产品概述 Product summary

RV系列蜗轮蜗杆减速器在按国家标准GB10085-88圆柱蜗轮蜗杆参数基础上，吸取国内外最先进科技，独具新颖一格的“方箱型”外形结构。箱体外形美观，以优质铝合金压铸而成，具有以下优势性能：

- 机械结构紧凑，体积外形轻巧，小型高效；
- 热交换性能好，散热快；
- 安装简易、灵活轻捷、性能忧越、易于维护检修；
- 运行平稳、噪音小、经久耐用；
- 适用性强，安全可靠性大；

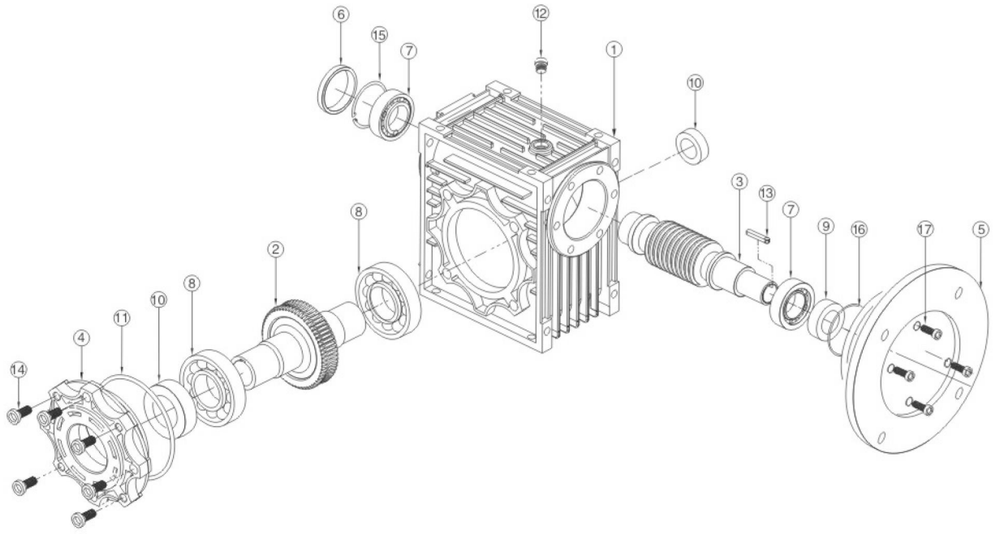
本产品目前已广泛应用于各类行业生产工艺装备的机械减速装置，深受用户的好评，是现代工业装备实现大扭矩，大速比低噪音，高稳定机械减速传动控制装置的最佳选择。

RV series worm gear speed reducer is made in accordance with national standard GB10085-88 Cylindrical worm parameters, based on lessons at home and abroad the most advanced technology, unique innovative a grid "square box-type" form factor. Box shape is beautiful, made of high-quality aluminum alloy die-casting. It has the following advantages:

- mechanical structure compact, volume thin, light, small and efficient;
- Good performance of heat exchanging, heat rapidly;
- Easy to install, flexible and nimble performance, easy maintenance overhaul;
- running smoothly, the noise is small, durable;
- applicability, security, high reliability;

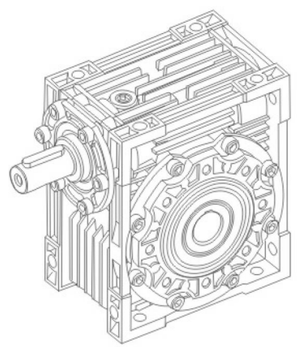
This product has been widely used in various industries of machinery and equipment production technology deceleration devices, deeply gain the user's high praise, is the best choice for modern industrial equipment to achieve high torque, large speed ratio with low noise, high stability and mechanical deceleration drive control unit.

产品结构图 Product structural drawings

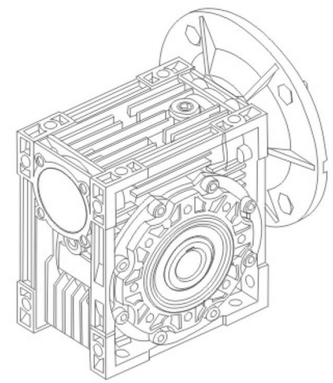


1、箱体 Frame
2、蜗轮 Worm wheel
3、蜗杆 Worm shaft
4、端盖 Output shaft cover
5、法兰 Flange
6、密封端盖 Seal cover
7、轴承 Bearing
8、轴承 Bearing
9、油封 Oil seal
10、油封 Oil seal
11、O型密封圈 O-ring
12、螺塞 Plug
13、平键（入轴用）Key（Input shaft）
14、内六角螺钉 Inner hexagoh screw
15、孔用挡圈 Snap ring
16、O型密封圈 O-ring
17、内六角螺钉 Inner hexagoh screw

基本型RV系列蜗杆减速器 Basic RV Series worm gear reducer



NRV



NMRV

型号表示法 Model & mark

NRV □ - □ - □ - □ - □

- 表示安装型式 Mounting Positions
- 标注AS1、AS2表示带单向输出轴 Filling AS1、AS2 means equip with single output shaft
- 标注AB表示带双向输出轴 Filling AB means equip with double output shaft
- 标注VS表示蜗杆带同向输入轴 Filling VS means equip with double input shaft
- 标注F1、F2表示带输出法兰 Filling F1、F2 means equip with output flange
- 传动比 Ratio
- 机座号 Size
- 表示轴输入型蜗杆减速器 Worm reducer with shaft input

示例 Example

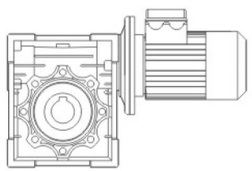
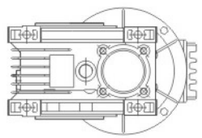
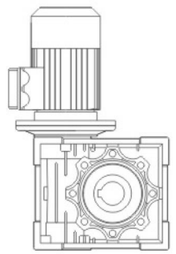
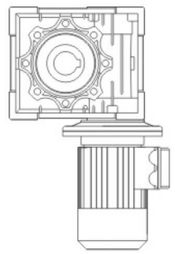
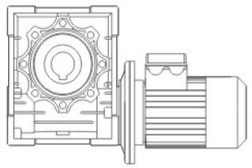
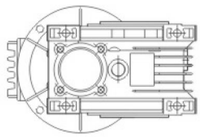
NRV 063-40-As1-B3

- 表示B3安装型式 Mounting positions is B3
- 表示带AS1单向输出轴 Means equip with As1 single output shaft
- 传动比40 Ratio is 40
- 机座号063 Size is 063
- 表示轴输入型蜗杆减速器 Worm reducer with shaft input

NRV 050-10-F1-B6

- 表示B6安装型式 Mounting positions is B6
- 表示带F1输出兰 Means equip with F1 output flange
- 传动比10 Ratio is 10
- 机座号050 Size is 050
- 表示轴输入型蜗杆减速器 Worm reducer with shaft input

单级安装型式 Single step mounting positions

B3	B6	V5	V6
			
B8	**B7**		
			

NMRV □ – □ – □ – □ – □ – □ – □

- 表示安装型式 Mounting Positions
- 标注AS1、AS2表示带单向输出轴 Filling AS1、AS2 means equip with single output shaft
  标注AB表示带双向输出轴 Filling AB means equip with double output shaft
  标注VS表示蜗杆带同向输入轴 Filling VS means equip with double input shaft
- 标注F1、F2表示带输出法兰 Filling F1、F2 means equip with output flange
- 标注电机机座号时表示带输入法半 Filling frame size of motor means equip with flange of motor input
- 传动比 Ratio
- 机座号 Size
- 表示孔输入、带输入法兰型蜗杆减速器 Worm reducer with hole and flange input

