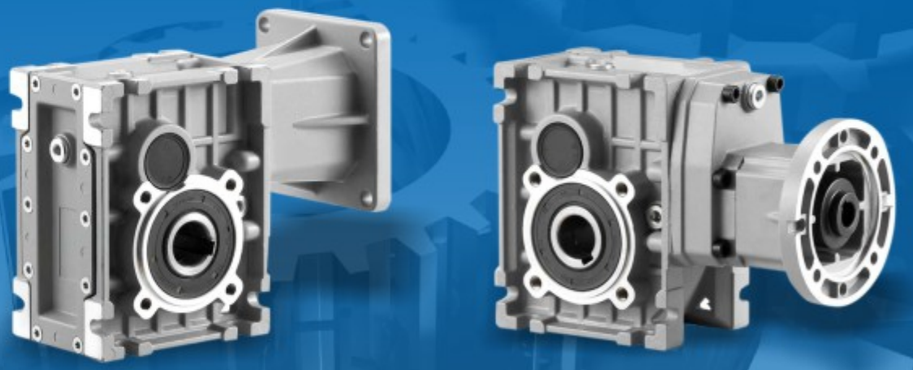
NKM系列准双曲齿轮减速器

NKM Series Hypoid Gear Reducer



ADVANCED EQUIPMENTS
生产及检测设备

我们拥有行业领先的自动化制造设备，为零部件精度的不断提升给于持续的支持。

We have the industry-leading automated manufacturing equipment, components for the continuous improvement of precision to provide continuous support.

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NKM28B~58B(MV)

NKM28C~58C(MV)

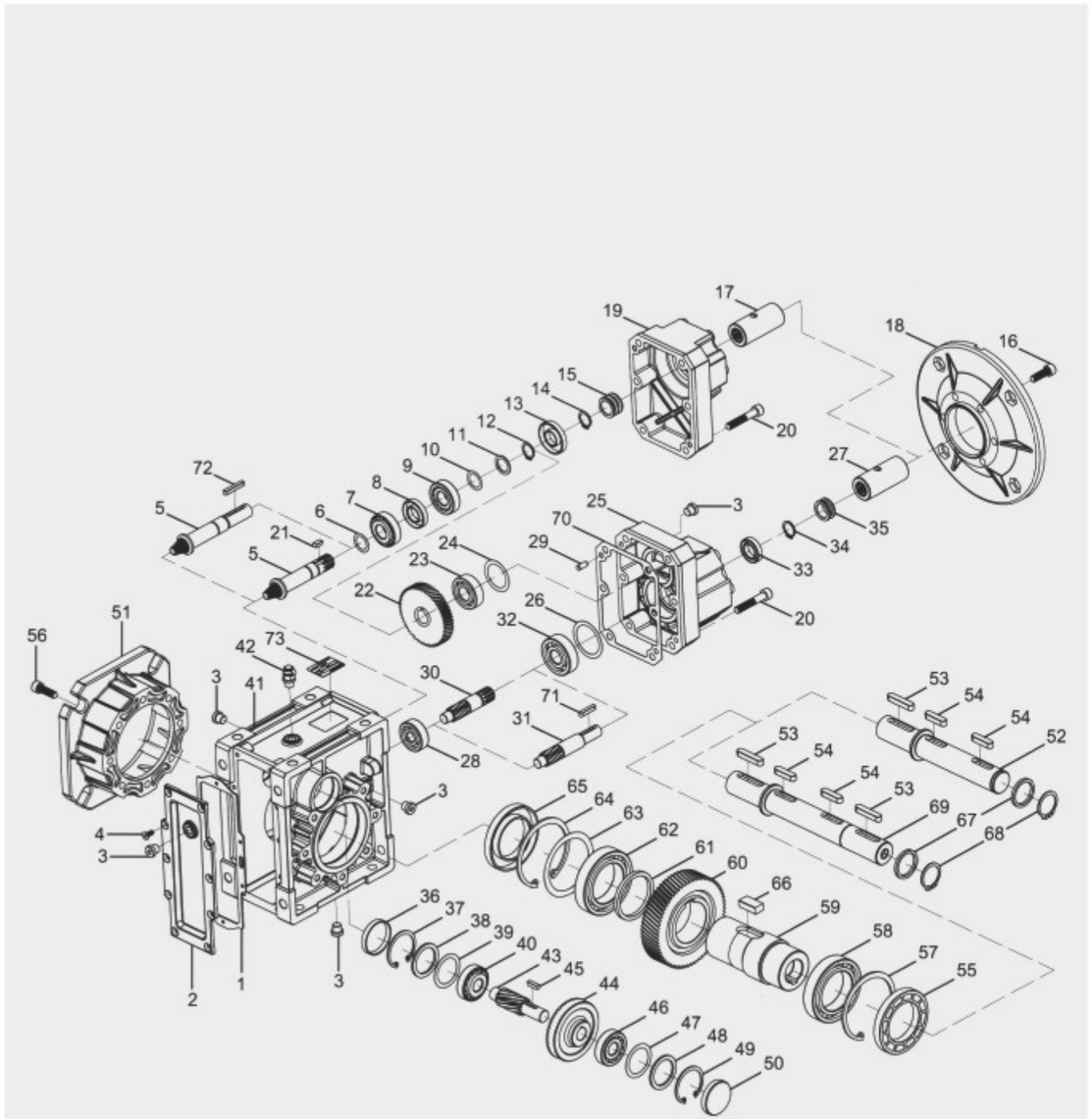
NKM28B~58B(IEC)

NKM28C~58C(IEC)

NKM28B~58B(MV)-直连

NKM28C~58C(MV)-直连

产品结构图 | PRODUCT STRUCTURE



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 / Gear case
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	孔手挡圈 / 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 / 2stage 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	73	铭牌 / Nameplate
37	孔用挡圈 / Hole-circlip		

产品概述 | PRODUCTS OVERVIEW

1.1 产品特点

NKM系列准双曲面齿轮减速器是我公司最新研发的新一代实用性产品。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.NKM系列减速器安装尺寸与NMRV系列蜗轮蜗杆减速器完全兼容（NKM28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。

1.1 Products features

NKM 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 hypoid gear with big ratios.
2. Large in output torque, high efficiency, energy saving and environmental protection.
3. Made of high quality 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 life service and small in volume.
6. Suitable for all round installation. wide application and easy of use.
7. The mounting dimension of NKM series are compatible with NMRV series worm gear unit(A part of NMRV050 dimensions are different from NKM28)
8. Modular and multistructure can meet the demands of various conditions .

1.2 主要材料

1.外壳：铝合金（机座：28-58）；

2.齿轮：20CrMnTiH1，渗碳淬火；齿面硬度56-62 HRC，精磨后保持渗碳层厚度0.3-0.5mm；

1.2 Main materials

1.Housing: die-cast aluminum alloy (frame size: 28 to 58).
2.Gear wheel: 20CrMnTiH1, carbonize & quencher heat treatment make the hardness of gear's surface up to 56-62 HRC, retain carbuzation layer's thickness between 0.3 and 0.5mm after precise grinding.

1.3 表面涂装

铝合金外壳：

1.先抛丸处理，再经去油处理，再喷RAL5010蓝色涂料，（其他颜色可根据客户需求再作调整）。

1.3 Surface painting

Aluminum alloy housing:

1. First shot blasting, then degreasing, and then spray RAL5010 blue paint (other colors can be adjusted according to customer needs).

型号说明 | MODEL ILLUMINATE

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

减速机/Gear unit　　电机/Motor

NKM	38	B	—	20.25	—	FA1	SS1	—	71B5	B3	—	7124或/or 0.37-4	/	270°	/	3
①	②	③		④		⑤	⑥		⑦	⑧		⑨		⑩		⑪

NO	说明	Comments
1	减速机系列代号：NKM	Code for gear units series:NKM
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 4）.H（1/2）:H表示带锁紧盘空心轴，1或2表示锁紧盘位置	1）. No mark means hole output 2）. SS(1/2):Single output shaft and position 3）. DS:Double output shaft 4）. H(1/2):Hollow shaft with shrink disk and position
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 （B3 B6 B7 B8 V5 V6）	Installation position code（B3 B6 B7 B8 V5 V6）
9	1）.无代号表示不带制动器 2）.电机型号或功率、极数	1）. No mark means without brake 2）. Motor model or power, no of poles
10	电机接线盒位置，默认位置0°（R）可以不写	Position of motor terminal box, default position 0°(R)　not to write out is ok
11	电机进线位置，默认位置 S 可以不写	Coil Position for motor, default position S 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：

NKM28B-12.47-B3-74B5

选型相关参数 | RELEVANT PARAMETER

3.1 功率 P

$$P_1=\frac{P_2}{\eta}\ [kW]$$

$$P_{1n}\geq P_1\cdot f_s[kW]$$

P1 输入功率
P2 输出功率
P1n 电机额定功率
fs 使用系数
η 传动效率

NKM系列减速器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%。

3.2 转速 n

n1 减速器输入转速
n2 减速器输出转速

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**M2**会下降。

3.3 传动比 i

$$i=\frac{n_1}{n_2}$$

传动比通常为小数，在选型表中保留两位小数。

3.4 扭矩 M

$$M_2=\frac{9550\cdot P_1\cdot \eta}{n2}\ [Nm]$$

$$M_{2n}\geq M_2\cdot f_s[Nm]$$

M_2 输出扭矩
M_{2n} 选用输出扭矩
P_1 输入功率
η 传动效率
f_s 使用系数

3.5 使用系数 fs

使用减速器时，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。

3.1 Power P

$$P_1=\frac{P_2}{\eta}\ [kW]$$

$$P_{1n}\geq P_1\cdot f_s[kW]$$

P1 Input power
P2 Output power
P1n Rated power driving motor
fs Service factor
η Transmission efficiency

The efficiency of NKM gear units varies with the number of gear stages, between 94%(2-stage), 92 % (3-stage).

3.2 Rotation speed n

n_1 Gear units input speed
n_2 Gear units output speed

If driven by the external gearing, l440r/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 M2 will be reduced.

3.3 Transmission ration i

$$i=\frac{n_1}{n_2}$$

Usually transmission ratio is decimal fraction with 2radix point tagged in selection tables.

3.4 Tourque M

$$M_2=\frac{9550\cdot P_1\cdot \eta}{n2}\ [Nm]$$

$$M_{2n}\geq M_2\cdot f_s[Nm]$$

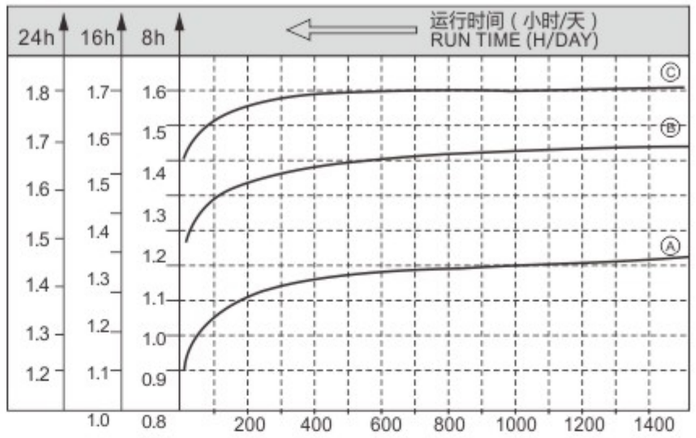
M_2 Output torque
M_{2n} Selected output torque
P_1 Input power
η Transmission efficiency
f_s Service factor

3.5 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.

使用此图选择的服务系数必须小于或等于性能参数表中给出的服务系数。

The service factor selected using this diagram must be less than or equal to the service factor as given in the performance parameter table.



