112	25	15	810	1.0	
	93.3	30	18	861	0.8	
	186.7	7.5	11	1315	3.6	NMRV040 71B5/B14 7114
	140	10	14	1447	2.8	
	93.3	15	20	1657	2.0	
	70	20	26	1824	1.5	
	56	25	32	1964	1.2	
	46.7	30	35	2087	1.3	
	35	40	44	2298	0.9	NMRV040 71B5/B14 7126
	120	7.5	17	1524	2.6	
	90	10	22	1677	2.0	
	60	15	31	1920	1.4	
	45	20	39	2113	1.1	
	36	25	48	2276	0.9	
	30	30	53	2419	0.9	

减速机选型表 / GEAR UNIT SELECTION TABLES

P _{1n} (kw)	n ₂ (r/min)	i	M _{2n} (Nm)	F _{r2} (N)	fs	  
0.25	35	80	42	3153	1.1	NMRV050 63B5/B14 6322
	28	100	48	3397	0.8	
	70	20	27	2503	2.7	NMRV050 71B5/B14 7114
	56	25	32	2696	2.2	
	46.7	30	36	2865	2.3	
	35	40	46	3153	1.7	
	28	50	54	3397	1.4	
	23.3	60	60	3610	1.1	
	17.5	80	72	3973	0.9	NMRV050 71B5/B14 7126
	45	20	40	2900	1.9	
	36	25	48	3124	1.5	
	30	30	54	3320	1.7	
	22.5	40	67	3654	1.2	
	18	50	78	3936	1.0	NMRV063 71B5/B14 7114
	15	60	88	4183	0.8	
	28	50	55	4440	2.4	
	23.3	60	63	4719	2.0	
	17.5	80	76	5193	1.6	
	14	100	87	5595	1.4	NMRV063 71B5/B14 7126
	18	50	81	5145	1.8	
	15	60	92	5467	1.5	
	11.3	80	110	6018	1.2	
	9	100	125	6270	1.0	
	17.5	80	80	6130	2.4	NMRV075 71B5 7114
	14	100	94	6603	1.9	
	11.3	80	117	7103	1.7	NMRV075 71B5 7126
	9	100	133	7380	1.4	
0.37	373.3	7.5	8.3	1044	3.4	NMRV040 71B5/B14 7112
	280	10	11	1149	2.6	
	186.7	15	16	1315	1.9	
	140	20	20	1447	1.4	
	112	25	25	1559	1.1	
	186.7	7.5	16	1315	2.5	NMRV040 71B5/B14 7124
	140	10	21	1447	1.9	
	93.3	15	30	1657	1.3	
	70	20	39	1824	1.0	
	56	25	47	1964	0.8	
	46.7	30	52	2087	0.9	NMRV050 71B5/B14 7112
	112	25	25	2140	2.0	
	93.3	30	29	2274	2.2	
	70	40	37	2503	1.6	
	56	50	44	2696	1.2	
	46.7	60	50	2865	1.0	
	35	80	62	3153	0.7	NMRV050 71B5/B14 7124
	140	10	21	1987	3.4	
	93.3	15	31	2274	2.4	
	70	20	39	2503	1.9	

减速机选型表 / GEAR UNIT SELECTION TABLES

P _{1n} (kw)	n ₂ (r/min)	i	M _{2n} (Nm)	F _{r2} (N)	fs	  
0.37	56	25	47	2696	1.5	NMRV050 71B5/B14 7124
	46.7	30	54	2865	1.6	
	35	40	68	3153	1.1	
	28	50	80	3397	0.9	
	23.3	60	89	3610	0.8	
	120	7.5	25	2091	3.4	NMRV050 80B5/B14 8016
	90	10	33	2302	2.6	
	60	15	47	2635	1.8	
	45	20	59	2900	1.3	
	36	25	72	3124	1.0	
	30	30	80	3320	1.1	NMRV063 71B5/B14 7124
	35	40	70	4122	2.1	
	28	50	82	4440	1.6	
	23.3	60	94	4719	1.4	
	17.5	80	113	5193	1.1	
	14	100	129	5595	0.9	NMRV063 80B5/B14 8016
	45	20	60	3791	2.4	
	36	25	73	4084	1.9	
	30	30	82	4339	2.1	
	22.5	40	102	4776	1.6	
	18	50	120	5145	1.2	NMRV075 80B5/B14 8016
	15	60	137	5467	1.0	
	23.3	60	97	5569	2.1	
	17.5	80	119	6130	1.6	
	14	100	139	6603	1.3	NMRV075 71B5 7124
	18	50	124	6073	1.8	
	15	60	141	6453	1.5	NMRV075 80B5/B14 8016
	11.3	80	173	7103	1.2	
	9	100	196	7380	1.0	
	11.3	80	185	7859	1.7	NMRV090 80B5/B14 8016
	9	100	212	8180	1.3	
0.55	373.3	7.5	12	1044	2.3	NMRV040 71B5/B14 7122
	280	10	16	1149	1.8	
	186.7	15	24	1315	1.3	
	140	20	30	1447	1.0	
	112	25	37	1559	0.8	
	140	20	31	1987	1.7	NMRV050 71B5/B14 7122
	112	25	38	2140	1.4	
	93.3	30	43	2274	1.5	
	70	40	55	2503	1.1	
	56	50	65	2696	0.8	
	46.7	60	74	2865	0.7	NMRV050 80B5/B14 8014
	186.7	7.5	24	1805	2.9	
	140	10	32	1987	2.3	
	93.3	15	46	2274	1.6	
	70	20	59	2503	1.2	
	56	25	70	2696	1.0	
	46.7	30	80	2865	1.1	