示例 Example

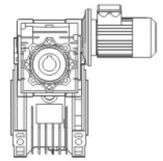
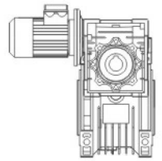
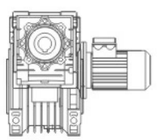
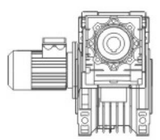
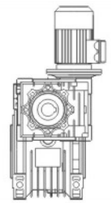
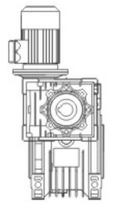
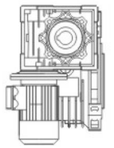
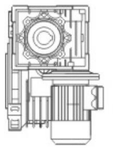
NMRV 063 – 40 – 80B5 – As1 – B3

- 表示B3安装型式 Mounting positions is B3
- 表示带AS1单向输出轴 Means equip with As1 single output shaft
- 带80B5输入法兰 Means equip with 80B5 flange
- 减速比40 Ratio is 40
- 机座号063 Size is 063
- 表示孔输入、带输入法兰型蜗杆减速器 Worm reducer with hole and flange input

NMRV 050 – 20 – 0.75 – F1 – B6

- 表示B6安装型式 Mounting positions is B6
- 表示带F1单向输出法兰 Means equip with F1 output flaneg
- 电动机功率0.75KW Motor power is 0.75kw
- 减速比20 Ratio is 20
- 机座号050 Size is 050
- 表示孔输入、带输入法兰型蜗杆减速器 Worm reducer with hole and flange input

双级安装型式 Double step mounting positions

AS1	AS2	BS1	BS2
			
VS1	**VS2**	**PS1**	**PS2**
			

NMRV □/□ – □ – □ – □ – □ – □

- 表示安装型式 Mounting Positions
- 标注AS1、AS2表示带单向输出轴 Filling AS1、AS2 means equip with single output shaft
  标注AB表示带双向输出轴 Filling AB means equip with double output shaft
  标注VS表示蜗杆带同向输入轴 Filling VS means equip with double input shaft
- 标注F1、F2表示带输出法兰规格 Filling F1、F2 means equip with output flange
- 电机功率或输入法兰规格 Motor power or Type of input flange
- 传动比 Ratio
- 机型组合，如030/040，050/075 Size，such as 030/040,050/075
- 表示孔输入、带输入法兰型蜗杆减速器 Worm reducer with hole and flange input

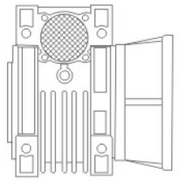
示例 Example

NMRV 40/50 – 900 – 0.37 – AS1 – Ps1

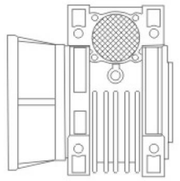
- 表示安装型式PS1 Mounting Positions PS1
- 表示带AS1单向输出轴 Means equip with AS1 single output shaft
- 电机功率0.37kW Motor power is 0.37kW
- 传动比900 Ratio is 900
- 机型组合，40/50 Size is 40/50
- 表示孔输入、带输入法兰型蜗杆减速器 Worm reducer with hole and flange input