使用系数（fs） Service factor (fs) 启动频率 Z（次/小时）# Start frequency Z (1/h)#

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的变化时的次数。
Starting frepuency Z: The cycles include all starting and braking procedures as well as change overs from low to high speed.

3.5.1 负载类型

Ⓐ 均匀冲击负载，允许惯性加速系数 fa≤0.2
Ⓑ 中等冲击负载，允许惯性加速系数 fa≤3
Ⓒ 重冲击负载，允许惯性加速系数 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。

3.5.2 惯性加速系数

惯性加速系数计算如下：

$$f_a=\frac{J_c}{J_m}$$

3.5.1 Load classifications

Uniform, permitted mass acceleration fact or fa≤0.2
Moderate shock load, permitted mass acceleration factor fa≤3
Heavy shock load, permitted mass acceleration factor fa≤10

Oad classifications:

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, 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, drillingmachines, hammer mills, cam presses, folding machines, turntables, tumbling barrels, vibrators, shredders.

3.5.2 Mass acceleration factor

The mass acceleration factor is calculated as follows:

$$f_a=\frac{J_c}{J_m}$$

fa 惯性加速系数
Jc 所有外部传动惯量（kgm^2）
Jm 驱动电机的传动惯量（kgm^2）

如果惯性加速系数fa>10，请与我们技术部联系。

为了保持减速器的使用寿命，从产品样本中的性能参数表所选择的使用系数fs应等于或略高于计算出的使用系数fs。

举例：

惯性加速系数2.5（负载类型Ⓑ），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。

fa Mass acceleration factor
Jc All external mass moments of inertia (kgm^2)
Jm Mass moment of inertia on the motor end (kgm^2) If

Mass acceleration factors fa> 10, 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 calculateduse factor fs.

Example:

Mass acceleration factor 2.5 (load classification), 14 hours/day operating time (read off at 16 h/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.

3.6. 径向载荷和轴向载荷

在确定影响径问载荷时，必须考虑安装在轴端上的传动件类型，不同类型的传动件的传动附加系数fz列表如下：

3.6 Overhung loads and axial forces

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	注塑 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 puilleys	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：

$$F_r = \frac{M \cdot 2000 \cdot f_z}{d_0} [N]$$

Fr 作用在轴上的载荷 [N]
M 作用在轴上的扭矩 [Nm]
d_0 安装在轴上传动件的平均直径 [mm]
fz 传动附加系数

许用径向载荷是根据轴承额定使用寿命L10h来估算的（根据ISO281），对于特殊的运行条件，许用径向载荷是根据修正使用寿命Lna来确定。

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

$$F_r = \frac{M \cdot 2000 \cdot f_z}{d_0} [N]$$

Fr Resulting radial load [N]
M Torque on the shaft [Nm]
d_0 Mean diameter of the mounted transmission element in [mm]
f_z Transmission element factor

The basis for determining the permitted radial loads is the computation of the rated service life L10h of the bearings (according to IS0281). For special operating conditions, the permitted radlar loads can be determined with regard to the modired 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F_{XL}（根据轴承的使用寿命）

根据轴承的使用寿命公式：

$$F_{XL} = F_{r(1.2)} \frac{a}{b+x} [N]$$

F_{r1}. F_{r2} =性能参数表中的许用径向载荷（x=L/2）[N]
x =从轴肩到受力点的距离[mm]
a,b =减速器径向转化常量[mm]

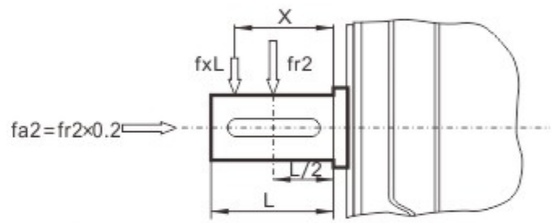
The permitted radial loads given in the selection tables must be calculated using the following formula in the event of force application not in the center of the shaft end. The smaller of the two values FXL (according to bearing service 1ife)

FXL according to bearing service life:

$$FXL = Fr(1.2) \cdot \frac{a}{b+x} [N]$$

Frl. Fr2= Permitted overhung load (x =L/2) for foot-mounted gear units according to he selec-tion tables in [N]
X = Distance from the shaft shoulder to the force application point in [mm]
a, b = Gear unit constant for overhung load conversion [mm]

输出轴径向载荷 / Output shafts radial loads

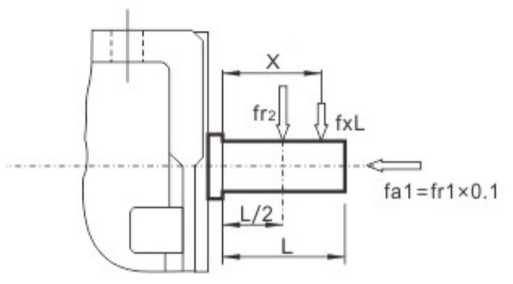


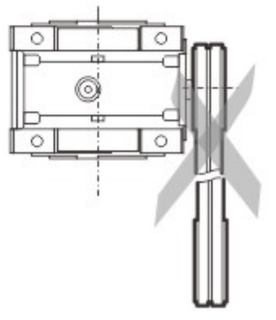
F_{a2} =输出轴向载荷
Output axial loads

NKM减速器径向转化常量 / Gear unit constants for overhung load conversion :

	NKM28B	NKM28C	NKM38B	NKM38C	NKM48B	NKM48C	NKM58B	NKM58C	NKM68B	NKM68C
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





输入结构
Narrow V-bolt pulleys V带轮
Flat belt pulleys 平带轮
Toothed belt pulleys 齿带轮

F_{a1} =输入轴向载荷
Input axial 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).

NKM 减速器径向转化常量 / Gear unit constants for overhung load conversion:

	NKM28B	NKM28C	NKM38B	NKM38C	NKM48B	NKM48C	NKM58B	NKM58C	NKM68B	NKM68C
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

选型举例 | SELECTION EXAMPLE

4.1 减速电机

例：被驱动设备所需功率0.37KW，工作8小时/天，中等冲击，启动频率100次/小时，输出转速n2=28r/min，减速机要求B3安装，则：

查P72使用系数图表即可选使用系数fs=1.3

查NKM系列性能参数表可确定减速电机型号为：

NKM28B-50-71B5-B3

4.1 Gear motor

Example: Required power 0.37K Won driven machine, work for 8 h/day, moderate shock load, start up frequency 100(1/h), n2-28r/min, B3 mounted.

So:

Check the service factor table at page 72, choose fs=1.3

Choose type:

NKM28B-50-71B5-B3

$$i = \frac{n_1}{n_2} = \frac{1400}{28} = 50$$

$$P_{1n} \geq P \uparrow f_s = \frac{P_2}{\eta} \cdot fs \ \frac{0.25}{0.94} \times 1.3 = 0.345[kW]$$

4.2 减速器

例：被驱动设备所需扭矩为200Nm，工作8小时/天，均匀冲击负载，启动频率400次/小时，减速机要求FA1法兰安装，减速器要求输入转速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P72使用系数图表即可选使用系数fs=1.05

查NKM系列性能参数表可确定减速型号为：

NKM48C-151.20-FA1

4.2 Gear units

Example: Recluired torque 200Nrn on driven machine, work 8 h/day, uniform load, start upfrequency 400(1/h), FA1 mounted, n1=900 r/min, n2-2.5 r/min, so the only selection is 3 stage after checked the table:

Check the service factor table at page 72, choose fs=1.05

Choose type:

NKM48C-151.20-FA1

$$i = \frac{n_1}{n_2} = \frac{900}{6} = 150 \qquad M_{2n} \geq M_2 \cdot f_s = 200 \times 1.05 = 210[Nm]$$

$$P_{1n} \geq P_1 \cdot f_s = \frac{M2 \cdot n1}{9550 \cdot \eta \cdot i} \cdot f_s = \frac{210 \times 900}{9550 \times 0.92 \times 150} \times 1.05 = 0.151[kW]$$

减速选型表 | GEAR UNIT SELECTION TABLES

5.1 减速器组合表 /Possible geometrical combinations

NKM28..减速机组合表（n1=1400r/min）

NKM28.. Possible geometrical combinations（n1=1400r/min）

160Nm

减速机型号 Gear units	i 公称 Nomial	i 实际 Actual	n_2 [r/min]	M_2max [Nm]	Fr_2 [N]	63B5	71B5 71B14	80B5 80B14	90B5 90B14
3级 / Stage									
NKM28C	300	303.10	4.6	130	4100				
NKM28C	250	244.29	5.8	130	4100				
NKM28C	200	200.44	7.0	130	4100				
NKM28C	150	146.67	9.6	160	4000				
NKM28C	125	124.29	11	160	3770				
NKM28C	100	101.14	14	160	3560				
NKM28C	75	74.62	19	160	3220				
2级 / Stage									
NKM28B	60	60.62	23	130	2960				
NKM28B	50	48.86	29	130	2790				
NKM28B	40	40.09	35	130	2610				
NKM28B	30	29.33	48	160	2350				
NKM28B	25	24.07	58	160	2200				
NKM28B	20	20.21	70	160	2080				
NKM28B	15	14.92	94	160	1880				
NKM28B	12.5	12.47	113	160	1770				
NKM28B	10	10.47	134	160	1670				
NKM28B	7.5	7.73	182	160	1510				

NKM38..减速机组合表（n1=1400r/min）

NKM38.. Possible geometrical combinations（n1=1400r/min）

200Nm

减速机型号 Gear units	i 公称 Nomial	i 实际 Actual	n_2 [r/min]	M_2max [Nm]	Fr_2 [N]	63B5	71B5 71B14	80B5 80B14	90B5 90B14
3级 / Stage									
NKM38C	300	298.57	4.7	160	4800				
NKM38C	250	242.26	5.8	160	4800				
NKM38C	200	202.04	7.2	160	4800				
NKM38C	150	150.74	9.3	180	4650				
NKM38C	125	125.71	11	180	4330				
NKM38C	100	99.22	14	180	4070				
NKM38C	75	75.66	19	180	3650				
2级 / Stage									
NKM38B	60	59.71	24	160	3430				
NKM38B	50	48.45	29	160	3190				
NKM38B	40	40.41	35	160	2970				
NKM38B	30	30.15	46	180	2720				
NKM38B	25	25.14	56	180	2530				
NKM38B	20	19.84	71	180	2380				
NKM38B	15	15.13	93	180	2130				
NKM38B	12.5	13.03	107	180	2030				
NKM38B	10	10.28	136	180	1910				
NKM38B	7.5	7.84	179	180	1710				

减速选型表 | GEAR UNIT SELECTION TABLES

减速器组合表 / Possible geometrical combinations

NKM48..减速机组合表 (n1=1400r/min)

NKM48.. Possible geometrical combinations (n1=1400r/min)

350Nm

减速机型号 Gear units	i 公称 Nomial	i 实际 Actual	n_2 [r/min]	M_2max [Nm]	Fr_2 [N]	63B5	71B5 71B14	80B5 80B14	90B5 90B14	100B5 100B14	112B5 112B14
3级 / Stage											
NKM48C	300	297.21	4.7	350	6500						
NKM48C	250	240.89	5.8	350	6500						
NKM48C	200	200.66	7.0	300	6500						
NKM48C	150	151.20	9.3	350	6360						
NKM48C	125	121.02	11.6	300	5980						
NKM48C	100	100.81	14	240	5520						
NKM48C	75	79.41	17.7	200	5040						
2级 / Stage											
NKM48B	60	59.44	28	350	4660						
NKM48B	50	48.18	29	350	4340						
NKM48B	40	40.13	35	300	4080						
NKM48B	30	29.86	47	350	3720						
NKM48B	25	24.20	58	300	3500						
NKM48B	20	20.16	69	240	3230						
NKM48B	15	15.88	88	200	2950						
NKM48B	12.5	12.49	112	300	2770						
NKM48B	10	9.84	142	240	2550						
NKM48B	7.5	7.48	187	200	2330						