减速机选型表 / GEAR UNIT SELECTION TABLES

P _{1n} (kw)	n ₂ (r/min)	i	M _{2n} (Nm)	F _{r2} (N)	fs	  
0.55	120	7.5	37	2091	2.3	NMRV050 80B5/B14 8026
	90	10	48	2302	1.7	
	60	15	69	2635	1.2	
	45	20	88	2900	0.9	
	70	40	56	3272	1.9	NMRV063 71B5/B14 7122
	56	50	68	3524	1.5	
	46.7	60	78	3745	1.2	
	35	80	96	4122	0.9	
	28	100	111	4440	0.7	
	70	20	60	3272	2.2	NMRV063 80B5/B14 8014
	56	25	72	3524	1.8	
	46.7	30	82	3745	1.9	
	35	40	104	4122	1.4	
	28	50	122	4440	1.1	
	23.3	60	140	4719	0.9	
	60	15	70	3444	2.2	
	45	20	90	3791	1.6	NMRV063 80B5/B14 8026
	36	25	108	4084	1.3	
	30	30	123	4339	1.4	
	22.5	40	152	4776	1.1	
	35	80	99	4865	1.3	NMRV075 71B5 7122
	28	100	116	5241	1.0	
	35	40	108	4865	2.0	
	28	50	128	5241	1.6	NMRV075 80B5/B14 8014
	23.3	60	144	5569	1.4	
	17.5	80	177	6130	1.1	
	14	100	206	6603	0.9	
	30	30	124	5122	2.1	NMRV075 80B5/B14 8026
	22.5	40	156	5637	1.5	
	18	50	184	6073	1.2	
	15	60	210	6453	1.0	NMRV090 80B5/B14 8014
	17.5	80	189	6783	1.5	
	14	100	221	7306	1.2	NMRV090 80B5/B14 8026
	18	50	196	6719	2.0	
	15	60	224	7140	1.6	
	11.3	80	275	7859	1.1	
	9	100	315	8180	0.9	
	17.5	80	201	8571	2.6	NMRV110 80B5 8014
	14	100	236	9232	2.0	NMRV110 80B5 8026
	11.3	80	294	9931	1.9	
	9	100	344	10320	1.5	

减速机选型表 / GEAR UNIT SELECTION TABLES

P _{1n} (kw)	n ₂ (r/min)	i	M _{2n} (Nm)	F _{r2} (N)	fs	  
0.75	373.3	7.5	17	1433	3.0	NMRV050 80B5/B14 8012
	280	10	22	1577	2.4	
	186.7	15	31	1805	1.7	
	140	20	41	1987	1.3	
	112	25	49	2140	1.0	
	93.3	30	56	2274	1.1	
	280	5	23	1577	2.7	NMRV050 80B5/B14 8024
	186.7	7.5	33	1805	2.1	
	140	10	43	1987	1.7	
	93.3	15	62	2274	1.2	
	70	20	80	2503	0.9	
	140	20	43	2597	2.3	NMRV063 80B5/B14 8012
	112	25	52	2797	1.8	
	93.3	30	60	2973	2.0	
	70	40	77	3272	1.4	
	56	50	92	3524	1.1	
	46.7	60	106	3745	0.9	NMRV063 80B5/B14 8024
	93.3	15	63	2973	2.2	
	70	20	82	3272	1.6	
	56	25	98	3524	1.3	
	46.7	30	112	3745	1.4	
	35	40	141	4122	1.0	NMRV063 90B5/B14 90S6
	120	7.5	51	2734	2.9	
	90	10	67	3009	2.3	
	60	15	96	3444	1.6	
	45	20	123	3791	1.2	
	36	25	147	4084	0.9	
	30	30	167	4339	1.0	NMRV075 80B5/B14 8012
	46.7	60	107	4421	1.3	
	35	80	135	4865	1.0	
	28	100	159	5241	0.8	
	56	25	101	4160	2.0	NMRV075 80B5/B14 8024
	46.7	30	117	4421	2.0	
	35	40	147	4865	1.5	
	28	50	174	5241	1.2	
	23.3	60	196	5569	1.0	
	60	15	97	4065	2.4	NMRV075 90B5/B14 90S6
	45	20	124	4474	1.9	
	36	25	149	4820	1.4	
	30	30	170	5122	1.5	
	22.5	40	213	5637	1.1	
	35	80	143	5383	1.6	NMRV090 80B5/B14 8012
	28	100	169	5799	1.2	
	28	50	182	5799	1.9	NMRV090 80B5/B14 8024
	23.3	60	209	6163	1.5	
	17.5	80	258	6783	1.1	
	14	100	302	7306	0.9	