法兰位置 Flange F-FL

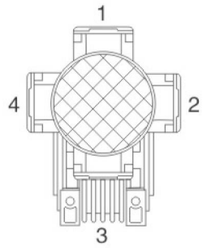
F1

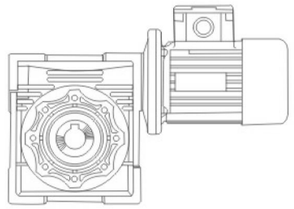


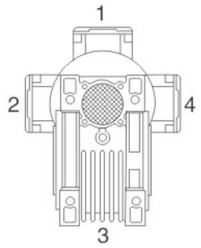
F2



接线盒安装方式 Pos. of terminal box

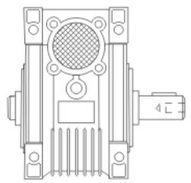




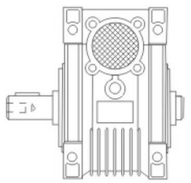


输出轴配置 Pos. of output shaft

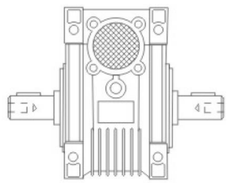
AS1



AS2

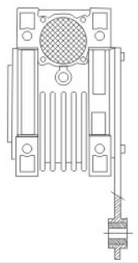


AB

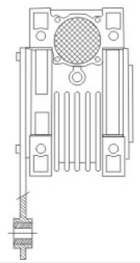


扭力臂配置 Pos. of torque arm

A1

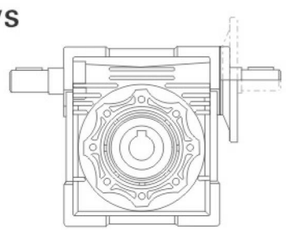


A2



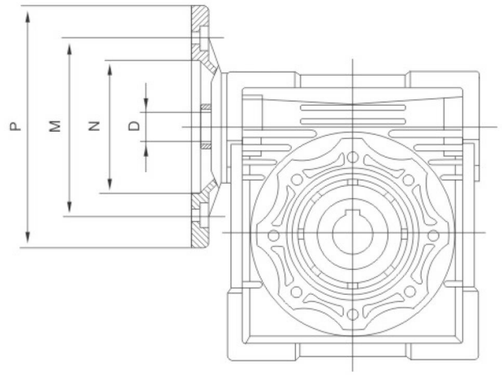
双向输入轴 Double extension worm shaft

VS



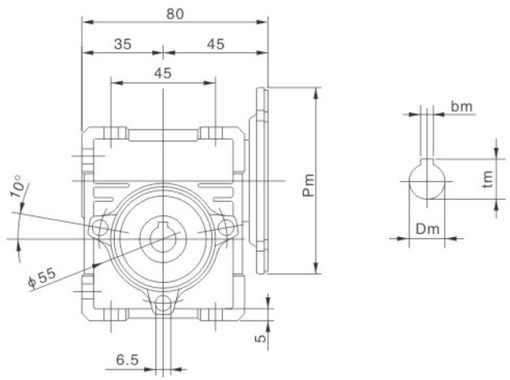
安装尺寸
Mounting dimensions

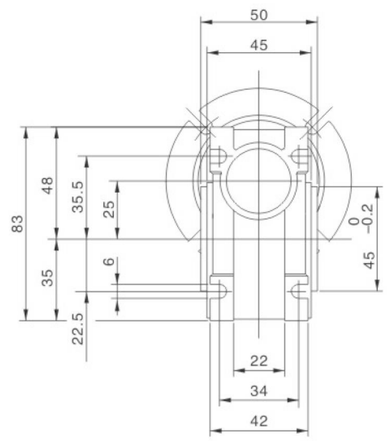
电机直联尺寸 Predisposition

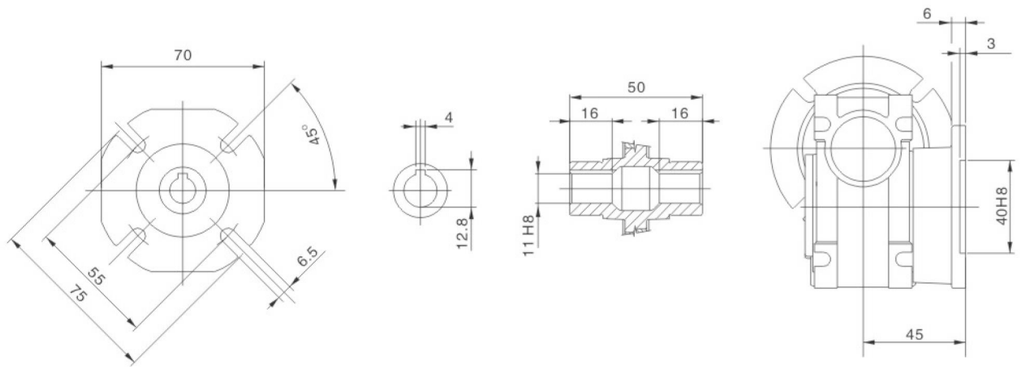


NMRV	PAM IEC	N	M	P	D										
					5	7.5	10	15	20	25	30	40	50	60	80	100
025	56B14	50	65	80	9	9	9	9	9	–	9	9	9	9	–	–
030	63B5	95	115	140	11	11	11	11	11	11	11	11	11	–	–	–
	63B14	60	75	90												
	56B5	80	100	120	9	9	9	9	9	9	9	9	9	9	9	–
	56B14	50	65	80												
040	71B5	110	130	160	14	14	14	14	14	14	14	14	14	14	–	–
	71B14	70	85	105												
	63B5	95	115	140	11	11	11	11	11	11	11	11	11	11	11	11
	63B14	60	75	90												
	56B5	80	100	120	–	–	–	–	–	–	–	–	9	9	9	9
050	80B5	130	165	200	19	19	19	19	19	19	19	19	19	19	–	–
	80B14	80	100	120												
	71B5	110	130	160	14	14	14	14	14	14	14	14	14	14	14	–
	71B14	70	85	105												
	63B5	95	115	140	–	–	–	–	–	–	–	11	11	11	11	11
063	90B5	130	165	200	24	24	24	24	24	24	24	24	24	24	–	–
	90B14	95	115	140												
	80B5	130	165	200	–	19	19	19	19	19	19	19	19	19	–	–
	80B14	80	100	120												
	71B5	110	130	160	–	–	–	–	–	–	–	14	14	14	14	14
	71B14	70	85	105												
075	100/112B5	180	215	250	–	28	28	28	–	–	–	–	–	–	–	–
	100/112B14	110	130	160												
	90B5	130	165	200	–	24	24	24	24	24	24	24	–	–	–	–
	90B14	95	115	140												
	80B5	130	165	200	–	–	–	–	19	19	19	19	19	19	19	19
	80B14	80	100	120												
	71B5	110	130	160	–	–	–	–	–	–	–	–	14	14	14	14
090	100/112B5	180	215	250	–	28	28	28	28	28	28	28	–	–	–	–
	100/112B14	110	130	160												
	90B5	130	165	200	–	24	24	24	24	24	24	24	24	24	–	–
	90B14	95	115	140												
	80B5	130	165	200	–	–	–	–	–	–	–	19	19	19	19	19
	80B14	80	100	120												
110	132B5	230	265	300	–	38	38	38	38	–	–	–	–	–	–	–
	100/112B5	180	215	250	–	28	28	28	28	28	28	28	28	28	–	–
	90B5	130	165	200	–	–	–	–	–	24	24	24	24	24	24	24
	80B5	130	165	200	–	–	–	–	–	–	–	–	–	–	19	19
130	132B5	230	265	300	–	38	38	38	38	38	38	38	–	–	–	–
	100/112B5	180	215	250	–	–	–	–	–	28	28	28	28	28	28	28
	90B5	130	165	200	–	–	–	–	–	–	–	–	–	–	24	24
150	160B5	250	300	350	–	42	42	42	42	42	–	–	–	–	–	–
	132B5	230	265	300	–	–	–	–	38	38	38	38	38	38	38	–
	100/112B5	180	215	250	–	–	–	–	–	–	–	–	–	28	28	28

025 外型及安装尺寸 /Outine & installation sizes





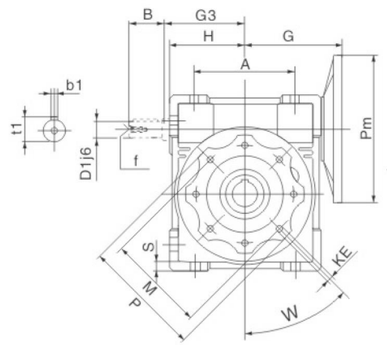


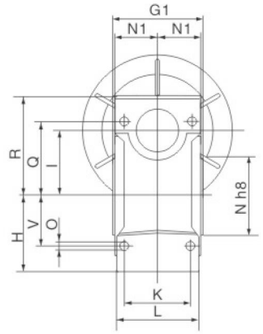
FA

– 净重 (不含电机)–– 约 0.7 公斤
– Weight without motor~0.7kg

有关连接马达之法兰尺寸 (PM, DM, BM, TM) 请参考第 15 页的表格。
For the dimensions concerning the motor connection area (Pm, Dm, bm, tm) please refer to the table shown at page 15.

030–150 外型及安装尺寸 /Outine & installation sizes



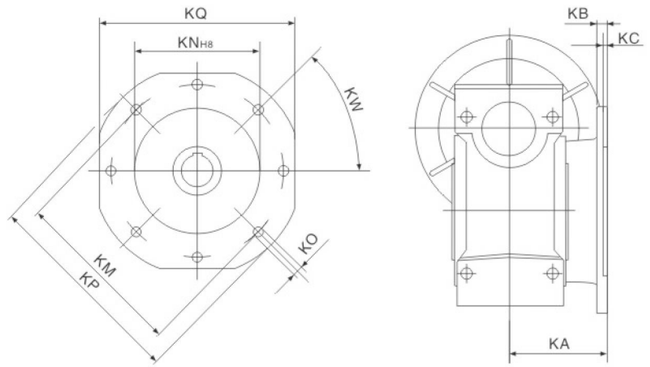


(..)非标产品
(..)Only on request

	030	040	050	063	075	090	110	130	150
A	54	70	80	100	120	140	170	200	240
B	20	23	30	40	50	50	60	80	80
D	14	18(19)	25(24)	25(28)	28(35)	35(38)	42	45	50
D1	9	11	14	19	24	24	28	30	35
G	55	70	80	95	112.5	129.5	160	180	210
G1	63	78	92	112	120	140	155	170	200
G3	45	53	64	75	90	108	135	155	175
H	40	50	60	72	86	103	127.5	147.5	170
I	30	40	50	63	75	90	110	130	150
K	44	60	70	85	90	100	115	120	145
KE	M6*11(4)	M6*10(4)	M8*10(4)	M8*14(8)	M8*14(8)	M10*18(8)	M10*18(8)	M12*21(8)	M12*21(8)
L	56	71	85	103	112	130	144	155	185
M	65	75	85	95	115	130	165	215	215
N	55	60	70	80	95	110	130	180	180
N1	29	36.5	43.5	53	57	67	74	81	96
O	6.5	6.5	8.5	8.5	11.5	13	14	16	18
P	75	87	100	110	140	160	200	250	250
Q	44	55	64	80	93	102	125	140	180
R	57	71.5	84	102	119	135	167.5	187.5	230
S	5.5	6.5	7	8	10	11	14.5	15.5	18
T	21	26	30	36	40	45	50	60	72.5
V	27	35	40	50	60	70	85	100	120
W	0°	45°	45°	45°	45°	45°	45°	45°	45°
b	5	6	8	8	8(10)	10	12	14	14
t	16.3	20.8(21.8)	28.3(27.3)	28.3(31.3)	31.3(38.3)	38.3(41.3)	45.3	48.8	53.8
b1	3	4	5	6	8	8	8	8	10
t1	10.2	12.5	16	21.5	27	27	31	33	38
f	–	–	M6	M6	M8	M8	M10	M10	M12
~kg	1.2	2.3	3.5	6.2	9	13	35	48	84

~Kg 净重 (不含电机) / Weight without motor
有关连接马达之法兰尺寸 (PM, DM, BM, TM) 请参考第 15 页的表格。
For the dimensions concerning the motor connection area (Pm, Dm, bm, tm) please refer to the table shown at page 15.