NKM58..减速机组合表 (n1=1400r/min)

NKM58.. Possible geometrical combinations (n1=1400r/min)

500Nm

减速机型号 Gear units	i 公称 Nomial	i 实际 Actual	n_2 [r/min]	M_2max [Nm]	Fr_2 [N]	63B5	71B5 71B14	80B5 80B14	90B5 90B14	100B5 100B14	112B5 112B14
3级 / Stage											
NKM58C	300	297.21	4.7	500	8300						
NKM58C	250	240.89	5.8	500	8300						
NKM58C	200	200.66	7.2	480	8300						
NKM58C	150	151.20	9.3	500	8050						
NKM58C	125	125.95	11.1	480	7580						
NKM58C	100	99.22	14.1	380	7000						
NKM58C	75	75.45	18.5	300	6390						
2级 / Stage											
NKM58B	60	59.44	28	500	5890						
NKM58B	50	48.18	29	500	5500						
NKM58B	40	40.13	35	480	5170						
NKM58B	30	30.24	46	500	4710						
NKM58B	25	25.19	56	480	4430						
NKM58B	20	19.84	71	380	4090						
NKM58B	15	15.09	93	300	3730						
NKM58B	12.5	12.49	112	480	3510						
NKM58B	10	9.84	143	380	3240						
NKM58B	7.5	7.48	187	300	2950						

性能参数 | PERFORMANCE PARAMETER

P_{1n} [kW]	n_2 [r/min]	M_{2max} [Nm]	i 公称 Nominal	i 实际 Actual	F_{r2} [N]	fs			
0.12	4.6	215	300	303.10	4100	0.6	NKM28C MV6314	NKM28C 63B5	6314
	5.8	180	250	244.29	4100	0.72			
	7.0	148	200	200.44	4100	0.88			
	9.6	108	150	146.67	4000	1.2			
	11	89	125	124.29	3770	1.5			
	14	74	100	101.14	3560	1.3			
	19	55	75	74.62	3220	1.5			
	23	44	60	60.62	2960	3.0	NKM28B MV6314	NKM28B 63B5	6314
	29	37	50	48.86	2790	3.5			
	35	30	40	40.09	2610	4.3			
	48	22	30	29.33	2350	5.9			
	58	18.1	25	24.07	2200	7.2			
	70	15.2	20	20.21	2080	6.6			
	94	11.2	15	14.92	1880	7.1			
	113	9.4	12.5	12.47	1770	13.8			
	134	7.9	10	10.47	1670	12.7			
	182	5.8	7.5	7.73	1510	13.7			
	4.7	223	300	298.57	4800	0.9	NKM38C MV6314	NKM38C 63B5	6314
	5.8	179	250	242.26	4800	1.1			
	7.2	145	200	202.04	4800	1.2			
	9.3	112	150	150.74	4650	1.8			
	11	90	125	125.71	4330	2.0			
	14	75	100	99.22	4070	2.0			
	19	54	75	75.66	3650	2.0			
	24	46	60	59.71	3430	4.4	NKM38B MV6314	NKM38B 63B5	6314
	29	37	50	48.45	3190	5.5			
	35	30	40	40.41	2970	6.1			
	46	23	30	30.15	2720	8.8			
	4.7	219	300	297.21	6500	1.6	NKM48C MV6314	NKM48C 63B5	6314
	5.8	177	250	240.89	6500	2.0			
	7.0	148	200	200.66	6500	2.0			
	9.3	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	NKM58C MV6314	NKM58C 63B5	6314
	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	4.6	161	300	303.10	4000	0.81	NKM28C MV6312	NKM28C 63B5	6312
	5.8	135	250	244.29	3790	0.96			
	7.0	111	200	200.44	3550	1.2			
	9.6	81	150	146.67	3200	1.6			
	11	66	125	124.29	2990	2.0			
	14	56	100	101.14	2820	1.8			
	19	41	75	74.62	2550	1.9			
	11	133	125	124.29	3770	0.98	NKM28C MV6324	NKM28C 63B5	6324
	14	112	100	101.14	3560	0.9			
	19	82	75	74.62	3220	0.97			

性能参数 | PERFORMANCE PARAMETER

P_{1n} [kW]	n_2 [r/min]	M_{2max} [Nm]	i 公称 Nominal	i 实际 Actual	F_{r2} [N]	fs			
0.18	23	66	60	60.62	2960	2.0	NKM28B MV6324	NKM28B 63B5	6324
	29	55	50	48.86	2790	2.4			
	35	45	40	40.09	2610	2.9			
	48	33	30	29.33	2350	3.9			
	58	27	25	24.07	2200	4.8			
	70	23	20	20.21	2080	4.4			
	94	16.9	15	14.92	1880	4.7			
	23	103	60	60.62	3430	1.3	NKM28B MV7116	NKM28B 71B5/B14	7116
	29	86	50	48.86	3240	1.5			
	35	70	40	40.09	3030	1.8			
	48	52	30	29.33	2730	2.5			
	58	42	25	24.07	2550	3.1			
	70	36	20	20.21	2410	2.8			
	94	26	15	14.92	2180	3.1			
	113	22	12.5	12.47	2050	5.9			
	134	18.4	10	10.47	1930	5.4			
	182	13.6	7.5	7.73	1750	5.9			
	4.7	167	300	298.57	4650	1.2	NKM38C MV6312	NKM38C 63B5	6312
	5.8	135	250	242.26	4330	1.5			
	7.2	109	200	202.04	4030	1.7			
	9.3	84	150	150.74	3690	2.4			
	11	68	125	125.71	3440	2.7			
	14	56	100	99.22	3230	2.7			
	19	41	75	75.66	2900	2.7			
	7.2	217	200	202.04	4800	0.83	NKM38C MV6324	NKM38C 63B5	6324
	9.3	167	150	150.74	4650	1.2			
	11	135	125	125.71	4330	1.3			
	14	112	100	99.22	4070	1.3			
	19	81	75	75.66	3650	1.4			
	24	68	60	59.71	3430	2.9	NKM38B MV6324	NKM38B 63B5	6324
	29	55	50	48.45	3190	3.6			
	35	44	40	40.41	2970	4.1			
	11	210	125	125.71	4800	0.86	NKM38C MV7116	NKM38C 71B5/B14	7116
	14	174	100	99.22	4720	0.86			
	19	126	75	75.66	4230	0.87			
	24	106	60	59.71	3970	1.9	NKM38B MV7116	NKM38B 71B5/B14	7116
	29	86	50	48.45	3690	2.3			
	35	69	40	40.41	3440	2.6			
	46	53	30	30.15	3150	3.8			
	56	43	25	25.14	2930	4.2			
	71	36	20	19.84	2760	4.2			
	93	26	15	15.13	2470	4.3			
	9.4	164	300	297.21	6320	2.1	NKM48C MV6312	NKM48C 63B5	6312
	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			
	4.7	328	300	297.21	6500	1.1	NKM48C MV6324	NKM48C 63B5	6324
	5.8	266	250	240.89	6500	1.3			
	7.0	222	200	200.66	6500	1.4			

性能参数 | PERFORMANCE PARAMETER

P_{1n} [kW]	n_2 [r/min]	M_{2max} [Nm]	i 公称 Nominal	i 实际 Actual	F_{r2} [N]	fs			
0.18	9.4	167	150	149.32	6500	2.1	NKM48C MV6324	NKM48C 63B5	6324
	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			
	4.0	414	250	240.89	6500	0.85	NKM48C MV7116	NKM48C 71B5	7116
	4.8	345	200	200.66	6500	0.87			
	6.4	260	150	149.32	6500	1.3			
	7.9	217	125	121.02	6500	1.4			
	9.5	171	100	100.81	6400	1.4			
	12.1	130	75	79.41	5840	1.5			
	16.1	104	60	59.44	5390	3.4	NKM48B MV7116	NKM48B 71B5	7116
	18.9	85	50	48.18	5030	4.1			
	23.9	71	40	40.13	4730	4.3			
	9.4	163	300	297.21	7990	3.1	NKM58C MV6312	NKM58C 63B5	6312
	11.6	133	250	240.89	7470	3.8			
	14.0	111	200	200.66	7030	4.3			
	4.7	326	300	297.21	8300	1.5	NKM58C MV6324	NKM58C 63B5	6324
	5.8	266	250	240.89	8300	1.9			
	7.0	222	200	200.66	8300	2.2			
	9.3	167	150	151.20	8050	3.0			
	11.1	139	125	125.95	7580	3.4			
	14.1	110	100	99.22	7000	3.5			
	18.6	83	75	75.45	6390	3.6			
	3.2	507	300	297.21	8300	0.99	NKM58C MV7116	NKM58C 71B5	7116
	4.0	414	250	240.89	8300	1.2			
	4.8	345	200	200.66	8300	1.4			
	6.3	260	150	151.20	8300	1.9			
	7.6	217	125	125.95	8300	2.2			
	9.7	171	100	99.22	8110	2.2			
	12.7	130	75	75.45	7400	2.3			
0.25	9.6	113	150	146.67	3200	1.2	NKM28C MV6322	NKM28C 63B5	6322
	11	92	125	124.29	2990	1.4			
	14	78	100	101.14	2820	1.3			
	19	57	75	74.62	2550	1.4			
	23	92	60	60.62	2960	1.4	NKM28B MV6334	NKM28B 71B5/B14	7114
	29	77	50	48.86	2790	1.7			
	35	63	40	40.09	2610	2.1			
	48	46	30	29.33	2350	2.8			
	58	38	25	24.07	2200	3.4			
	70	32	20	20.21	2080	3.2			
	94	23	15	14.92	1880	3.4			
	23	142	60	60.62	3430	0.91	NKM28B MV7126	NKM28B 71B5/B14	7126
	29	119	50	48.86	3240	1.1			
	35	98	40	40.09	3030	1.3			
	48	72	30	29.33	2730	1.8			
	58	59	25	24.07	2550	2.2			
	70	49	20	20.21	2410	2.0			
	94	36	15	14.92	2180	2.2			
	113	30	12.5	12.47	2050	4.3			
	134	26	10	10.47	1930	3.9			
	182	18.9	7.5	7.73	1750	4.2			

性能参数 | PERFORMANCE PARAMETER

P_{1n} [kW]	n_2 [r/min]	M_{2max} [Nm]	i 公称 Nominal	i 实际 Actual	F_{r2} [N]	fs			
0.25	4.7	232	300	298.57	4650	0.86	NKM38C MV6322	NKM38C 63B5	6322
	5.8	187	250	242.26	4330	1.1			
	7.2	151	200	202.04	4030	1.2			
	9.3	116	150	150.74	3690	1.7			
	11	94	125	125.71	3440	1.9			
	14	78	100	99.22	3230	1.9			
	19	56	75	75.66	2900	2.0			
	9.3	233	150	150.74	4650	0.86	NKM38C MV6334	NKM38C 71B5/B14	7114
	11	188	125	125.71	4330	0.96			
	14	155	100	99.22	4070	0.97			
	19	113	75	75.66	3650	0.98			
	24	95	60	59.71	3430	2.1	NKM38B MV6334	NKM38B 71B5/B14	7114
	29	76	50	48.45	3190	2.6			
	35	62	40	40.41	2970	2.9			
	46	48	30	30.15	2720	4.2			
	24	148	60	59.71	3970	1.4	NKM38B MV7126	NKM38B 71B5/B14	7126
	29	119	50	48.45	3690	1.7			
	35	96	40	40.41	3440	1.9			
	46	74	30	30.15	3150	2.7			
	56	60	25	25.14	2930	3.0			
	71	49	20	19.84	2760	3.0			
	93	36	15	15.13	2470	3.1			
	9.4	228	300	297.21	6320	1.5	NKM48C MV6322	NKM48C 63B5	6322
	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	NKM48C MV6334	NKM48C 71B5	7114
	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	NKM48B MV6334	NKM48B 71B5	7114
	29	76	50	48.18	4340	4.6			
	6.4	361	150	149.32	6500	0.97	NKM48C MV7126	NKM48C 71B5	7126
	7.9	301	125	121.02	6500	1.0			
	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	NKM48B MV7126	NKM48B 71B5	7126
	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	NKM58C MV6322	NKM58C 63B5	6322
	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	NKM58C MV6334	NKM58C 71B5	7114
	5.8	370	250	240.89	8300	1.4			
	7.0	308	200	200.66	8300	1.6			