减速机选型表 / GEAR UNIT SELECTION TABLES

P_{in} (kw)	n_2 (r/min)	i	M_{2n} (Nm)	F_{r2} (N)	fs	 
0.75	30	30	179	5667	2.6	NMRV090 90B5B14 90S6
	22.5	40	226	6238	1.8	
	18	50	267	6719	1.5	
	15	60	306	7140	1.1	
	17.5	80	274	8571	1.9	NMRV110 80B5 8024
	14	100	322	9232	1.5	
	15	60	325	9023	2.1	NMRV110 90B5/B14 90S6
	11.3	80	401	9931	1.4	
	9	100	470	10320	1.1	
	11.3	80	401	12989	2.1	NMRV130 90B5 90S6
	9	100	470	13500	1.7	
1. 1	373.3	7.5	25	1433	2.1	NMRV050 80B5/B14 8022
	280	10	33	1577	1.7	
	186.7	15	48	1805	1.2	
	140	20	62	1987	0.9	
	186.7	15	46	2359	2.1	NMRV063 80B5/B14 8022
	140	20	60	2597	1.6	
	112	25	72	2797	1.2	
	93.3	30	82	2973	1.4	
	70	40	104	3272	1.0	NMRV063 90B5/B14 90L6
	120	7.5	75	2734	2.0	
	90	10	98	3009	1.6	
	60	15	140	3444	1.1	
	45	20	180	3791	0.8	NMRV063 90B5/B14 90S4
	186.7	7.5	50	2359	2.6	
	140	10	65	2597	2.0	
	93.3	15	92	2973	1.5	
	70	20	120	3272	1.1	NMRV063 90B5/B14 90S2
	56	25	144	3524	0.9	
	46.7	30	164	3745	1.0	
	112	25	77	3302	2.0	
	93.3	30	89	3509	1.9	NMRV075 80B5/B14 8022
	70	40	114	3862	1.4	
	56	50	137	4160	1.1	
	46.7	60	158	4421	0.9	
	90	10	98	3551	2.3	NMRV075 90B5/B14 90L6
	60	15	142	4065	1.7	
	45	20	182	4474	1.3	
	36	25	219	4820	1.0	
	30	30	249	5122	1.0	

减速机选型表 / GEAR UNIT SELECTION TABLES

P_{in} (kw)	n_2 (r/min)	i	M_{2n} (Nm)	F_{r2} (N)	fs	 
1. 1	93.3	15	95	3509	2.1	NMRV075 90B5/B14 90S4
	70	20	122	3862	1.7	
	56	25	148	4160	1.3	
	46.7	30	171	4421	1.3	
	35	40	216	4865	1.0	NMRV090 80B5/B14 8022
	35	80	210	5383	1.1	
	28	100	248	5799	0.8	
	36	25	228	5333	1.6	
	30	30	263	5667	1.8	NMRV090 90B5/B14 90L6
	22.5	40	331	6238	1.2	
	18	50	391	6719	1.0	
	15	60	448	7140	0.8	
	35	40	222	5383	1.6	NMRV090 90B5/B14 90S4
	28	50	266	5799	1.3	
	23.3	60	306	6163	1.0	
	22.5	40	345	7882	2.3	
	18	50	414	8491	1.8	NMRV110 90B5/B14 90L6
	15	60	476	9023	1.4	
	11.3	80	588	9931	1.0	
	28	50	278	7328	2.4	
	23.3	60	324	7787	1.9	NMRV110 90B5/B14 90S4
	17.5	80	402	8571	1.3	
	14	100	473	9232	1.0	
	11.3	80	588	12989	1.5	
1.5	9	100	689	13500	1.1	NMRV130 90B5 90L6
	17.5	80	408	11210	2.1	
	14	100	480	12076	1.5	
	14	100	480	12076	1.5	
	373.3	7.5	34	1433	1. 5	NMRV050 80B5/B14 8032
	280	10	45	1577	1.2	
	186.7	15	65	1805	0.9	
	186.7	7.5	68	2359	1.9	
	140	10	88	2597	1.5	NMRV063 90B5/B14 90L4
	93.3	15	126	2973	1.1	
	70	20	164	3272	0.8	
	373.3	7.5	35	1873	2.7	NMRV063 90B5/B14 90S2
	280	10	45	2061	2.2	
	186.7	15	66	2359	1.6	
	140	20	86	2597	1.2	
	112	25	105	2797	0.9	NMRV063 90B5/B14 90S2
	93.3	30	120	2973	1.0	
	120	7.5	103	3227	2.1	
	90	10	134	3551	1.7	
	60	15	193	4065	1.2	NMRV075 100B5/B14 100L6
	56	50	187	4160	1.3	
	46.7	60	215	4421	1.1	
	140	10	89	3065	2.2	
	93.3	15	129	3509	1.6	NMRV075 90B5/B14 90L4
	70	20	166	3862	1.3	
	56	25	202	4160	1.0	
	56	25	202	4160	1.0	