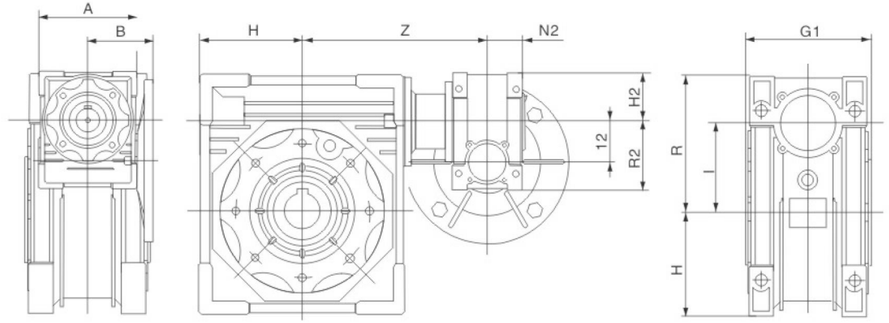
030–150F 输出法兰尺寸/Output flange mounting



		030	040	050	063	075	090	110	130	150
FA	KA	54.4	67	90	82	111	111	131	140	155
	KB	6	7	9	10	13	13	15	15	15
	KC	4	4	5	6	6	6	6	6	6
	KN	50	60	70	115	130	152	170	180	180
	KM	68	75	85	150	165	175	230	255	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)	16(n=8)
	KP	80	110	125	180	200	210	280	320	320
	KQ	70	95	110	142	170	200	260	290	290
	KW	45°	45°	45°	45°	45°	45°	45°	22.5°	22.5°
FB	KA	–	97	120	112	90	122	180	–	–
	KB	–	7	9	10	13	18	15	–	–
	KC	–	4	5	6	6	6	6	–	–
	KN	–	60	70	115	110	180	170	–	–
	KM	–	75	85	150	130	215	230	–	–
	KO	–	9 (n=4)	11 (n=4)	11 (n=4)	14 (n=4)	14 (n=4)	14 (n=8)	–	–
	KP	–	110	125	180	160	250	280	–	–
	KQ	–	95	110	142	–	–	260	–	–
	KW	–	45°	45°	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	–	–	–
	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	–	–	–
	KW	–	45°	45°	45°	–	45°	–	–	–
FE	KA	–	–	–	80.5	–	–	–	–	–
	KB	–	–	–	16.5	–	–	–	–	–
	KC	–	–	–	5	–	–	–	–	–
	KN	–	–	–	110	–	–	–	–	–
	KM	–	–	–	130	–	–	–	–	–
	KO	–	–	–	11(n=4)	–	–	–	–	–
	KP	–	–	–	160	–	–	–	–	–
	KW	–	–	–	45°	–	–	–	–	–

WGT®

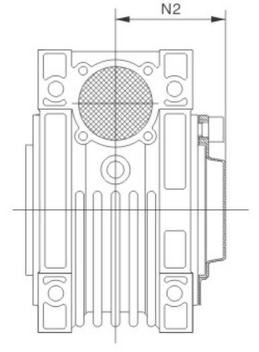
NMRV+NMRV 外型及安装尺寸/Outine & installation sizes



NMRV+NMRV									
	025–030	025–040	030–040	030–050	030–063	040–075	040–090	050–110	063–130	063–150
A	70	70	80	80	80	100	100	120	144	144
B	45	45	55	55	55	70	70	80	95	95
G1	63	78	78	92	112	120	140	155	170	200
H	40	50	50	60	72	86	103	127.5	147.5	170
I	30	40	40	50	63	75	90	110	130	150
R	57	71.5	71.5	84	102	119	135	167.5	187.5	230
H2	35	35	40	40	40	50	50	60	72	72
I2	25	25	30	30	30	40	40	50	63	63
N2	22.5	22.5	29	29	29	36.5	36.5	43.5	53	53
R2	48	48	57	57	57	71.5	71.5	84	102	102
Z	100	115	122	132	145	167.5	184.5	226	245	275
~Kg	1.9	3	3.5	4.7	7.4	11.3	15.3	38.5	54.2	90.2

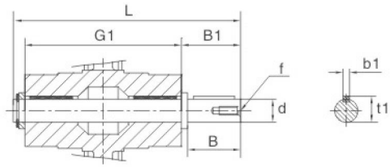
~Kg 净重(不含电机)/ Weight without motor

盖子 / Cover

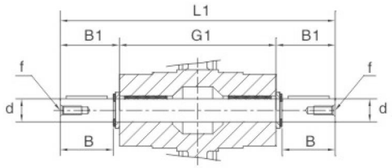


	N2
030	42
040	50
050	58
063	69
075	74
090	86
110	94
130	102
150	117

低速轴/Low speed shafts



AS

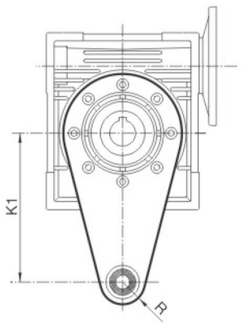


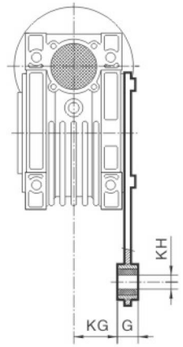
AB

	d	B	B1	G1	L	L1	f	b1	t1
025	11g6 (9)	23 (25)	25.5 30	50	81 (85.5)	101	–	4 (3)	12.5 (10.2)
030	14 g6	30	32.5	63	102	128	M6	5	16
040	18 h6	40	43	78	128	164	M6	6	20.5
050	25 h6	50	53.5	92	153	199	M10	8	28
063	25 h6	50	53.5	112	173	219	M10	8	28
075	28 h6	60	63.5	120	192	247	M10	8	31
090	35 h6	80	84.5	140	234	309	M12	10	38
105	42 h6	80	84.5	155	249	324	M16	12	45
110	42 h6	80	84.5	155	249	324	M16	12	45
130	45 h6	80	85	170	265	340	M16	14	48.5
150	50 h6	82	87	200	297	374	M16	14	53.5

(..) 非标产品，下单时须注明要求
(..) Only on request

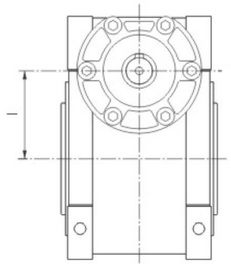
扭力臂/Torque arm

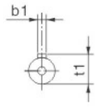


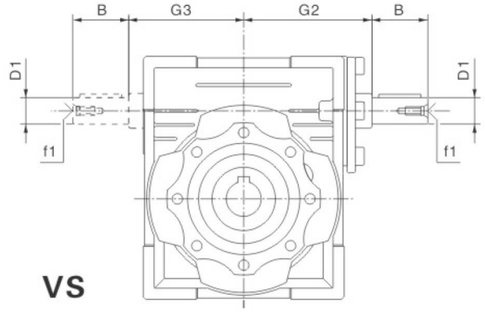


	K1	G	KG	KH	R
025	70	14	17.5	8	15
030	85	14	24	8	15
040	100	14	31.5	10	18
050	100	14	38.5	10	18
063	150	14	49	10	18
075	200	25	47.5	20	30
090	200	25	57.5	20	30
105	250	30	62	25	35
110	250	30	62	25	35
130	250	30	69	25	35
150	250	30	84	25	35