性能参数 | PERFORMANCE PARAMETER

P_{1n} [kW]	n_2 [r/min]	M_{2max} [Nm]	i 公称 Nominal	i 实际 Actual	F_{r2} [N]	fs			
0.25	9.3	232	150	151.20	8050	2.2	NKM58C MV6334	NKM58C 71B5	7114
	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	NKM58C MV7126	NKM58C 71B5	7126
	4.0	575	250	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	NKM58B MV7126	NKM58B 71B5	7126
	19.9	118	50	48.18	6370	4.3			
	11	137	125	124.29	2990	0.95	NKM28C MV6332	NKM28C 71B5/B14	7112
	14	115	100	101.14	2820	0.87			
	19	85	75	74.62	2550	0.94			
	23	136	60	60.62	2960	0.96	NKM28B MV7124	NKM28B 71B5/B14	7124
	29	113	50	48.86	2790	1.1			
	35	93	40	40.09	2610	1.4			
	48	68	30	29.33	2350	1.9			
	58	56	25	24.07	2200	2.3			
	70	47	20	20.21	2080	2.1			
	94	35	15	14.92	1880	2.3			
	113	29	12.5	12.47	1770	4.5			
	134	24	10	10.47	1670	4.1			
	182	17.9	7.5	7.73	1510	4.5			
0.37	35	145	40	40.09	3030	0.9	NKM28B MV8016	NKM28B 80B5/B14	8016
	48	106	30	29.33	2730	1.2			
	58	87	25	24.07	2550	1.5			
	70	73	20	20.21	2410	1.4			
	94	54	15	14.92	2180	1.5			
	113	45	12.5	12.47	2050	2.9			
	134	38	10	10.47	1930	2.6			
	182	28	7.5	7.73	1750	2.9			
	9.3	172	150	150.74	3690	1.2	NKM38C MV6332	NKM38C 71B5/B14	7112
	11	139	125	125.71	3440	1.3			
	14	115	100	99.22	3230	1.3			
	19	83	75	75.66	2900	1.3			
	24	140	60	59.71	3430	1.4	NKM38B MV7124	NKM38B 71B5/B14	7124
	29	113	50	48.45	3190	1.8			
	35	91	40	40.41	2970	2.0			
	46	70	30	30.15	2720	2.8			
	56	57	25	25.14	2530	3.2			
	71	47	20	19.84	2380	3.2			
	93	34	15	15.13	2130	3.2			
	24	219	60	59.71	3970	0.92	NKM38B MV8016	NKM38B 80B5/B14	8016
	29	176	50	48.45	3690	1.1			
	35	142	40	40.41	3440	1.3			
	46	109	30	30.15	3150	1.8			
	56	88	25	25.14	2930	2.0			
	71	73	20	19.84	2760	2.1			

性能参数 | PERFORMANCE PARAMETER

P_{1n} [kW]	n_2 [r/min]	M_{2max} [Nm]	i 公称 Nominal	i 实际 Actual	F_{r2} [N]	fs			
0.37	93	53	15	15.13	2470	2.1	NKM38B MV8016	NKM38B 80B5/B14	8016
	107	46	12.5	13.03	2360	3.9			
	136	38	10	10.28	2210	4.0			
	179	27	7.5	7.84	1990	4.0			
	9.4	338	300	297.21	6320	1.0	NKM48C MV6332	NKM48C 71B5	7112
	11.6	274	250	240.89	5890	1.3			
	14.0	228	200	200.66	5540	1.3			
	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	NKM48C MV7124	NKM48C 71B5	7124
	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	NKM48B MV7124	NKM48B 71B5	7124
	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	NKM48C MV8016	NKM48C 80B5/B14	8016
	19.9	174	50	48.18	5030	2.0			
	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			
	60.5	55	15	15.88	3410	3.7			
	9.4	335	300	297.21	7990	1.5	NKM58C MV6332	NKM58C 71B5	7112
	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			
	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	NKM58C MV7124	NKM58C 71B5	7124
	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			
	18.6	171	75	75.45	6390	1.8			
	24	137	60	59.44	5890	3.6	NKM58B MV7124	NKM58B 71B5	7124
	29	112	50	48.18	5500	4.5			
	6.3	534	150	151.20	8300	0.94	NKM58C MV8016	NKM58C 80B5/B14	8016
	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	NKM58B MV8016	NKM58B 80B5/B14	8016
	19.9	174	50	48.18	6370	2.9			
	23.9	145	40	40.13	6000	3.3			

性能参数 | PERFORMANCE PARAMETER

P_{1n} [kW]	n_2 [r/min]	M_{2max} [Nm]	i 公称 Nominal	i 实际 Actual	F_{r2} [N]	fs			
0.55	35	138	40	40.09	2610	0.94	NKM28B MV8014	NKM28B 80B5/B14	8014
	48	101	30	29.33	2350	1.3			
	58	83	25	24.07	2200	1.6			
	70	70	20	20.21	2080	1.4			
	94	51	15	14.92	1880	1.6			
	113	43	12.5	12.47	1770	3.0			
	134	36	10	10.47	1670	2.8			
	182	27	7.5	7.73	1510	3.0			
	58	129	25	24.07	2550	1.0	NKM28B MV8026	NKM28B 80B5/B14	8026
	70	109	20	20.21	2410	0.92			
	94	80	15	14.92	2180	1.0			
	113	67	12.5	12.47	2050	1.9			
	134	56	10	10.47	1930	1.8			
	182	42	7.5	7.73	1750	1.9			
	11	206	125	125.71	3440	0.87	NKM38C MV7122	NKM38C 71B5/B14	7122
	14	171	100	99.22	3230	0.88			
	19	124	75	75.66	2900	0.9			
	24	209	60	59.71	3430	0.96	NKM38B MV8014	NKM38B 80B5/B14	8014
	29	168	50	48.45	3190	1.2			
	35	136	40	40.41	2970	1.3			
	46	105	30	30.15	2720	1.9			
	56	84	25	25.14	2530	2.1			
	71	70	20	19.84	2380	2.1			
	93	51	15	15.13	2130	2.2			
	107	44	12.5	13.03	2030	4.1			
	136	36	10	10.28	1910	4.1			
	179	26	7.5	7.84	1710	4.2			
	35	211	40	40.41	3440	0.85	NKM38B MV8026	NKM38B 80B5/B14	8026
	46	163	30	30.15	3150	1.2			
	56	131	25	25.14	2930	1.4			
	71	109	20	19.84	2760	1.4			
	93	79	15	15.13	2470	4.4			
	107	68	12.5	13.03	2360	2.6			
	136	56	10	10.28	2210	2.7			
	179	41	7.5	7.84	1990	2.7			
	11.6	407	250	240.89	5890	0.86	NKM48C MV7122	NKM48C 71B5	7122
	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	NKM48C MV8014	NKM48C 80B5/B14	8014
	24	205	60	59.44	4660	1.7	NKM48B MV8014	NKM48B 80B5/B14	8014
	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	NKM48B MV8026	NKM48B 80B5/B14	8026
	19.9	259	50	48.18	5030	1.4			
	23.9	215	40	40.13	4730	1.4			

性能参数 | PERFORMANCE PARAMETER

P_{1n} [kW]	n_2 [r/min]	M_{2max} [Nm]	i 公称 Nominal	i 实际 Actual	F_{r2} [N]	fs			
0.55	32.2	162	30	29.86	4310	2.2	NKM48B	MV8026	NKM48B 80B5/B14 8026
	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			
	9.4	498	300	297.21	7990	1.0	NKM58C	MV7122	NKM58C 71B5 7122
	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	1.0	NKM58C	MV8014	NKM58C 80B5/B14 8014
	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	NKM58B	MV8014	NKM58B 80B5/B14 8014
	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	NKM58B	MV8026	NKM58B 80B5/B14 8026
	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			
0.75	48	138	30	29.33	2350	0.94	NKM28B	MV8024	NKM28B 80B5/B14 8024
	58	113	25	24.07	2200	1.1			
	70	95	20	20.21	2080	1.1			
	94	70	15	14.92	1880	1.1			
	113	59	12.5	12.47	1770	2.2			
	134	49	10	10.47	1670	2.0			
	182	36	7.5	7.73	1510	2.2			
	113	91	12.5	12.47	2050	1.4	NKM28B	MV90S6	NKM28B 90B5/B14 90S6
	134	77	10	10.47	1930	1.3			
	182	57	7.5	7.73	1750	1.4			
	29	229	50	48.45	3190	0.87	NKM38B	MV8024	NKM38B 80B5/B14 8024
	35	185	40	40.41	2970	0.97			
	46	143	30	30.15	2720	1.4			
	56	115	25	25.14	2530	1.6			
	71	95	20	19.84	2380	1.6			
	93	69	15	15.13	2130	1.6			
	107	60	12.5	13.03	2030	3.0			
	136	49	10	10.28	1910	3.0			
	179	36	7.5	7.84	1710	3.1			
	46	222	30	30.15	3150	0.9	NKM38B	MV90S6	NKM38B 90B5/B14 90S6
	56	179	25	25.14	2930	1.0			
	71	148	20	19.84	2760	1.0			
	93	107	15	15.13	2470	1.0			
	107	93	12.5	13.03	2360	1.9			
	136	77	10	10.28	2210	2.0			
	179	56	7.5	7.84	1990	2.0			

性能参数 | PERFORMANCE PARAMETER

P_{1n} [kW]	n_2 [r/min]	M_{2max} [Nm]	i 公称 Nominal	i 实际 Actual	F_{r2} [N]	fs			
	18.8	348	150	149.32	5040	1.0	NKM48C	MV8012	NKM48C 80B5/B14 8012
	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	NKM48B	MV8024	NKM48B 80B5/B14 8024
	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	NKM48B	MV90S6	NKM48B 90B5/B14 90S6
	23.9	294	40	40.13	4730	1.0			
	32.2	221	30	30.24	4310	1.6			
	39.7	184	25	25.19	4050	1.6			
	47.6	145	20	19.84	3740	1.7			
	60.5	110	15	15.09	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			
0.75	11.6	555	250	240.89	7470	0.9	NKM58C	MV8012	NKM58C 80B5/B14 8012
	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	NKM58C	MV8024	NKM58C 80B5/B14 8024
	14.1	457	100	99.22	7000	0.83			
	18.6	247	75	75.45	6390	0.86			
	24	278	60	59.44	5890	1.8	NKM58B	MV8024	NKM58B 80B5/B14 8024
	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	NKM58B	MV90S6	NKM58B 90B5/B14 90S6
	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			
1.1	113	86	12.5	12.47	1770	1.5	NKM28B	MV90S4	NKM28B 90B5/B14 90S4
	134	72	10	10.47	1670	1.4			
	182	53	7.5	7.73	1510	1.5			
	113	134	12.5	12.47	2050	0.97	NKM28B	MV90L6	NKM28B 90B5/B14 90L6
	134	112	10	10.47	1930	0.89			
	182	83	7.5	7.73	1750	0.96			
	48	209	30	29.33	2720	0.96	NKM28B	MV90S4	NKM28B 90B5/B14 90S4
	58	169	25	24.07	2530	1.1			
	70	140	20	20.21	2380	1.1			