减速机选型表 / GEAR UNIT SELECTION TABLES

P _{1n} (kw)	n ₂ (r/min)	i	M _{2n} (Nm)	F _{r2} (N)	fs			
1.5	46.7	30	233	4421	1.0	NMRV075	90B5/B14	90L4
	280	10	45	2433	3.2	NMRV075	90B5/B14	90S2
	186.7	15	66	2785	2.3			
	140	20	86	3065	1.9			
	112	25	105	3302	1.4			
	93.3	30	121	3509	1.4			
	70	40	156	3862	1.1			
	90	10	137	3929	2.7	NMRV090	100B5/B14	100L6
	60	15	198	4498	2.1			
	45	20	258	4951	1.5			
	36	25	310	5333	1.2			
	30	30	358	5667	1.3			
	70	20	170	4273	2.1			
	56	25	207	4603	1.6	NMRV090	90B5/B14	90L4
	46.7	30	239	4891	1.7			
	35	40	303	5383	1.2			
	28	50	363	5799	0.9			
	23.3	60	417	6163	0.8			
	56	50	197	4603	1.3	NMRV090	90B5/B14	90S2
	46.7	60	227	4891	1.1			
	45	20	264	6256	2.7		NMRV110	100B5
	36	25	322	6739	2.4			
	30	30	363	7161	2.3			
	22.5	40	471	7882	1.7			
	18	50	565	8491	1.3			
	15	60	649	9023	1.1	NMRV110	90B5/B14	90L4
	35	40	315	6803	2.2			
	28	50	379	7328	1.7			
	23.3	60	442	7787	1.4			
	17.5	80	548	8571	0.9			
	46.7	60	236	6181	2.0	NMRV110	90B5/B14	90S2
	35	80	299	6803	1.3			
	28	100	358	7328	1.0			
	22.5	40	471	10309	2.3		NMRV130	100B5
	18	50	565	11105	1.9			
	15	60	659	11801	1.4			
	11.3	80	802	12989	1.1			
	17.5	80	557	11210	1.5	NMRV130	90B5	90L4
	14	100	655	12076	1.1			
2.2	373.3	7.5	51	1873	1.8	NMRV063	90B5/B14	90L2
	280	10	66	2061	1.5			
	186.7	15	97	2359	1.1			
	186.7	7.5	99	2785	1.9			
	140	10	131	3065	1.5	NMRV075	100B5/B14	100L1-4
	93.3	15	189	3509	1.1			
	373.3	7.5	50	2210	2.6			
	280	10	66	2433	2.2			
	186.7	15	97	2785	1.5	NMRV075	90B5/B14	90L2
	140	20	126	3065	1.3			

减速机选型表 / GEAR UNIT SELECTION TABLES

P _{1n} (kw)	n ₂ (r/min)	i	M _{2n} (Nm)	F _{r2} (N)	fs			
2.2	112	25	154	3302	1.0	NMRV075	100B5/B14	90L2
	93.3	30	178	3509	1.0			
	186.7	7.5	100	3081	2.9	NMRV090	100B5/B14	100L1-4
	140	10	132	3391	2.3			
	93.3	15	191	3882	1.9			
	70	20	249	4273	1.4			
	56	25	304	4603	1.1			
	46.7	30	351	4891	1.2			
	120	7.5	154	3570	2.2	NMRV090	112B5/B14	112M6
	90	10	201	3929	1.8			
	60	15	291	4498	1.4			
	45	20	378	4951	1.0			
	140	20	129	3391	2.0		NMRV090	90B5/B14
	112	25	159	3653	1.6			
	93.3	30	185	3882	1.7			
	70	40	237	4273	1.2			
	56	50	289	4603	0.9			
	70	20	255	5399	2.5	NMRV110	100B5	100L1-4
	56	25	311	5816	2.2			
	46.7	30	356	6181	2.0			
	35	40	462	6803	1.5			
	28	50	555	7328	1.2			
	23.3	60	648	7787	1.0	NMRV110	112B5	112M6
	90	10	203	4965	3.5			
	60	15	294	5684	2.6			
	45	20	388	6256	1.9			
	36	25	473	6739	1.6			
	30	30	532	7161	1.6		NMRV110	90B5/B14
	112	25	161	4616	3.1			
	93.3	30	187	4905	3.0			
	70	40	243	5399	2.2			
	56	50	296	5816	1.7	NMRV130	100B5	100L1-4
	46.7	60	347	6181	1.4			
	35	40	468	8897	2.2			
	28	50	563	9584	1.7			
	23.3	60	657	10185	1.4			
	17.5	80	816	11210	1.0	NMRV130	112B5	112M6
	36	25	473	8814	2.2			
	30	30	539	9366	2.2			
	22.5	40	691	10309	1.6			
	18	50	829	11105	1.3		NMRV130	90B5
	15	60	966	11801	1.0			
	35	80	444	8897	1.3			
	28	100	525	9584	1.0			
	28	50	570	13103	2.5	NMRV150	100B5	100L1-4
	23.3	60	657	13924	1.9			
	17.5	80	816	15325	1.4			
	14	100	960	16508	1.0			

减速机选型表 / GEAR UNIT SELECTION TABLES

P_{in} (kw)	n_2 (r/min)	i	M_{2n} (Nm)	F_{t2} (Nm)	fs	
3.0	373.3	7.5	68	2210	1.9	NMRV075 100B5/B14 100L2
	280	10	90	2433	1.6	
	186.7	7.5	135	2785	1.4	
	140	10	178	3065	1.1	NMRV075 100B5/B14 100L2-4
	93.3	15	258	3509	0.8	
	373.3	7.5	70	2446	3.0	
	280	10	92	2692	2.6	NMRV090 100B5/B14 100L2
	186.7	7.5	137	3081	2.1	
	140	10	180	3391	1.7	
	93.3	15	261	3882	1.4	NMRV090 100B5/B14 100L2-4
	70	20	340	4273	1.0	
	56	25	414	4603	0.8	
	46.7	30	479	4891	0.9	
	93.3	15	264	4905	2.5	
	70	20	348	5399	1.9	NMRV110 100B5 100L2-4
	56	25	425	5816	1.6	
	46.7	30	485	6181	1.5	
	35	40	630	6803	1.1	
	28	50	757	7328	0.9	
	120	7.5	210	4511	3.1	NMRV110 132B5 132S6
	90	10	277	4965	2.6	
	60	15	401	5684	1.9	
	45	20	528	6256	1.4	
	56	25	430	7607	2.2	NMRV130 100B5 100L2-4
	46.7	30	491	8084	2.1	
	35	40	638	8897	1.6	
	28	50	767	9584	1.3	
	23.3	60	896	10185	1.0	
	17.5	80	1113	11210	0.8	NMRV130 132B5 132S6
	90	10	277	6494	3.5	
	60	15	406	7434	2.6	
	45	20	528	8182	2.0	
	36	25	645	8814	1.6	
	30	30	735	9366	1.6	NMRV150 100B5 100L2-4
	22.5	40	942	10309	1.2	
	28	50	778	13103	1.8	
	23.3	60	896	13924	1.4	
	17.5	80	1113	15325	1.0	
	14.0	100	1310	16508	0.8	4.0
	373.3	7.5	91	2210	1.4	
	280	10	120	2433	1.2	
	186.7	7.5	180	2785	1.0	
	140	10	237	3065	0.8	
	373.3	7.5	93	2446	2.3	
	280	10	123	2692	1.9	
	186.7	7.5	182	3081	1.6	
	140	10	240	3391	1.3	
	93.3	15	348	3882	1.0	NMRV090 112B5 112M4
	70	20	453	4273	0.8	