NRV 尺寸图/Dimensions



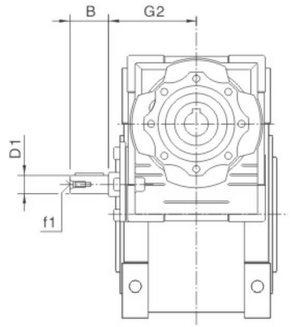


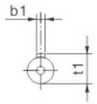


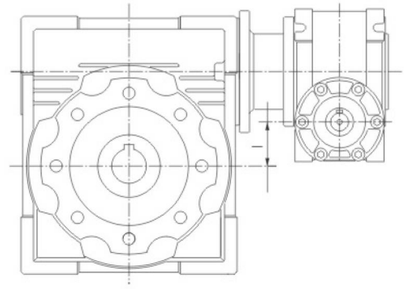
VS

NRV	030	040	050	063	075	090	110	130	150
B	20	23	30	40	50	50	60	80	80
D1	9 j6	11 j6	14 j6	19 j6	24 j6	24 j6	28 j6	30 j6	35 j6
G2	51	60	74	90	105	125	142	162	195
G3	45	53	64	75	90	108	135	155	175
l	30	40	50	63	75	90	110	130	150
b1	3	4	5	6	8	8	8	8	10
f1	–	–	M6	M6	M8	M8	M10	M10	M12
t1	10.2	12.5	16	21.5	27	27	31	33	38

NRV+NMRV 尺寸图/Dimensions



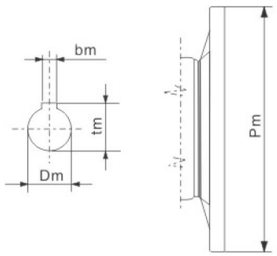




NRV-NMRV	030-040	030-050	030-063	040-075	040-090	050-105	050-110	063-130	063-150
B	20	20	20	23	23	30	30	40	40
D1	9 j6	9 j6	9 j6	11 j6	11 j6	14 j6	14 j6	19 j6	19 j6
G2	51	51	51	60	60	74	74	90	90
l	10	20	33	35	50	60	60	67	87
b1	3	3	3	4	4	5	5	6	6
f1	–	–	–	–	–	M6	M6	M6	M6
t1	10.2	10.2	10.2	12.5	12.5	16	16	21.5	21.5

如需要的尺寸在上图没有标示，请参考其它相关的 NMRV 图纸。
For the missing dimensions, please consider the drawing of relevant NMRV size.

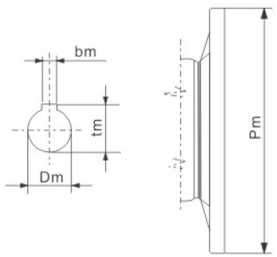
法兰尺寸图 IEC B5/PAM B5–Dimensions



B5	IEC										
	056	063	071	080	090	100	112	132	160	180	200
Pm	120	140	160	200	200	250	250	300	350	350	400
Dm	9	11	14	19	24	28	28	38	42	48	55
bm	3	4	5	6	8	8	8	10	12	14	16
tm	10.4	12.8	16.3	21.8	27.3	31.3	31.3	41.3	45.3	51.3	59.3

NMRV(25~130) Tm=40.3(IEC 132)

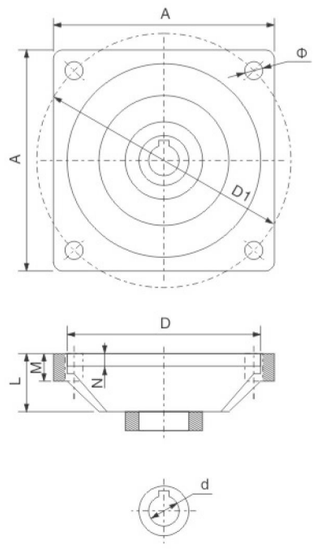
法兰尺寸图 IEC B14/PAM B14–Dimensions



B4	IEC							
	056	063	071	080	090	100	112	132
Pm	80	90	105	120	140	160	160	200
Dm	9	11	14	19	24	28	28	38
bm	3	4	5	6	8	8	8	10
tm	10.4	12.8	16.3	21.8	27.3	31.3	31.3	41.3

NMRV(25~130) Tm=40.3(IEC 132)

方法兰尺寸图 Square Flange Dimensions



机型 Model	A	D	D1	Φ	d	L	M	N
30	60*60	50	70	M5	Φ11	20	20	4
	80*80	70	92	Φ6.5	Φ11	21	10	4.5
	86*86	73	100	Φ6.5	Φ11	22	10	4.5
	90*90	83	104	Φ6.5	Φ11	23	10	5
40	60*60	50	70	M5	Φ14/Φ11	20	20	4
	80*80	70	92	Φ6.5	Φ14/Φ11	21	10	4.5
	86*86	73	100	Φ6.5	Φ12.7/Φ14	22	10	4.5
	90*90	83	104	Φ6.5	Φ11	23	10	5
	104*104	94	120	Φ8.5	Φ14	23	10	5
50	80*80	70	92	Φ6.5	Φ14/Φ11	21	10	4.5
	86*86	73	100	Φ6.5	Φ14/Φ12.7	22	10	4.5
	90*90	83	104	Φ6.5	Φ11	22	10	5
	104*104	94	120	Φ8.5	Φ14	23	10	5
	110*110	85/95	132	Φ8.5	Φ19	22	12	6
	130*130	100/110	145	Φ8.5	Φ19	25	12	6
63	80*80	70	92	Φ6.5	Φ19	25	25	6
	86*86	73	100	Φ6.5	Φ12.7	25	25	6
	110*110	85/95	132	Φ8.5	Φ19	22	1	6
	130*130	100/110	145	Φ8.5	Φ22/Φ24	33	12	6
75/90	110*110	85/95	132	Φ8.5	Φ19	40	1	6
	130*130	100/110	145	Φ8.5	Φ22/Φ24	33	12	6

选型方法及示例

为正确选择RV蜗轮减速机，敬请用户首先了解以下几点：

- 负荷条件
- 使用转速范围或速比（与双级组合可获得超低输出转速）
- 工作运转情况及环境（温度、湿度、腐蚀等）
- 安装空间

确定工作情况系数K1及工作情况修正系数K2

- 根据表1，决定机械负荷种类A、B、C。
- 根据运转时间（小时/天）和启动频率（次数/小时）从图1中求得工作情况系数K1。
- 根据表2，查取工作情况修正系数K2。