性能参数 | PERFORMANCE PARAMETER

P_{1n} [kW]	n_2 [r/min]	M_{2max} [Nm]	i 公称 Nominal	i 实际 Actual	F_{r2} [N]	fs			
	94	101	15	14.92	2130	1.1	NKM28B MV90S4	NKM28B 90B5/B14	90S4
	113	87	12.5	12.47	2030	2.1			
	134	72	10	10.47	1910	2.1			
	182	52	7.5	7.73	1710	2.1			
	113	136	12.5	12.47	2360	1.3	NKM28B MV90L6	NKM28B 90B5/B14	90L6
	134	113	10	10.47	2210	1.3			
	182	82	7.5	7.73	1990	1.3			
	24	410	60	59.44	4660	0.85	NKM48B MV90S4	NKM48B 90B5/B14	90S4
	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	83	12.5	12.49	2770	3.5			
	142	68	10	9.84	2550	3.5			
	187	52	7.5	7.48	2330	3.9			
	32.3	325	30	29.86	4310	1.1	NKM48B MV90L6	NKM48B 90B5/B14	90L6
	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			
1.1	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	NKM58C MV8022	NKM58C 80B5/B14	8022
	22	425	125	125.95	6010	1.1			
	28	335	100	99.22	5550	1.1			
	37.1	255	75	75.45	5070	1.2			
	24	408	60	59.44	5890	1.2	NKM58B MV90S4	NKM58B 90B5/B14	90S4
	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			
	16.2	634	60	59.44	6820	0.79	NKM58B MV90L6	NKM58B 90B5/B14	90L6
	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			
	113	117	12.5	12.47	1770	1.1	NKM28B MV90L4	NKM28B 90B5/B14	90L4
	134	99	10	10.47	1670	1.0			
	182	73	7.5	7.73	1510	1.1			
1.5	58	230	25	24.07	2530	0.8	NKM28B MV90L4	NKM28B 90B5/B14	90L4
	70	191	20	20.21	2380	0.79			
	94	138	15	14.92	2130	0.8			
	113	119	12.5	12.47	2030	1.5			

性能参数 | PERFORMANCE PARAMETER

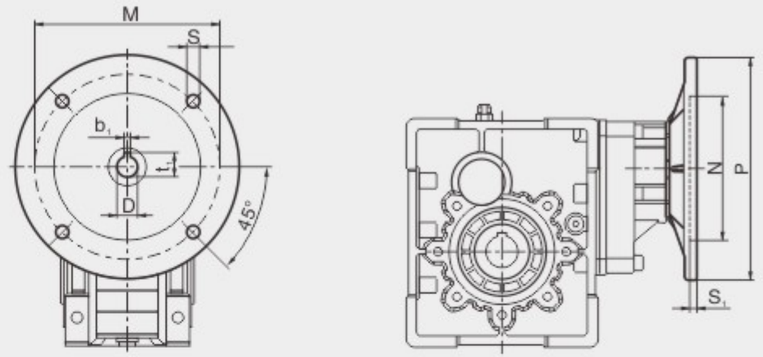
P_{1n} [kW]	n_2 [r/min]	M_{2max} [Nm]	i 公称 Nominal	i 实际 Actual	F_{r2} [N]	fs			
	134	99	10	10.47	1910	1.5	NKM28B MV90L4	NKM28B 90B5/B14	90L4
	182	72	7.5	7.73	1710	1.5			
	29	454	50	48.18	4340	0.77	NKM48B MV90L4	NKM48B 90B5/B14	90L4
	35	378	40	40.13	4080	0.79			
	47	285	30	29.86	3720	1.2			
	58	237	25	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			
	47.6	291	20	20.16	3740	0.83	NKM48B MV100L6	NKM48B 100B5/B14	100L6
	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			
1.5	24	556	60	59.44	5890	0.9	NKM58B MV90L4	NKM58B 90B5/B14	90L4
	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			
	31.7	443	30	30.24	5460	1.1	NKM58B MV100L6	NKM58B 100B5/B14	100L6
	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			
	47	418	30	29.86	3720	0.84	NKM48B MV100LA4	NKM48B 100B5/B14	100LA4
	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	NKM48B MV112M6	NKM48B 112B5/B14	112M6
2.2	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	NKM58B MV100LA4	NKM58B 100B5/B14	100LA4
	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			

性能参数 | PERFORMANCE PARAMETER

P_{1n} [kW]	n_2 [r/min]	M_{2max} [Nm]	i 公称 Nominal	i 实际 Actual	F_{r2} [N]	fs			
2.2	38.1	541	25	25.19	5130	0.89	NKM58B MV112M6	NKM58B 100B5/B14	112M6
	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			
3.0	112	235	12.5	12.49	2770	1.3	NKM48B MV100LB4	NKM48B 100B5/B14	100LB4
	142	185	10	9.84	2550	1.3			
	187	141	7.5	7.48	2330	1.4			
	46	569	30	30.24	4710	0.9	NKM58B MV100LB4	NKM58B 100B5/B14	100LB4
	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			
4.0	112	314	12.5	12.49	2770	0.96	NKM48B MV112M4	NKM48B 100B5/B14	112M4
	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	NKM58B MV112M4	NKM58B 112B5/B14	112M4
	142	247	10	9.84	3240	1.5			
	187	188	7.5	7.48	2950	1.6			

连接尺寸图表 | CONNECTING DIMENSION SHEET

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

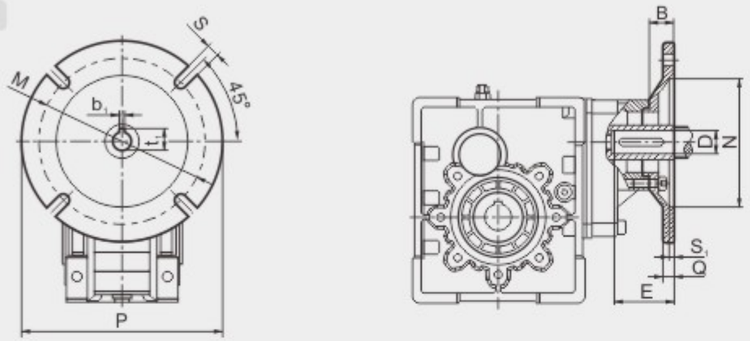


NKM	PAM-IEC	$N_{(H8)}$		M		P		S		b_1	t_1	s_1	i(速比/ratio)																					
		B5	B14	B5	B14	B5	B14	B5	B14				7.5	10	12.5	15	20	25	30	40	50	60	50	60	75	100	125	150	200	250	300				
													$D_{(H8)}$																						
													B										C												
050	63B5	95	-	115	-	140	-	9	-	4	12.8	5	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	71B5/B14	110	70	130	85	160	105	9	7	5	16.3	5	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	-	-	-	-	-	-	-	-
	80B5/B14	130	80	165	100	200	120	11	7	6	21.8	5	19	19	19	19	19	19	19	19	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	90B5/B14	130	95	165	115	200	140	11	9	8	27.3	5	24	24	24	24	24	24	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
063	63B5	95	-	115	-	140	-	9	-	4	12.8	5	-	-	-	-	-	-	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	71B5/B14	110	70	130	85	160	105	9	7	5	16.3	5	-	-	-	14	14	14	14	14	14	14	14	14	14	14	14	-	-	-	-	-	-	-	-
	80B5/B14	130	80	165	100	200	120	11	7	6	21.8	5	19	19	19	19	19	19	19	19	19	19	19	-	-	-	-	-	-	-	-	-	-	-	-
	90B5/B14	130	95	165	115	200	140	11	9	8	27.3	5	24	24	24	24	24	24	24	24	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-
075	63B5	95	-	115	-	140	-	9	-	4	12.8	5	-	-	-	-	-	-	-	-	-	-	-	-	11	11	11	11	11	11	11	11	11	11
	71B5	110	-	130	-	160	-	9	7	5	16.3	5	-	-	-	-	-	-	-	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	80B5/B14	130	80	165	100	200	120	11	7	6	21.8	5	-	-	-	19	19	19	19	19	19	19	19	19	19	19	19	19	-	-	-	-	-	-	-
	90B5/B14	130	95	165	115	200	140	11	9	8	27.3	5	24	24	24	24	24	24	24	24	24	24	24	-	-	-	-	-	-	-	-	-	-	-	-
	100B5/B14	180	110	215	130	250	160	13	9	8	31.3	5.5	28	28	28	28	28	28	28	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	112B5/B14	180	110	215	130	250	160	13	9	8	31.3	5.5	28	28	28	28	28	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
090	63B5	95	-	115	-	140	-	9	-	4	12.8	5	-	-	-	-	-	-	-	-	-	-	-	-	11	11	11	11	11	11	11	11	11	11
	71B5	110	-	130	-	160	-	9	7	5	16.3	5	-	-	-	-	-	-	-	-	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	80B5/B14	130	80	165	100	200	120	11	7	6	21.8	5	-	-	-	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	-	-	-
	90B5/B14	130	95	165	115	200	140	11	9	8	27.3	5	24	24	24	24	24	24	24	24	24	24	24	-	-	-	-	-	-	-	-	-	-	-	-
	100B5/B14	180	110	215	130	250	160	13	9	8	31.3	5.5	28	28	28	28	28	28	28	28	28	28	-	-	-	-	-	-	-	-	-	-	-	-	-
	112B5/B14	180	110	215	130	250	160	13	9	8	31.3	5.5	28	28	28	28	28	28	28	28	28	28	-	-	-	-	-	-	-	-	-	-	-	-	-
110	71B5	110	-	130	-	160	-	9	7	5	16.3	6	-	-	-	-	-	-	-	-	-	-	-	-	14	14	14	14	14	14	14	14	14	14	14
	80B5	130	-	165	-	200	-	11	7	6	21.8	6	-	-	-	-	-	-	-	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
	90B5	130	-	165	-	200	-	11	9	8	27.3	6	-	-	-	24	24	24	24	24	24	24	24	24	24	24	24	24	-	-	-	-	-	-	-
	100B5/B14	180	110	215	130	250	160	13	9	8	31.3	6	28	28	28	28	28	28	28	28	28	28	28	28	-	-	-	-	-	-	-	-	-	-	-
	112B5/B14	180	110	215	130	250	160	13	9	8	31.3	6	28	28	28	28	28	28	28	28	28	28	28	28	-	-	-	-	-	-	-	-	-	-	-
	132B5	230	-	265	-	300	-	13	-	10	41.3	6	38	38	38	38	38	38	38	38	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-