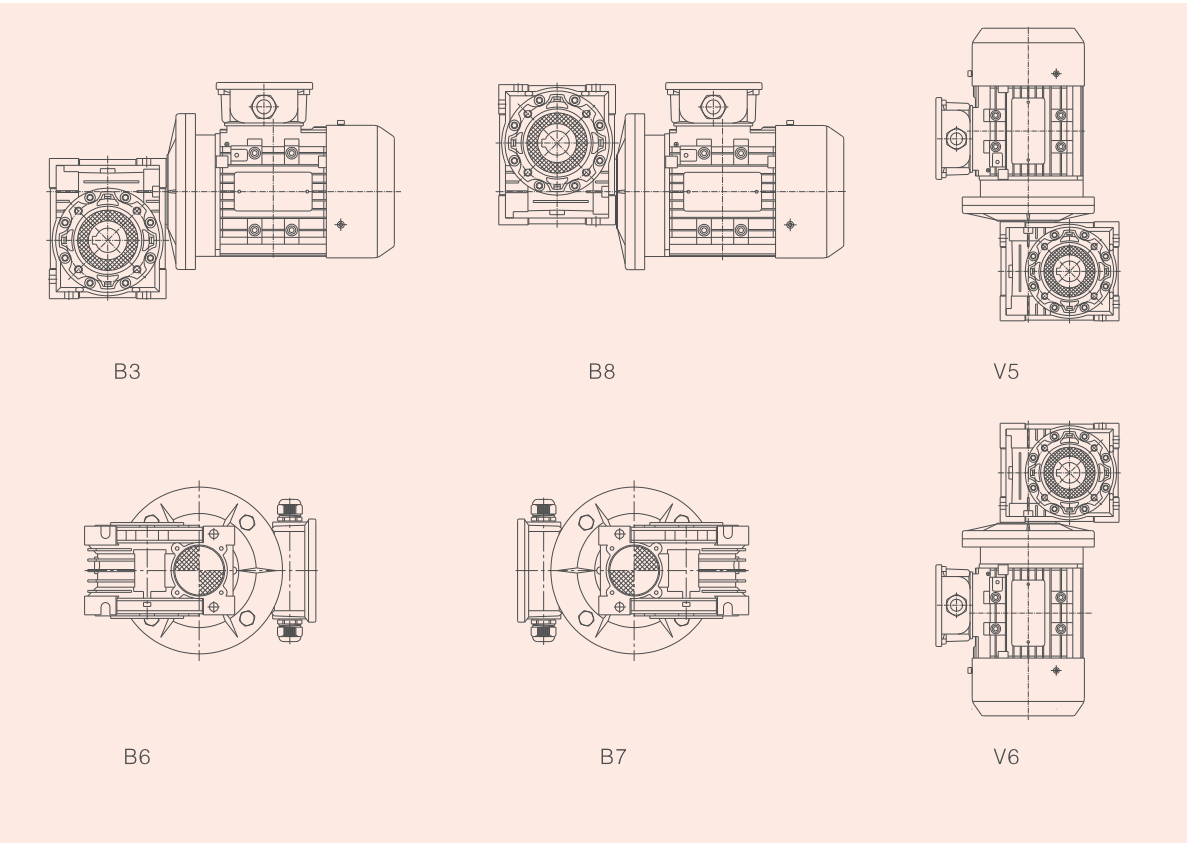
减速机选型表 / GEAR UNIT SELECTION TABLES

P_{in} (kw)	n_2 (r/min)	i	M_{2n} (Nm)	F_{t2} (N)	fs	
4.0	140	10	240	4285	2.5	NMRV110 112B5 112M4
	93.3	15	352	4905	1.9	
	70	20	464	5399	1.4	
	56	25	566	5816	1.2	
	46.7	30	647	6181	1.1	
	120	7.5	280	4511	2.3	NMRV110 132B5 132M1-6
	90	10	369	4965	1.9	
	60	15	535	5684	1.4	
	56	25	573	7607	1.6	NMRV130 112B5 112M4
	46.7	30	655	8084	1.6	
	35	40	851	8897	1.2	
	28	50	1023	9584	1.0	
	23.3	60	1195	10185	0.8	
	120	7.5	283	5901	3.1	NMRV130 132B5 132M1-6
	90	10	369	6494	2.6	
	60	15	541	7434	2.0	
	45	20	705	8182	1.5	
	36	25	860	8814	1.2	
	28	50	1037	13103	1.4	NMRV150 112B5 112M4
	23.3	60	1195	13924	1.1	
	17.5	80	1484	15325	0.8	NMRV110 132B5 132S4
	186.7	7.5	250	3893	2.2	
5.5	140	10	330	4285	1.8	
	93.3	15	484	4905	1.4	
	70	20	638	5399	1.0	
	140	10	334	5605	2.5	NMRV130 132B5 132S4
	93.3	15	490	6416	1.9	
	70	20	638	7062	1.4	
	56	25	788	7607	1.2	
	46.7	30	900	8084	1.2	
	35	40	1171	8897	0.9	NMRV150 132B5 132S4
	70	20	645	9654	2.0	
	56	25	788	10400	1.5	
	46.7	30	934	11051	1.3	
	35.0	40	1171	12163	1.3	
	28.0	50	1426	13103	1.0	NMRV110 132B5 132M4
	23.3	60	1643	13924	0.8	
	186.7	7.5	341	3893	1.6	
	140	10	450	4285	1.3	
7.5	93.3	15	660	4905	1.0	NMRV130 132B5 132M4
	186.7	7.5	345	5092	2.2	
	140	10	455	5605	1.8	
	93.3	15	668	6416	1.4	
	70	20	870	7062	1.0	
	56	25	1074	7607	0.9	
	46.7	30	1228	8084	0.8	