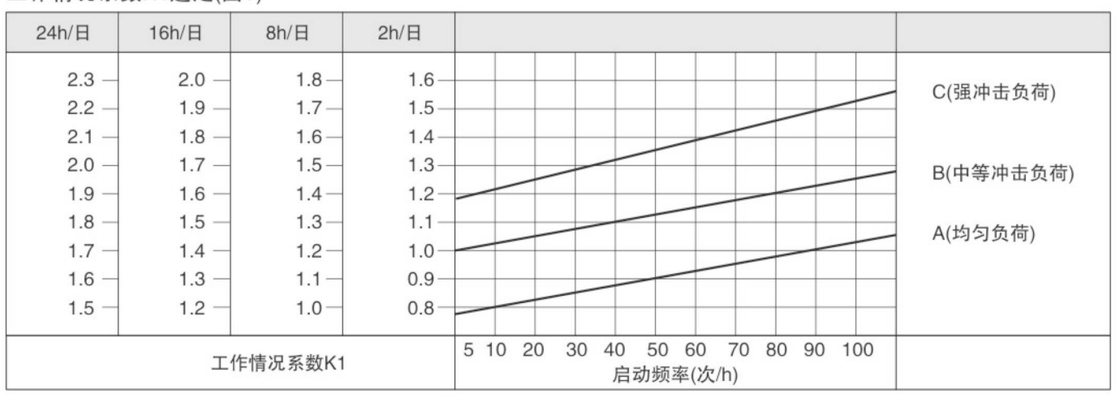
机械负荷种类选定(表1)

使用情况	示例	负荷种类
无冲击均匀负荷	传送带(均速输送)	A(均匀负荷)
中等冲击负荷	传送带(变速输送)	B(中等冲击负荷)
强烈冲击负荷	压缩机、粉碎机等	C(强冲击负荷)

工作情况修正系数K2选定(表2)

环境温度	工作情况修正系数K2
-10℃~30℃	×1
30℃~40℃	×1.1~1.2

工作情况系数K1选定(图1)



选定减速机

- 用户须先确定工作机输入机械负荷T(转矩)，以T乘以工作情况系数K1，再乘以工作情况修正系数K2，即获得减速机应有的输出转矩值，以此为据，并结合速比值或输出转速值，选定所需减速机规格。
- 用户也可以根据已知的输入功率，结合速比值或输出转速值，计算输出转矩，选定减速机。

选型示例

例1 通用传送带（均匀负荷）

转矩：19N.m，　　运转时间：8小时/天，
转速：约55r/min，　　启动频率：10次/小时，
减速机：1/25，　　环境温度：室内25℃，　　电机直联

① 根据表1，决定负荷种类
负荷种类：无冲击均匀负荷，选A；
② 根据图1，在A线上取频率10次/小时的交点，求出运转时间8小时/天的系数K1=1；
③ 根据表2，查得系数K2=1；
④ 则转矩值为19×K1×K2=19×1×1=19 N.m，可选择最接近19 N.m的减速机。

选定结果：**NMRV30－1/25**
输入功率0.18kW，输出转速56转/分，输出转矩21 N.m

例2 输送带（中等冲击负荷）

转矩：65N.m，　　运转时间：16小时/天，
转速：约21r/min，　　启动频率：100次/小时，
减速机：1/60，　　环境温度：室内35℃，　　电机直联

① 根据表1，决定负荷种类
负荷种类：轻度冲击负荷，选B；
② 根据图1，在B线上取频率100次/小时的交点，求出运转时间16小时/天的系数K1=1.65；
③ 根据表2，查得系数K2=1.15；
④ 则转矩值为65×K1×K2=65×1.65×1.15=123 N.m，可选择最接近123N.m的减速机。

选定结果：NMRV63－1/60
输入功率0.55kW，输出转速23.3转/分，输出转矩140N.m

Model selections & Demonstration

Please understand the following at first in order to select the model of NMRV worm-gear speed reducer properly:

- Load condition.
- Speed scope or ratio in application.
- Working condition and environment.
- Installation space.

Define working si condition coefficient K1 and revise coefficient K2.

- Ensure machinery load types A, B, C according to table 1
- Get the working condition coefficient K1 from diagram 1 according to turning time (hour/day) and start frequency (times/hour)
- Inspect working condition and select coefficient K2 from table 2.

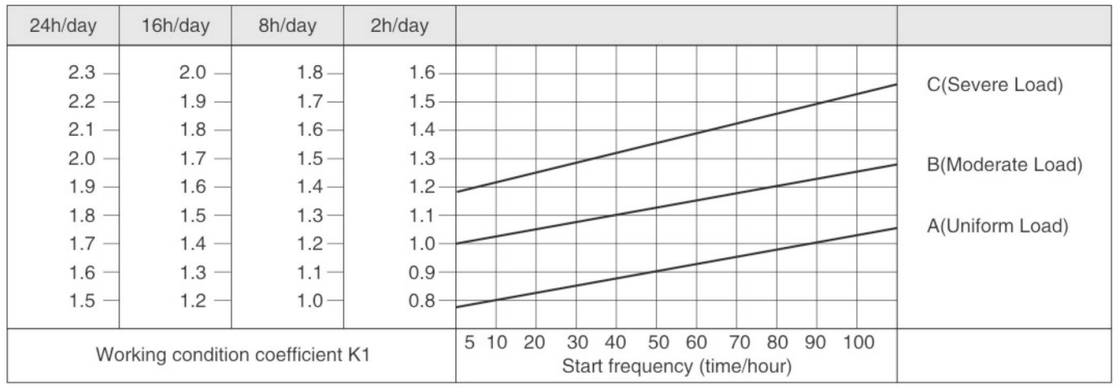
Table 1 Machinery Load classification selection

Using situation	Example	Load type
Uniform load	Convey band (uniform conveying)	A(Unitorm load)
Moderak load	Speed changed conveying	B(Moderate load)
Severe load	Compressor、pulverizer, etc.	C(Severe load)

Table 2 Working condition coefficient K2

Ambient temperature	Working condition coefficient K2
-10℃ ~ 30℃	1
30℃ ~ 40℃	1.1 ~ 1.2

Diagram 1 working Condition coefficient K1



Reducer selected

- At first it is better to make sure the value input machinery load T(torque) and then you can get the output torque through M multiply with work situation coefficient K1and work situation revise coefficient K2. The required model can be gained by the above and connecting ratio or output speed.
- You can also select the reducer as followings: calculate output torque according to known input power and then select the reducer in accordance with output torque rotate speed.

Examples for model chosen

Ex1 Common convey band (uniform load)

Torque：19 N.m　　Turning time：8hours/day
Speed：About 55r/min　　Start frequency：10times/hours
Ratio：1/25　　Environment temperature：indoor 25℃　　Connect with motor directly

① As per table 1；Select load classification. Load classification: Unifomlod，choose A.
② As per the cross point of 10 times/hour frequency on line A in diagram 1, get coefficient K1 value is 1 that turning time is 8 hours/day.
③ Get the coefficient K2 according to table 2.
④ So the torque value is 19 N.m.