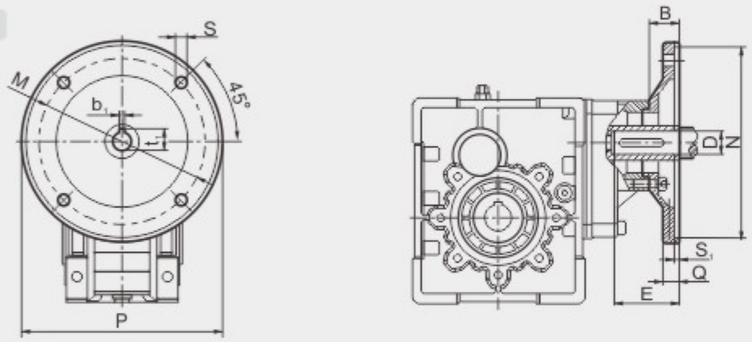
连接尺寸图表 | CONNECTING DIMENSION SHEET

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

56C-145TC



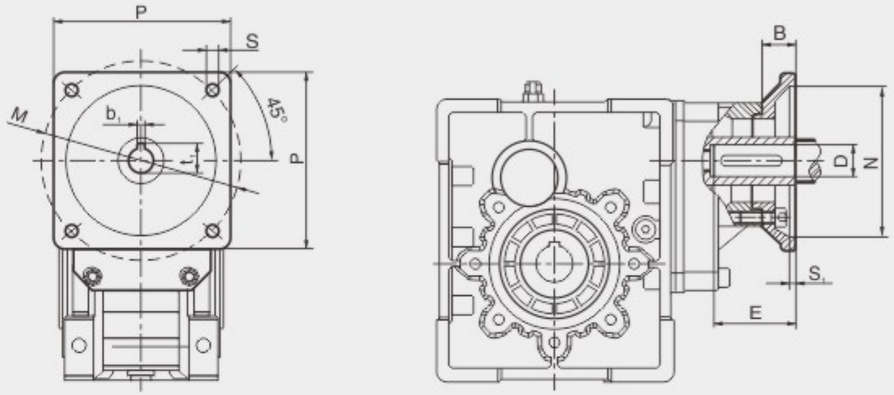
182C-215TC



NKM	NEMA Flange	B	D	E	b_1	t_1	M	N	P	Q	S	S_1
050	56C	1.15	0.625	2.06	0.188	0.713	5.875	4.5	6.5	0.433	0.413	0.177
063	56C	1.22	0.625	2.06	0.188	0.713	5.875	4.5	6.5	0.433	0.413	0.177
	143TC	1.22	0.875	2.12	0.188	0.963	5.875	4.5	6.5	0.433	0.413	0.177
	145TC											
075 090	56C	1.50	0.625	2.06	0.188	0.713	5.875	4.5	6.5	0.433	0.413	0.177
	143TC	1.50	0.875	2.12	0.188	0.963	5.875	4.5	6.5	0.433	0.413	0.177
	145TC											
	182TC	1.50	1.126	2.62	0.250	1.240	7.250	8.5	9.5	0.472	0.551	0.197
	184TC											
110	56C	1.89	0.625	2.06	0.188	0.713	5.875	4.5	6.5	0.433	0.413	0.177
	143TC	1.89	0.875	2.12	0.188	0.983	5.875	4.5	6.5	0.433	0.413	0.177
	145TC											
	182TC	1.89	1.125	2.62	0.250	1.240	7.250	8.5	9.0	0.472	0.551	0.197
	184TC											
	213TC	1.89	1.375	3.12	0.312	1.517	7.250	8.5	9.0	0.472	0.551	0.197
	215TC											

连接尺寸图表 | CONNECTING DIMENSION SHEET

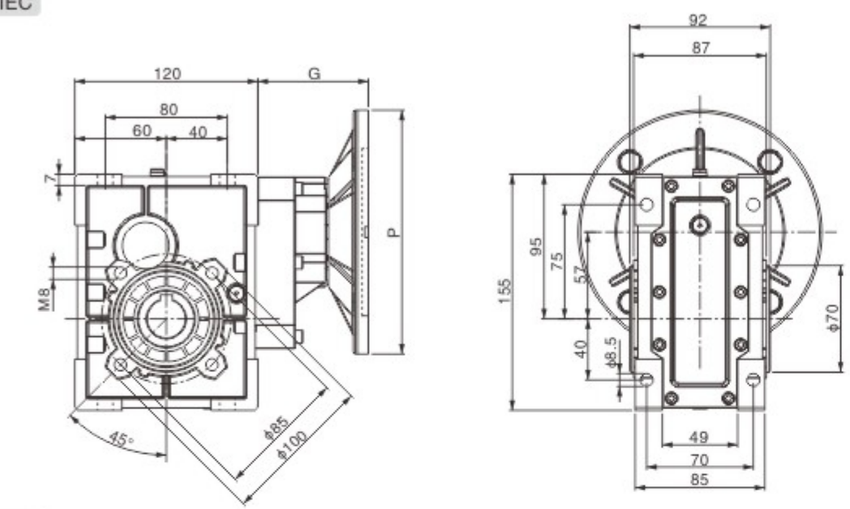
NKM..ST伺服电机输入法兰尺寸 / Servo Motor Input Flange Dimension



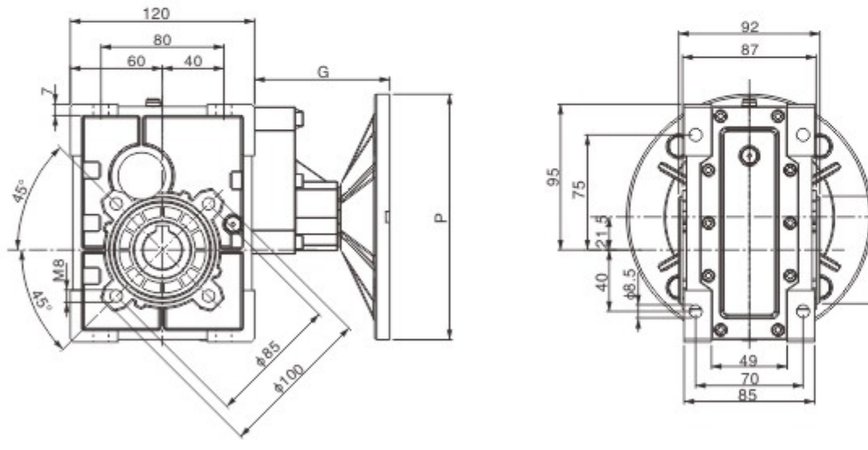
NKM	P	B	D_{k7}	E	b_1	t_1	M	N	S	S_1
050	60	35	14	30	5	16.3	70	50	5.5	4
	80	28	19	35	6	21.8	90	70	6	5
	90	30	16	35	5	18.3	100	80	6.5	5
	110	26	19	55	6	21.8	130	95	9	6
	130	32	22	57	6	24.8	145	110	9	6
063	60	40	14	30	5	16.3	70	50	5.5	4
	80	21	19	35	6	21.8	90	70	6	5
	90	21	16	35	5	18.3	100	80	6.5	5
	110	46	19	55	6	21.8	130	95	9	6
	130	40	22	57	6	24.8	145	110	9	6
075	110	47	19	55	6	21.8	130	95	9	6
	130	40	22	57	6	24.8	145	110	9	6
	150	38	28	58	8	31.3	165	130	11	6
090	110	47	19	55	6	21.8	130	95	9	6
	130	40	22	57	6	24.8	145	110	9	6
	150	38	28	58	8	31.3	130	130	11	6
110	130	38	22	57	6	24.8	145	110	9	6
	150	38	28	58	8	31.3	165	130	11	6
	180	38	35	65	10	38.3	200	114.3	13.5	6