	35	40	1596	8897	0.7	
	70	20	880	9654	1.5	NMRV150 132B5 132M4
	56	25	1074	10400	1.1	

P_{1n} (kw)	n_1 (r/min)	i	M_{2n} (Nm)	F_{t2} (N)	fs			
7.5	46.7	30	1274	11051	0.9	NMRV150	132B5	132M4
	35	40	1596	12163	1.0			
11	186.7	7.5	512	6962	2.3	NMRV150	160B5	160M4
	140	10	675	7663	1.8			
	93.3	15	990	8771	1.3			
	70.0	20	1291	9654	1.0			
15	56.0	25	1576	10400	0.8	NMRV150	160B5	160L4
	186.7	7.5	698	6962	1.7			
	140	10	921	7663	1.3			
	93.3	15	1351	8771	0.9			
	70.0	20	1760	9654	0.7			

减速机安装方位 / GEAR BOX INSTALLATION POSITION

NMRV与电机安装方位 / NMRV AND MOTOR MOUNTING POSITION



注: 如在订货时无特别说明, 将按B3安装方式供货。
Note: if there is no special instructions to B3 standards for installation.

NMRV配件系列 / NMRV ACCESSORIES SERIES

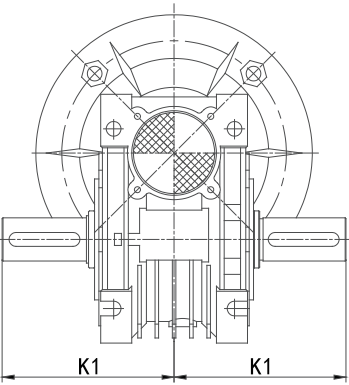
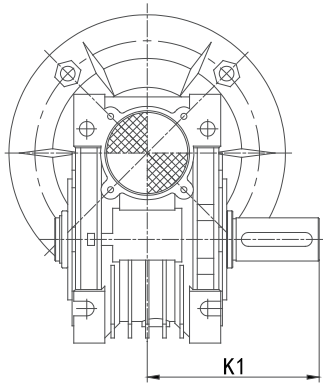
输出轴尺寸 / OUTPUT SHAFT SIZE



单向输出轴 (DZ)



双向输出轴 (SZ)



NMRV	G1	K1	L	L1	b2	t2	d(h6)	m	V1	V2
030	63	64	102	128	5	16	14	M6	30	32.5
040	78	82	128	164	6	20.5	18	M6	40	43
050	92	99.5	153	199	8	28	25	M10	50	53.5
063	112	109.5	173	219	8	28	25	M10	50	53.5
075	120	123.5	192	247	8	31	28	M10	60	63.5
090	140	154.5	234	309	10	38	35	M12	80	84.5
110	155	162	249	324	12	45	42	M16	80	84.5
130	170	170	265	340	14	48.5	45	M16	80	85
150	200	187	297	374	14	53.5	50	M16	82	87

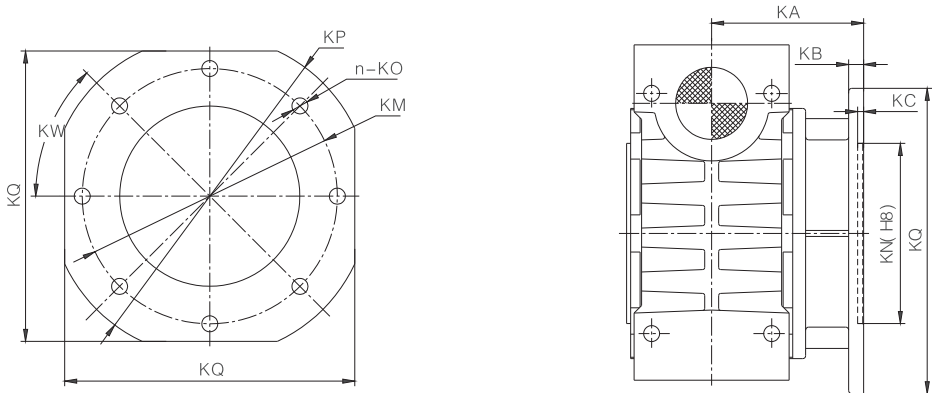
NMRV配件系列 / NMRV ACCESSORIES SERIES

输出法兰 (F) 尺寸 / OUTPUT FLANGE DIMENSIONS (F)