Choose model：NMRV30－1/25
Input power is 0.18KW，output speed is 56r/min，output torque is 21N.m

Ex2 Covey band (moderate load)

Torque：65N.m,　　Turning time：16 hours/day,
Speed：21r/min,　　Start frequency：100times/hours,
Ratio：1/60,　　Environment temperature：indoor 35℃,　　Connect with motor directly

① As per load classification 1，moderate load，choose B.
② As per the cross point of 100times/hour frequency on line B in diagram 1, get coefficient K1 value is 1.68 that turning time is 16 hours/day.
③ Get the coefficient K2 1.15 according to table 2.
④ So the torque value is 65N.m. You can select the model that torque value most close to 123N.m。

Choose model：NMRV63－1/60
Input power is 0.55KW, output speed is 23.3r/min, output torque is 140N.m

选型参数
Parameter selections

NMRV单级减速机(法兰输入，输入转速1400r/min)/(配4极电机)
NMRV Single step reducer(flange input, input speed is 1400r/min)/(matched with 4 poles motor)

输出转速 Output speed r/min	输出转矩 Output torque N·m	传动比 Transmission ration 1	输出轴径向力 Output radial force kN	使用系数 fs	机型代号 Model code
0.06kw					
186.7	2.6	7.5	0.5	4.2	**NMRV25**
140	3.4	10	0.55	3.5	
93.3	4.9	15	0.63	2.5	
70	6.1	20	0.69	2.0	
46.7	8.2	30	0.79	1.6	
35	10	40	0.87	1.3	
28	12	50	0.94	0.9	
23.3	14	60	1	0.7	
186.7	2.6	7.5	0.68	6.9	**NMRV30**
140	3.4	10	0.75	5.4	
93.3	4.7	15	0.86	3.8	
70	6	20	0.94	3.0	
56	7	25	1.02	3.0	
46.7	8	30	1.08	2.5	
35	9.7	40	1.19	1.9	
28	11	50	1.28	1.5	
23.3	13	60	1.36	1.3	
17.5	14	80	1.5	0.9	
0.09kw					
186.7	3.9	7.5	0.5	2.8	**NMRV25**
140	5.1	10	0.55	2.4	
93.3	7.3	15	0.63	1.6	
70	9.2	20	0.69	1.3	
46.7	12	30	0.79	1.1	
35	15	40	0.87	0.9	
186.7	3.9	7.5	0.68	4.6	**NMRV30**
140	5	10	0.75	3.6	
93.3	7.1	15	0.86	2.5	
70	9	20	0.94	2.0	
56	10	25	1.02	2.0	
46.7	12	30	1.08	1.7	
35	14	40	1.19	1.2	
28	17	50	1.28	1.0	
23.3	19	60	1.36	0.9	
28	19	50	2.47	2.0	**NMRV40**

输出转速 Output speed r/min	输出转矩 Output torque N·m	传动比 Transmission ration 1	输出轴径向力 Output radial force kN	使用系数 fs	机型代号 Model code
0.09kw					
23.3	21	60	2.63	1.7	**NMRV40**
17.5	26	80	2.89	1.3	
14	29	100	3.11	1.0	
0.12kw					
186.7	5.2	7.5	0.68	3.4	**NMRV30**
140	6.7	10	0.75	2.7	
93.3	9.5	15	0.86	1.9	
70	12	20	0.94	1.5	
56	14	25	1.02	1.5	
46.7	16	30	1.08	1.3	
35	19	40	1.19	0.9	
28	23	50	1.28	0.8	
46.7	17.2	30	2.08	2.6	**NMRV40**
35	21	40	2.29	1.9	
28	25	50	2.47	1.5	
23.3	28	60	2.63	1.3	
17.5	34	80	2.89	1.0	
14	38	100	3.11	0.8	
23.3	29	60	3.61	2.3	**NMRV50**
17.5	35	80	3.97	1.9	
14	40	100	4.28	1.4	
0.18kw					
186.7	7.8	7.5	0.68	2.3	**NMRV30**
140	10	10	0.75	1.8	
93.3	14	15	0.86	1.3	
70	18	20	0.94	1.0	
56	21	25	1.02	1.0	
46.7	24	30	1.08	0.8	
70	19	20	1.82	2.0	**NMRV40**
56	23	25	1.96	1.7	
46.7	26	30	2.08	1.7	
35	32	40	2.29	1.3	
28	38	50	2.47	1.0	
23.3	43	60	2.63	0.8	

输出转速 Output speed r/min	输出转矩 Output torque N·m	传动比 Transmission ration 1	输出轴径向力 Output radial force kN	使用系数 fs	机型代号 Model code
0.18kw					
35	32	40	3.15	2.3	**NMRV50**
28	39	50	3.39	1.9	
23.3	43	60	3.61	1.6	
17.5	52	80	3.97	1.2	
14	60	100	4.28	0.9	
0.25kw					
186.7	11	7.5	1.31	3.6	**NMRV40**
140	14	10	1.44	2.8	
93.3	21	15	1.65	1.9	
70	27	20	1.82	1.5	
56	32	25	1.96	1.2	
46.7	36	30	2.08	1.3	
35	44	40	2.29	0.9	
70	26	20	2.5	2.7	**NMRV50**
56	32	25	2.69	2.2	
46.7	37	30	2.86	2.3	
35	46	40	3.15	1.7	
28	54	50	3.39	1.4	
23.3	60	60	3.61	1.1	
17.5	72	80	3.97	0.9	
28	56	50	4.44	2.4	**NMRV63**
23.3	63	60	4.71	2.0	
17.5	78	80	5.19	1.6	
14	87	100	5.59	1.4	
0.37kw					
186.7	16	7.5	1.31	2.4	**NMRV40**
140	21	10	1.44	1.9	
93.3	31	15	1.65	1.3	
70	39	20	1.82	1.0	
56	47	25	1.96	0.8	
46.7	53	30	2.08	0.8	
140	21	10	1.98	3.3	**NMRV50**
93.3	31	15	2.27	2.4	
70	40	20	2.5	1.8	
56	48	25	2.69	1.5	
46.7	55	30	2.86	1.5	
35	68	40	3.15	1.1	
28	80	50	3.39	0.9	
23.3	89	60	3.61	0.8	
35	70	40	4.12	2.1	**NMRV63**

输出转速 Output speed r/min	输出转矩 Output torque N·m	传动比 Transmission ration 1	输出轴径向力 Output radial force kN	使用系数 fs	机型代号 Model code
0.37kw					
28	83	50	4.44	1.6	**NMRV63**
23.3	94	60	4.71	1.4	
17.5	115	80	5.19	1.1	
14	129	100	5.59	0.9	
0.55kw					
186.7	25	7.5	1.8	2.9	**NMRV50**
140	32	10	1.98	2.2	
93.3	46	15	2.27	1.6	
70	59	20	2.5	1.2	
56	71	25	2.69	1.0	
46.7	81	30	2.86	1.0	
70	60	20	3.27	2.2	**NMRV63**
56	73	25	3.52	1.8	
46.7	83	30	3.74	1.9	
35	105	40	4.12	1.4	
28	124	50	4.44	1.1	
23.3	140	60	4.71	0.9	
35	108	40	4.86	2.0	**NMRV75**
28	129	50	5.24	1.6	
23.3	146	60	5.56	1.4	
17.5	180	80	6.13	1.1	
14	206	100	6.6	0.9	
17.5	189	80	6.78	1.5	**NMRV90**
14	221	100	7.3	1.2	
0.75kw					
186.7	34	7.5	1.8	2.1	**NMRV50**
140	44	10	1.98	1.6	
93.3	63	15	2.27	1.2	
70	81	20	2.5	0.9	
93.3	63	15	2.97	2.2	**NMRV63**
70	83	20	3.27	1.6	
56	100	25	3.52	1.3	
46.7	114	30	3.74	1.4	
35	143	40	4.12	1.0	
56	102	25	4.16	2.0	**NMRV75**
46.7	117	30	4.42	2.0	
35	147	40	4.86	1.5	
28	177	50	5.24	1.2	
23.3	200	60	5.56	1.0	