外形尺寸图表 | OUTLINE DIMENSION SHEET

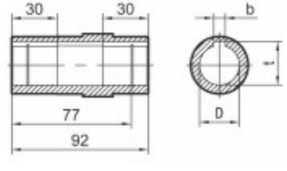
NKM28..B..IEC



NKM28..C..IEC



输出孔/Output hole



IEC	NKM	G
63B5	28B	
	28C	
71B5/B14	28B	
	28C	
80B5/B14	28B	
90B5/B14	28B	

D_{H8}	b	t
20*	6	22.8
25	8	28.3

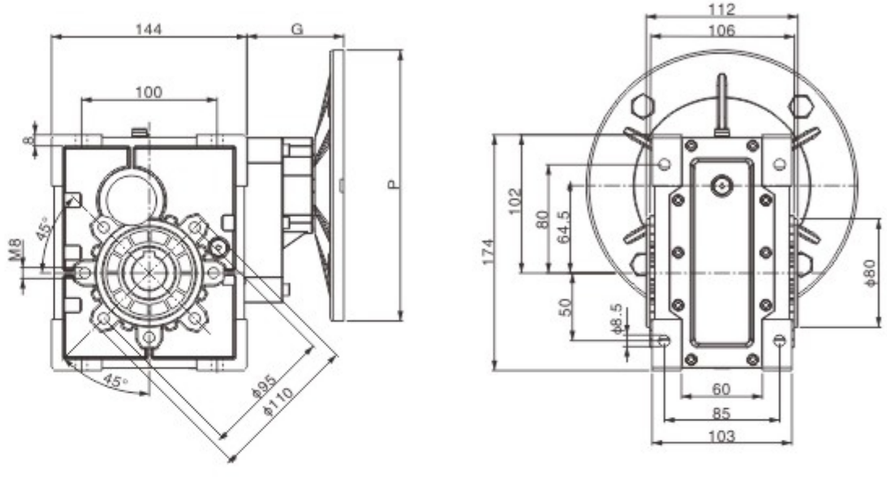
*非标孔，订单时请说明。
*Only on request

NKM	Kg(重量)
28B	4.2
28C	5

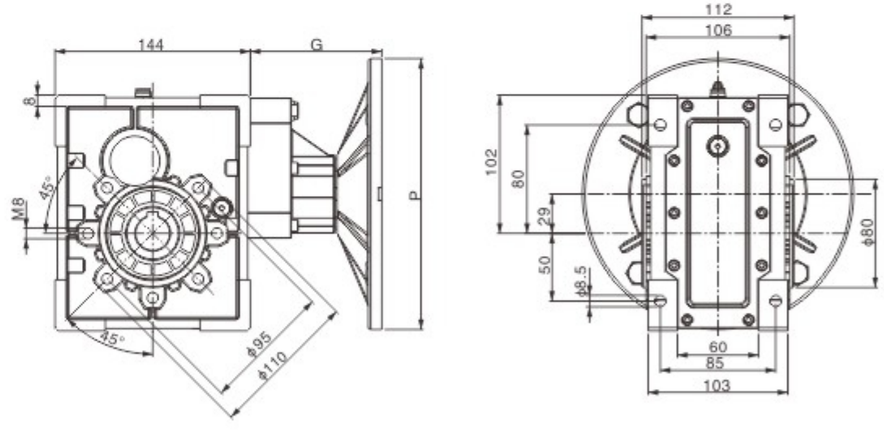
不包括马达
Weight without motor

外形尺寸图表 | OUTLINE DIMENSION SHEET

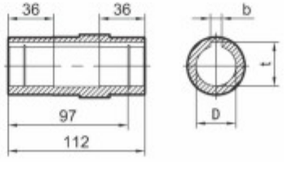
NKM38..B..IEC



NKM38..C..IEC



输出孔/Output hole



IEC	NKM	G
63B5	38B	
	38C	
71B5/B14	38B	
	38C	
80B5/B14	38B	
	38C	
90B5/B14	38B	

D_{H8}	b	t
25	8	28.3
28*	8	31.3

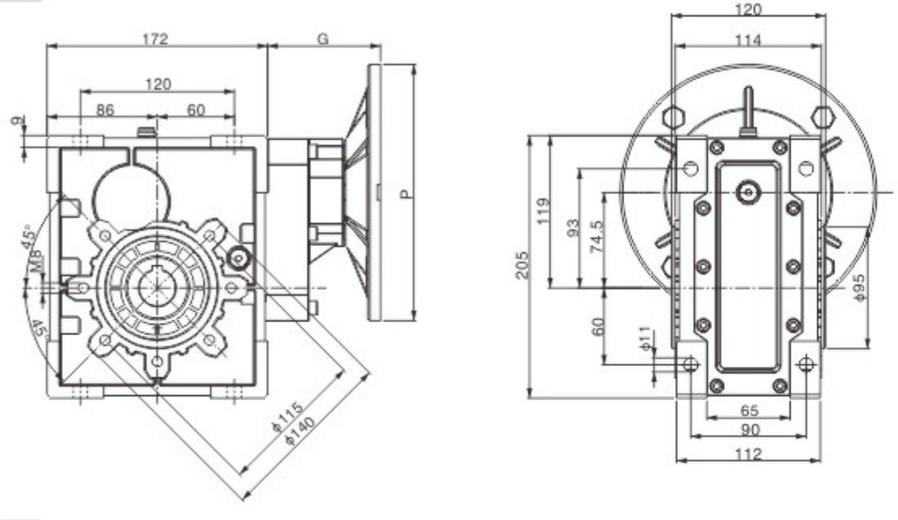
*非标孔，订单时请说明。
*Only on request

NKM	Kg(重量)
38B	6.0
38C	6.8

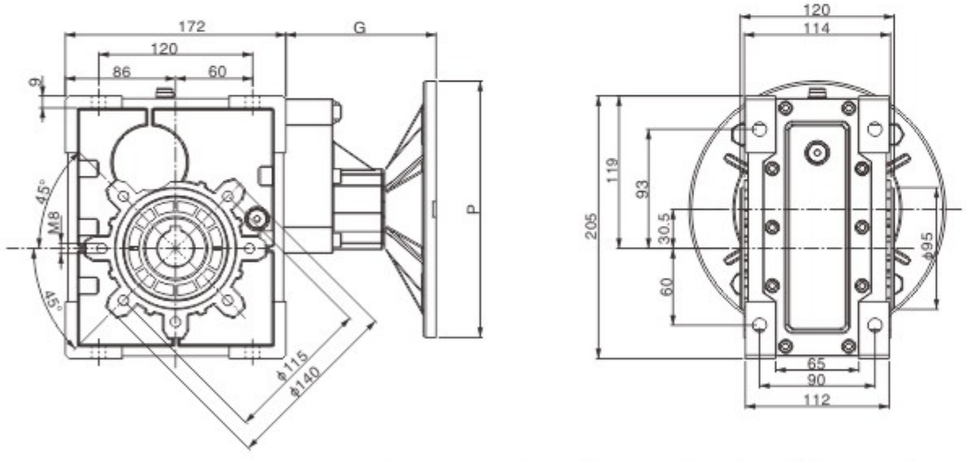
不包括马达
Weight without motor

外形尺寸图表 | OUTLINE DIMENSION SHEET

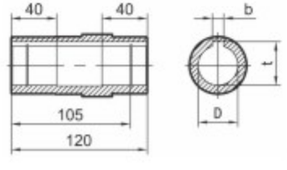
NKM48..B..IEC



NKM48..C..IEC



输出孔/Output hole



IEC	NKM	G
63B5	48C	
71B5	48B	
	48C	
80B5/B14	48B	
	48C	
90B5/B14	48B	
	48C	
100/112B5	48B	
100/112B14	48B	

D_{H8}	b	t
28	8	31.3
30*	8	33.3
35	10	38.3

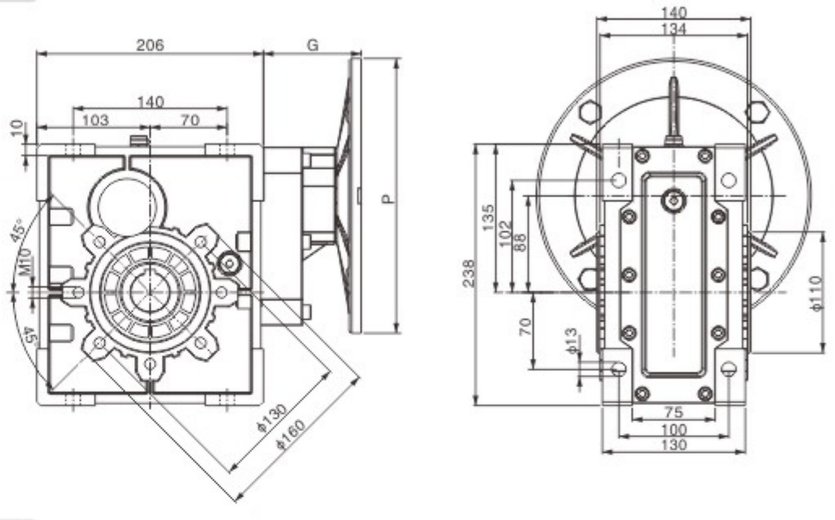
*非标孔，订单时请说明。
*Only on request

NKM	Kg(重量)
48B	9.2
48C	10.8

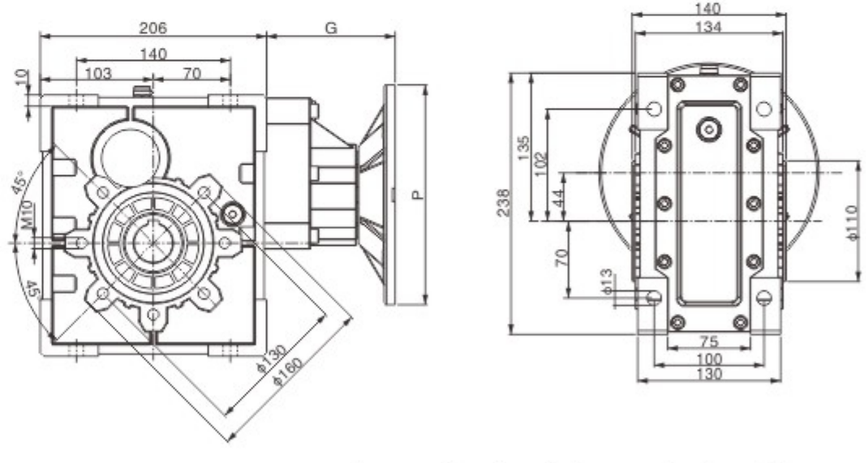
不包括马达
Weight without motor

外形尺寸图表 | OUTLINE DIMENSION SHEET

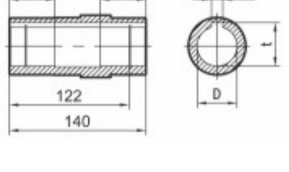
NKM58..B..IEC



NKM58..C..IEC



输出孔/Output hole



IEC	NKM	G
63B5	58C	
71B5	58B	
	58C	
80B5/B14	58B	
	58C	
90B5/B14	58B	
	58C	
100/112B5	58B	
100/112B14	58B	

D_{H8}	b	t
35	10	28.3
38*	10	41.3

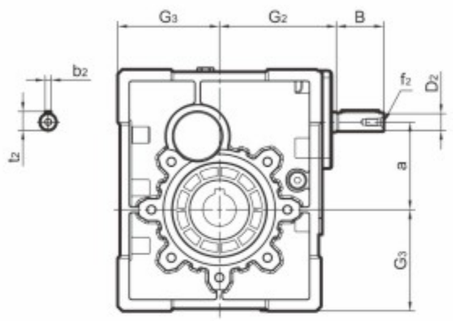
*非标孔，订单时请说明。
*Only on request

NKM	Kg(重量)
58B	13.3
58C	14.8

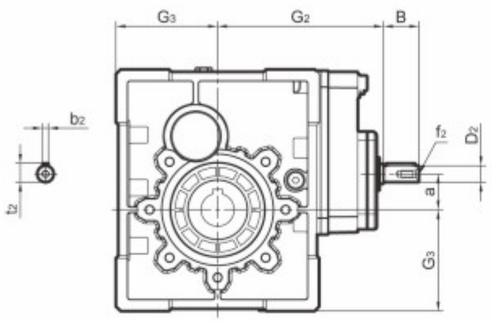
不包括马达
Weight without motor

外形尺寸图表 | OUTLINE DIMENSION SHEET

NKM..B..HS



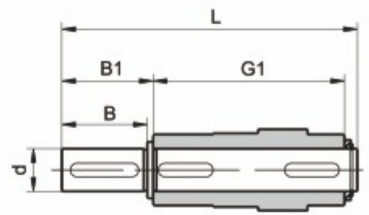
NKM..C..HS



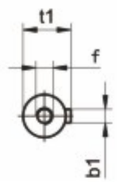
NKM	B	D_{2j6}	G_2	G_3	a	b_2	t_2	f_2
28B	23	11	70	60	56.5	4	12.5	–
28C	23	11	88	60	28	4	12.5	–
38B	30	14	85	72	69.1	5	16	M6
38C	23	11	110	72	35.6	4	12.5	–
48B	40	16	99	86	80	5	18	M6
48C	30	14	129	86	41.5	5	16	M6
58B	40	19	112	103	93	6	21.5	M6
58C	30	14	152	103	52.5	5	16	M6

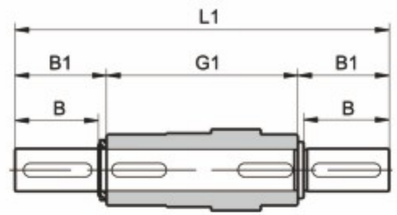
附件尺寸图表 | ACCESSORIES DIMENSION SHEET

输出轴/Output Shafts



SS

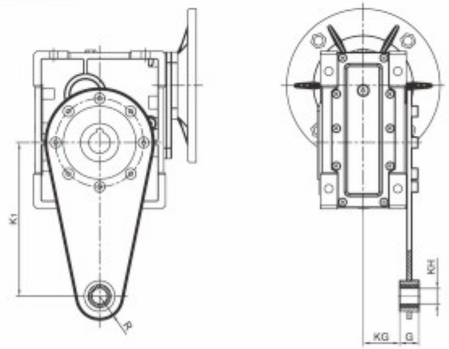




DS

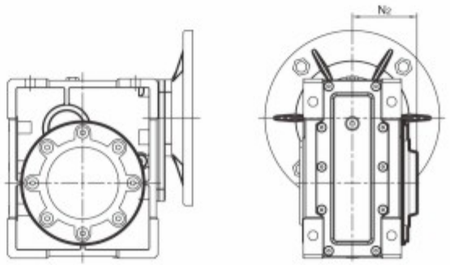
NKM	d_{h6}	B	B_1	G_1	L	L_1	f	b_1	t_1
28	25	50	53.5	92	153	199	M10*27	8	28
38	25	50	53.5	112	173	219	M10*27	8	28
48	28	60	63.5	120	192	247	M10*27	8	31
58	35	80	84.5	140	234	309	M12*34	10	38

扭力臂/Torque Arm



NKM	K1	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

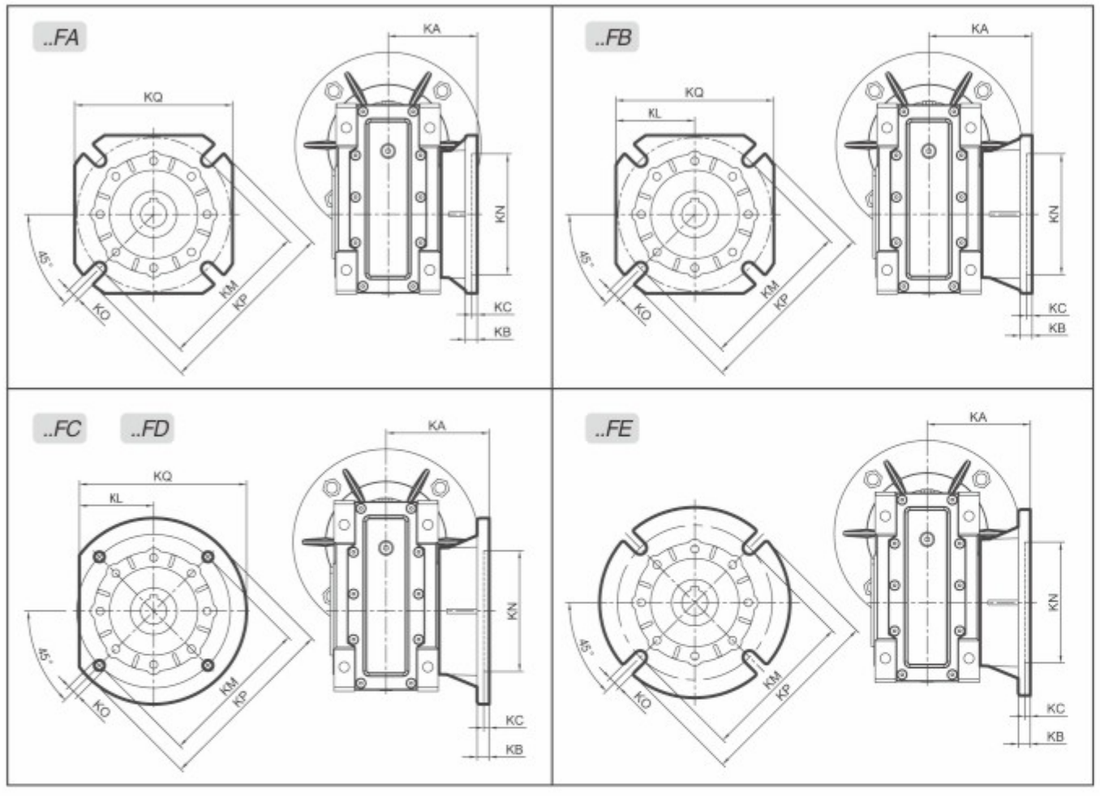
防尘盖/Cover



NKM	N2
28	58
38	69
48	74
58	85

附件尺寸图表 | ACCESSORIES DIMENSION SHEET

输出法兰 / Output flange



NKM	FA							
	KA	KB	KC	KM	KN_{H8}	K0	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

