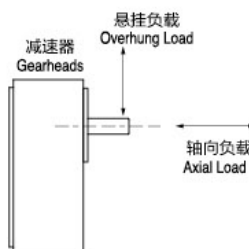# 通用规格 COMMON SPECIFICATIONS

■电动机的容许悬挂负载·容许轴向负载
PERMISSIBLE OVERHUNG LOAD AND PERMISSIBLE AXID LOAD OF MOTOR

● 容许悬挂负载Permissible Overhung Load

型号 Model		容许悬挂负载 Permissible Overhung Load N	
安装尺寸 Motor Frame Size (mm)	输出轴直径 Output Shaft Diameter Ø(mm)	距轴端的距离 Distance from Shaft End	
		10mm	20mm
42	5	40	-
60	6	50	110
70	6	40	60
80	8	90	140
	10	110	120
90	10	140	200
	12	240	270
100	14	320	350

减速器 Gearheads　悬挂负载 Overhung Load　轴向负载 Axial Load

● 容许轴向负载Permissible Thrust Load

请尽量不要施加轴向负载。即使是不得已的情况下，请将轴向负载控制在电动机重量的一半以下。

Avoid thrust loads as much as possible. If thrust load is unavoidable, keep it to half or less of the motor mass.

■减速器的容许悬挂负载·容许轴向负载
PERMISSIBLE OVERHUNG LOAD AND PERMISSIBLE AXID LOAD OF GEARHEAD

型号 Model	减速比 Gear Ratio	最大容许转矩 Maximum Permissible Torque N.m	容许悬挂负载 Permissible Overhung Load N		容许悬挂负载 Permissible Overhung Load N
			距轴端10mm 10mm from Shaft End	距轴端20mm 10mm from Shaft End	
0GN□K	3~60	1.0	20	-	15
2GN□K	3~18	3.0	50	80	3.0
	25~200		120	180	
3GN□K	3~18	5.0	80	120	40
	25~200		150	250	
4GN□K	3~18	8.0	100	150	50
	25~200		200	300	
5GN□K	3~18	10	250	350	100
	25~200		300	450	
5GU□KB 5GU□K	3~9	20	400	500	150
	12.5~18		450	600	
	25~200		500	700	
6GU□K	3~200	40	1100	1500	300

■减速器的容许负载惯性惯量J PERMISSIBLE LOAD INERTIA FOR GEARHEAD J

● 连接到减速器上的负载惯性惯量 (J) 较大的情况下，在频繁的间歇运转的起动瞬间（或以电磁制动及制动器进行急停时）会出现瞬时较大的转矩。该冲击负载过大会导致减速器及电动机损坏。

● 下面列出了电动机轴上的容许负载惯性惯量的值，使用时请控制在此数值下。三相电动机的容许负载惯性惯量是指从一旦停止运转后再进行反转时的数值。

● 请利用下面的公式计算减速器输出轴上的容许惯性惯量 (J) 。

● 通过带电磁制动电动机、制动器及速度控制电动机的瞬时停止来运转容许负载惯性惯量时的使用寿命为200万次。

● When a high load inertia (J) is connected to a gearhead, high torque is exerted instantaneously on the gearhead when starting up in frequent, discontinuous operations (or when stopped by an electromagnetic brake, or when stopped instantaneously by a brake pack). Excessive impact loads can cause the gearhead or motor damage.

● The table below gives values for permissible load inertia on the motor shaft. Use the motor and gearhead within these parameters. The permissible inertial load value shown for three-phase motors is the value when reversing after a stop.

● The permissible load inertia (J) on the gearhead output shaft is calculated with the following equation.

● The life of the gearhead when operating at the permissible inertial load with instantaneous stops of the motors with electromagnetic brakes, brake packs or speed control motors is at least 2 million cycles.

● 减速器输出轴上的容许负载惯性惯量
Permissible Load Inertia for Gearhead Output Shaft

减速比1/3～1/50时　JG= JM × i²

减速比1/60以上时　JG= JM × 2500

Gear ratio 1/3~1/50　　JG= JM × i²

Gear ratio 1/60 or higher　JG= JM × 2500

JG: 减速器输出轴容许负载惯性惯量J（×10⁻⁴ kg.m²）

JM: 电动机轴容许负载惯性惯量J（×10⁻⁴ kg.m²）

I: 减速比（例：减速比1/3时i=3）

JG: Permissible load inertia for gearhead output shaft J（×10⁻⁴ kg.m²）

JM: Permissible load inertia at the motor shaft J（×10⁻⁴ kg.m²）

I: Gear ratio (Example: i=3 means the gear ratio of 1/3)

● 电动机轴上的容许负载惯性惯量
Permissible Load Inertia at the Motor Shaft

电动机电源相数 No. of Phase	安装尺寸 Motor Frame Size mm	输出功率 Output Power	电动机轴上的容许负载惯性惯量 Permissible Load Inertia at the Motor Shaft	
			J（×10⁻⁴kg.m²）	GD²（kg.m²）
单相 Single-phase	42	1W、3W	0.016	0.07
	60	3W※、6W	0.062	0.25
	70	6W※、15W	0.14	0.52
	80	10W※、25W	0.31	1.2
	90	20W※、40W	0.75	3
		60W	1.1	4.6
		90W	1.1	4.6
		120W	1.1	4.6
	100	120W	2	8
		140W	2	8
		180W	2	8
三相 Three-phase	60	6W	0.062	0.25
	70	15W	0.14	0.25
	80	25W	0.31	1.2
	90	40W	0.75	3
		60W	1.1	4.6
		90W	1.1	4.6
		120W	1.1	4.6
	100	120W	2	8
		140W	2	8
		180W	2	8
直流 DC-Power	60	6W、10W、15W	0.062	0.25
	70	15W	0.14	0.52
	80	25W、40W	0.31	1.2
	90	40W	0.75	3
		60W	1.1	4.6
		90W	1.1	4.6
		120W	1.1	4.6
	100	250W	2	8

● ※是指转矩电动机的输出功率　　※Output power for torque motors

● 减速器容许转矩的计算
The calculation for the permissible torque of gearhead

部分机型并为列在容许转矩表上，需要是可按以下公式计算。

Pemissible torque for some products area omitted. in that case, use the equation below to catculate the pemissible torque.

容许转矩Permissile Torque TG=TM x i x η

TG: 减速器容许转矩Permissile Torque Gearhead　　　TM: 电动机转矩Motor Torque

i: 减速器减速比Gear Ratio Gearhead　　　　　　　　　η: 效率Efficiency

● 减速器传动效率Gearhead Efficiency

型号 Model ＼ 减速比Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	200
0GN□K　2GN□K 3GN□K　4GN□K 5GN□K	81%									73%			66%								
5GU□KB(K)	81%				73%				66%				59%								
6GU□K	81%				73%			66%													