NMRV配件系列 / NMRV ACCESSORIES SERIES

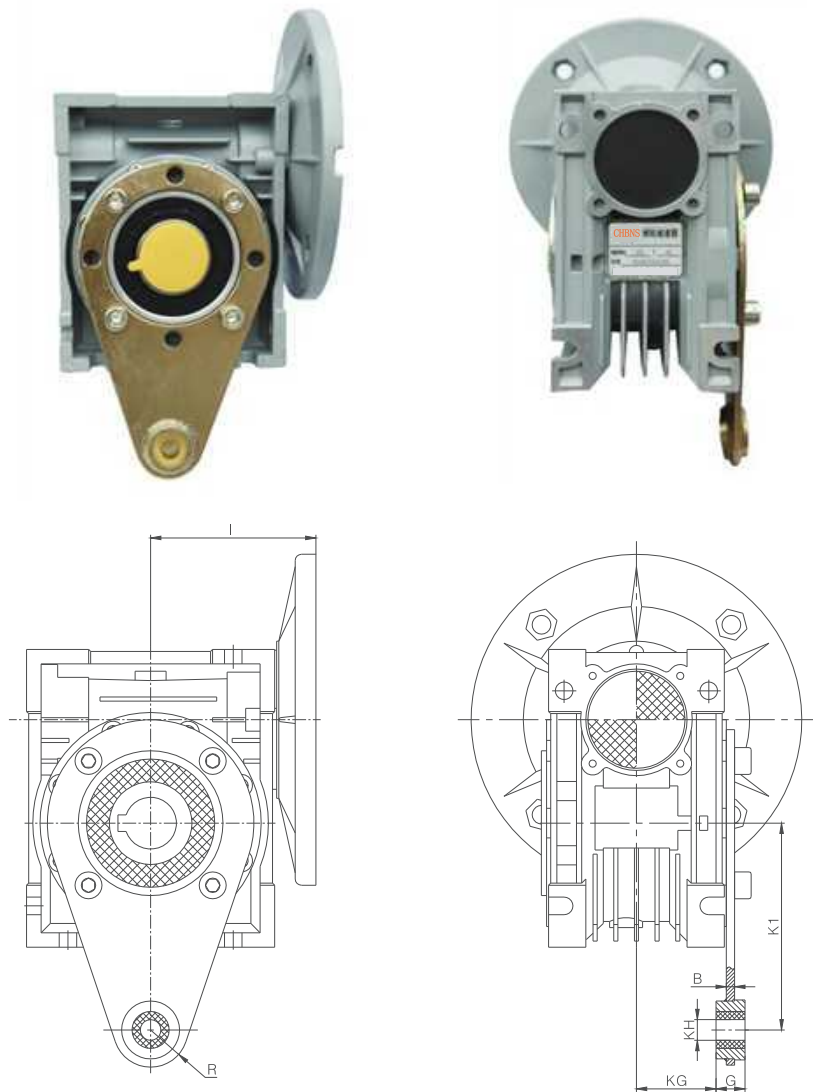
输出法兰 (F) 尺寸 / OUTPUT FLANGE DIMENSIONS (F)



NMRV	030	040	050	063	075	090	110	130	150
FA	KA	54.5	67	90	82	111	139	152	155
	KB	6	7	9	10	13	13	15	15
	KC	4	4	5	6	6	6	6	6
	KN	50	60	70	115	130	152	170	180
	KM	68	75	85	150	165	175	230	255
	KO	6.5(n=4)	9(n=4)	11(n=4)	11(n=4)	14(n=4)	14(n=4)	14(n=8)	16(n=8)
	KP	80	110	125	180	200	210	280	320
	KQ	70	95	110	142	170	200	260	290
	KW	45°	45°	45°	45°	45°	45°	45°	22.5°
FB	KA	-	97	120	112	-	122	-	-
	KB	-	7	9	10	-	18	-	-
	KC	-	4	5	6	-	6	-	-
	KN	-	60	70	115	-	180	-	-
	KM	-	75	85	150	-	215	-	-
	KO	-	9(n=4)	11(n=4)	11(n=4)	-	14(n=4)	-	-
	KP	-	110	125	180	-	250	-	-
	KQ	-	95	110	142	-	-	-	-
	KW	-	45°	45°	45°	-	45°	-	-
FC	KA	-	80	89	98	-	110	-	-
	KB	-	9	10	10	-	17	-	-
	KC	-	5	5	5	-	6	-	-
	KN	-	95	110	130	-	130	-	-
	KM	-	115	130	165	-	165	-	-
	KO	-	9.5(n=4)	9.5(n=4)	11(n=4)	-	11(n=4)	-	-
	KP	-	140	160	200	-	200	-	-
	KQ	-	45°	45°	45°	-	45°	-	-
	KW	-	45°	45°	45°	-	45°	-	-
FD	KA	-	58	72	107	-	151	-	-
	KB	-	12	14.5	10	-	13	-	-
	KC	-	5	5	5	-	6	-	-
	KN	-	80	95	130	-	152	-	-
	KM	-	100	115	165	-	175	-	-
	KO	-	9(n=4)	11(n=4)	11(n=4)	-	14(n=4)	-	-
	KP	-	120	140	200	-	210	-	-
	KQ	-	45°	45°	45°	-	45°	-	-
	KW	-	45°	45°	45°	-	45°	-	-
FE	KA	-	-	-	80.5	-	-	-	-
	KB	-	-	-	16.5	-	-	-	-
	KC	-	-	-	5	-	-	-	-
	KN	-	-	-	110	-	-	-	-
	KM	-	-	-	130	-	-	-	-
	KO	-	-	-	11(n=4)	-	-	-	-
	KP	-	-	-	160	-	-	-	-
	KQ	-	-	-	45°	-	-	-	-
	KW	-	-	-	45°	-	-	-	-