NKM	FB								
	KA	KB	KC	KM	KN_{H8}	K0	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	13	6	215	180	14(n=4)	250	–	105

NKM	FC								
	KA	KB	KC	KM	KN_{H8}	K0	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	–	–

NKM	FD								
	KA	KB	KC	KM	KN_{H8}	K0	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	–

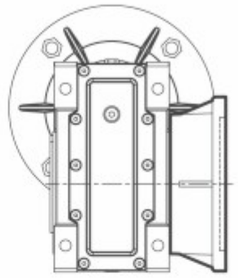
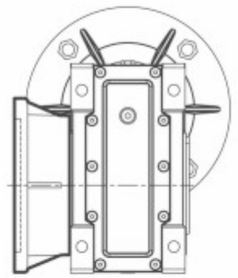
NKM	FE						
	KA	KB	KC	KM	KN_{H8}	K0	KP
38	80.5	16.5	5	130	110	11(n=4)	160

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

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

安装方位图 | INSTALLATION POSITIONS DIAGRAM

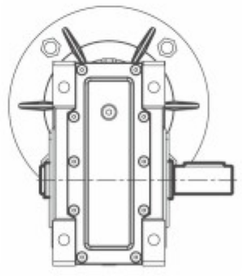
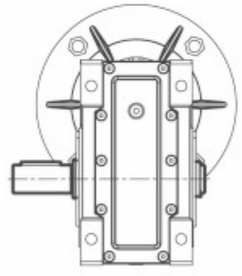
输出法兰位置 / Position diagram for output flange

FA1,FB1,FC1,FD1,FE1	FA2,FB2,FC2,FD2,FE2
	

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**.

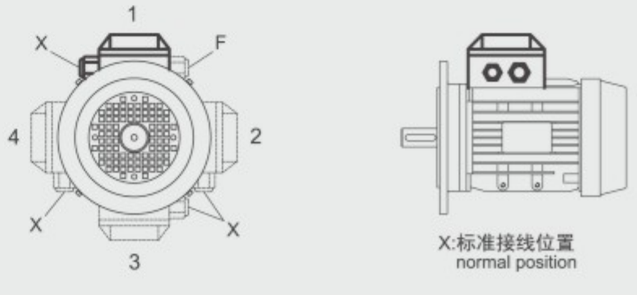
单向输出轴位置 / Position diagram for single output shaft

SS1	SS2
	

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。

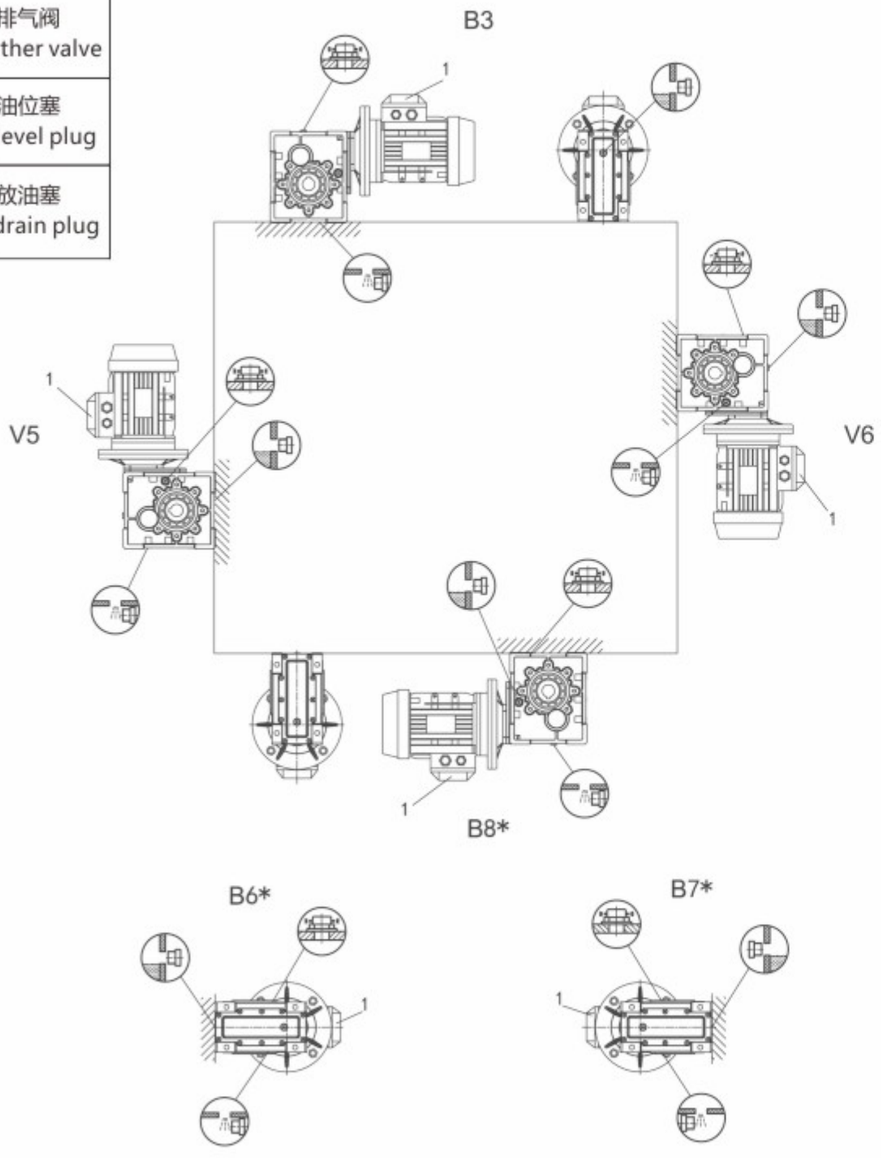
Unless specified otherwise, the gear units is supplied with the flange in pos. **SS1** referred to position **B3**.

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

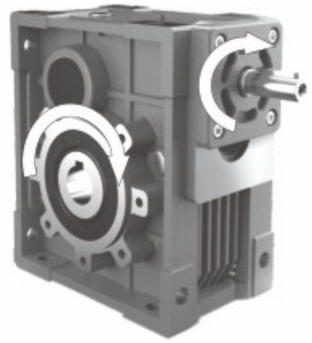


* 表示在此安装方式，不能仅凭油位塞加注润滑油，油位需高出油位塞，加注量按表内所示。

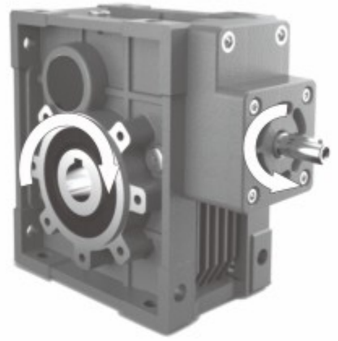
* It means the lubricant can't be added according to the oil level line plug, but also higher the plug to fill quantity as shown in the table.

安装方位图 | INSTALLATION POSITIONS DIAGRAM

旋转方向 / Direction of rotation



NKM..B..HS



NKM..C..HS

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,keyand 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 Tunder –5℃or over 40℃.
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

	环境温度(℃) Ambient Tempreatur(℃) ℃-50 0 +50 +100	ISO粘度 ISO Viscosity Class	SHELL	Mobil MOBIL	BP	润滑油类型 Lubrication type
NKM	-10 +40	VG220	Shell Omala S2G220	Mobil gear 630	BP Energol GR-XP 220	矿物油 Mineral oil
	-20 +25	VG150 VG100	Shell Omala S2G220	Mobil gear 627	BP Energol GR-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 SHC 630		合成油 Synthetic oil
	-40 +40	VG150		Mobil SHC 629		
	-40 +10	VG32		Mobil SHC 624		

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
NKM	NKM28B	0.22	0.20*	0.13*	0.15	0.25	0.14
	NKM28C#	0.07	0.04	0.04	0.05	0.08	0.09
	NKM38B	0.42	0.35*	0.24*	0.22	0.46	0.25
	NKM38C#	0.07	0.04	0.04	0.05	0.08	0.09
	NKM48B	0.70	0.58*	0.42*	0.42	0.75	0.45
	NKM48C#	0.13	0.09	0.09	0.09	0.15	0.17
	NKM58B	1.21	0.95*	0.72*	0.67	1.30	0.74
	NKM58C#	0.13	0.09	0.09	0.09	0.15	0.17

规定的加注量为参考值。精确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 highter the plug the fll 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地冲洗齿轮箱，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）根据不同的工作条件（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，与本公司售后服务部门联系（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.

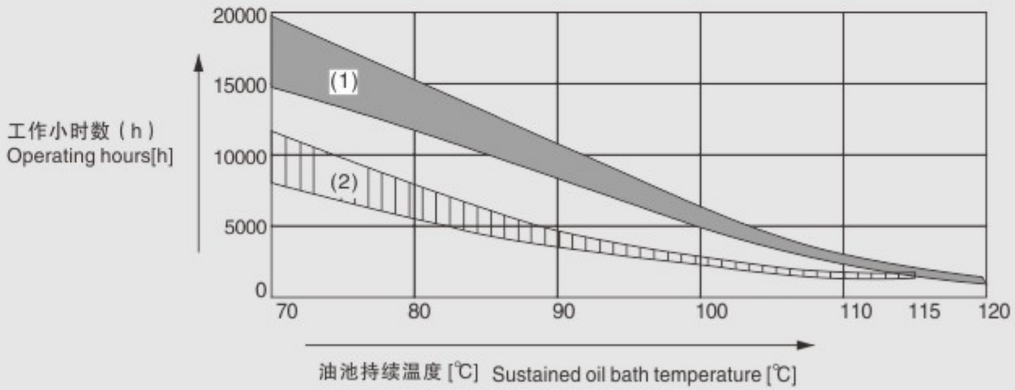
2) Every 3,000 working time, at least every 6 months, you have to check the oil and oil level,the seals visually for leakage.For IEC input gear units, the elastomer should be tested or replaced if necessary.

3) Depending on the working 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 working 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.

适用于正常环境条件下标准减速器的更换时间间隔
Oil change intervals for standard gear units under normal environmental conditions



● 每种机油类型的平均值为70 ℃ / Average value per oil type at 70 ℃
（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 timely.
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. Other 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	解决办法 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: Contactcustomer 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 ollevel	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 leve(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 REFEREBCE)

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

减速机负载特征表(参考件) | MCHARGE CHARACTERISTIC CHART(FOR REFEREBCE)

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

注：A—均匀冲击负责；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 24 hour system.