NMRV配件系列 / NMRV ACCESSORIES SERIES

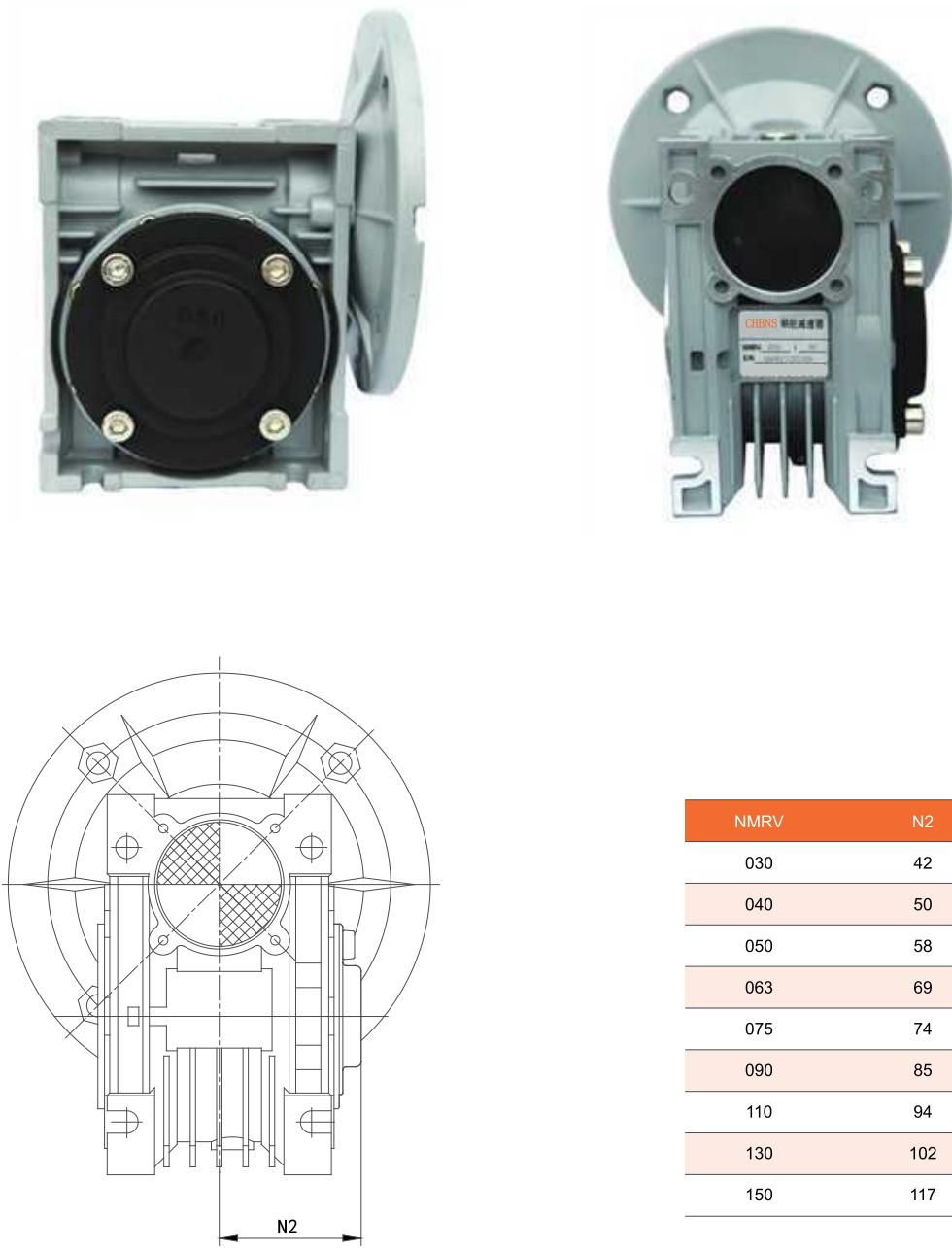
扭力臂 (A) 尺寸 / TORQUE ARM (A) SIZE



NMRV	B	I	K1	G	KG	KH	R
025	4	45	70	14	17.5	8	15
030	4	55	85	14	24	8	15
040	4	70	100	14	31.5	10	18
050	4	80	100	14	38.5	10	18
063	6	95	150	14	49	10	18
075	6	112.5	200	25	47.5	20	30
090	6	129.5	200	25	57.5	20	30
110	6	160	250	30	62	25	35
130	6	179	250	30	69	25	35
150	8	210	250	30	84	25	35

NMRV配件系列 / NMRV ACCESSORIES SERIES

防尘盖尺寸 / DUST COVER SIZE



NMRV	N2
030	42
040	50
050	58
063	69
075	74
090	85
110	94
130	102
150	117