输出转速 Output speed r/min	输出转矩 Output torque N・m	传动比 Transmission ration 1	输出轴径向力 Output radial force kN	使用系数 fs	机型代号 Model code
0.75kw					
28	184	50	5.79	1.8	**NMRV90**
23.3	212	60	6.16	1.5	
17.5	258	80	6.78	1.1	
14	302	100	7.3	0.9	
1.1kw					
186.7	49	7.5	2.35	2.6	**NMRV63**
140	65	10	2.59	2.0	
93.3	93	15	2.97	1.5	
70	122	20	3.27	1.1	
56	146	25	3.52	0.9	
46.7	167	30	3.74	1.0	
93.3	95	15	3.5	2.1	**NMRV75**
70	123	20	3.86	1.7	
56	150	25	4.16	1.3	
46.7	171	30	4.42	1.3	
35	216	40	4.86	1.0	
35	225	40	5.38	1.6	**NMRV90**
28	270	50	5.79	1.3	
23.3	311	60	6.16	1.0	
28	281	50	7.32	2.3	**NMRV110**
23.3	324	60	7.78	1.9	
17.5	402	80	8.57	1.3	
14	473	100	9.23	1.0	
1.5kw					
186.7	67	7.5	2.35	1.9	**NMRV63**
140	89	10	2.59	1.5	
93.3	127	15	2.97	1.1	
70	166	20	3.27	0.8	
140	90	10	3.06	2.2	**NMRV75**
93.3	130	15	3.5	1.5	
70	168	20	3.86	1.3	
56	205	25	4.16	1.0	
46.7	233	30	4.42	1.0	
70	171	20	4.27	2.1	**NMRV90**
56	210	25	4.6	1.6	
46.7	239	30	4.89	1.7	
35	307	40	5.38	1.2	
28	368	50	5.79	0.9	
23.3	424	60	6.16	0.8	

输出转速 Output speed r/min	输出转矩 Output torque N・m	传动比 Transmission ration 1	输出轴径向力 Output radial force kN	使用系数 fs	机型代号 Model code
1.5kw					
35	319	40	6.8	2.2	**NMRV110**
28	384	50	7.32	1.7	
23.3	442	60	7.78	1.4	
17.5	548	80	8.57	0.9	
2.2kw					
186.7	100	7.5	2.78	1.8	**NMRV75**
140	132	10	3.06	1.5	
93.3	191	15	3.5	1.0	
186.7	101	7.5	3.08	2.9	**NMRV90**
140	134	10	3.39	2.3	
93.3	194	15	3.88	1.9	
70	252	20	4.27	1.4	
56	308	25	4.6	1.1	
46.7	351	30	4.89	1.2	
70	255	20	5.39	2.5	**NMRV110**
56	315	25	5.81	2.2	
46.7	356	30	6.18	2.0	
35	468	40	6.8	1.5	
28	563	50	7.32	1.2	
23.3	648	60	7.78	1.0	
35	468	40	8.89	2.2	**NMRV130**
28	563	50	9.58	1.7	
23.3	648	60	10.18	1.4	
17.5	816	80	11.21	1.0	
14	869	100	10.62	0.8	
28	570	50	13.1	2.5	**NMRV150**
23.3	657	60	13.92	1.9	
17.5	816	80	15.32	1.4	
14	960	100	16.5	1.0	
3kw					
186.7	136	7.5	2.78	1.4	**NMRV75**
140	180	10	3.06	1.1	
93.3	261	15	3.5	0.8	
186.7	138	7.5	3.08	2.1	**NMRV90**
140	182	10	3.39	1.7	
93.3	264	15	3.88	1.4	
70	344	20	4.27	1.0	
56	420	25	4.6	0.8	
46.7	479	30	4.89	0.9	

输出转速 Output speed r/min	输出转矩 Output torque N・m	传动比 Transmission ration 1	输出轴径向力 Output radial force kN	使用系数 fs	机型代号 Model code
3kw					
93.3	264	15	4.9	2.5	**NMRV110**
70	348	20	5.39	1.9	
56	430	25	5.81	1.6	
46.7	485	30	6.18	1.5	
35	638	40	6.8	1.1	
28	767	50	7.32	0.9	
56	429	25	7.6	2.2	**NMRV130**
46.7	491	30	8.08	2.1	
35	638	40	8.89	1.6	
28	767	50	9.58	1.3	
23.3	884	60	10.18	1.0	
17.5	1113	80	11.21	0.8	
28	777	50	13.1	1.8	**NMRV150**
23.3	896	60	13.92	1.4	
17.5	1113	80	15.32	1.0	
14	1310	100	16.5	0.8	
4kw					
186.7	184	7.5	3.08	1.6	**NMRV90**
140	243	10	3.39	1.3	
93.3	352	15	3.88	1.0	
70	458	20	4.27	0.8	
140	242	10	4.28	2.5	**NMRV110**
93.3	352	15	4.9	1.9	
70	464	20	5.39	1.4	
56	573	25	5.81	1.2	
46.7	647	30	6.18	1.1	
56	573	25	7.6	1.6	**NMRV130**
46.7	655	30	8.08	1.6	
35	851	40	8.89	1.2	
28	1023	50	9.58	1.0	
23.3	1179	60	10.18	0.8	
28	1036	50	13.1	1.4	**NMRV150**
23.3	1195	60	13.92	1.1	
17.5	1484	80	15.32	0.8	
5.5kw					
186.7	253	7.5	3.89	2.2	**NMRV110**
140	334	10	4.28	1.8	
93.3	484	15	4.9	1.4	
70	638	20	5.39	1.0	

输出转速 Output speed r/min	输出转矩 Output torque N・m	传动比 Transmission ration 1	输出轴径向力 Output radial force kN	使用系数 fs	机型代号 Model code
5.5kw					
140	333	10	5.6	2.5	**NMRV130**
93.3	490	15	6.41	1.9	
70	645	20	7.06	1.4	
56	788	25	7.6	1.2	
46.7	900	30	8.08	1.2	
35	1171	40	8.89	0.9	
70	645	20	9.65	2.0	**NMRV150**
56	788	25	10.4	1.5	
46.7	934	30	11.05	1.3	
35	1171	40	12.16	1.3	
28	1426	50	13.1	1.0	
23.3	1643	60	13.92	0.8	
7.5kw					
186.7	345	7.5	3.89	1.6	**NMRV110**
140	455	10	4.28	1.3	
93.3	660	15	4.9	1.0	
186.7	349	7.5	5.09	2.1	**NMRV130**
140	455	10	5.6	1.8	
93.3	668	15	6.41	1.4	
70	880	20	7.06	1.0	
56	1074	25	7.6	0.9	
46.7	1228	30	8.08	0.8	
35	1596	40	8.89	0.7	
70	880	20	9.65	1.5	**NMRV150**
56	1074	25	10.4	1.1	
46.7	1274	30	11.05	0.9	
35	1596	40	12.16	1.0	
186.7	512	7.5	6.96	2.3	**NMRV150**
140	675	10	7.66	1.8	
93.3	990	15	8.77	1.3	
70	1291	20	9.65	1.0	
56	1576	25	10.4	0.8	
15kw					
186.7	698	7.5	6.96	1.7	**NMRV150**
140	921	10	7.66	1.3	
93.3	1351	15	8.77	0.9	
70	1760	20	9.65	0.7	

NMRV+NMRV双级减速机(法兰输入，输入转速1400r/min) /(配4极电机)

NMRV+NMRV Double step reducer(flange input, input speed is 1400r/min)/(matched with 4 poles motor)

输出转速 Output speed r/min	输出转矩 Output torque N·M	总传动比 General transmission ration i	高速级传动比 High speed transmission ratio i1	低速级传动比 Low speed transmission ratio i2	输出轴径向力 Output radial force kN	使用系数 fs	组合机型规格 Combination model Size
0.06kw							
14	25	100	10	10	1.62	1.3	**25/30**
9.3	32	150	10	15	1.83	0.9	
7.0	41	200	10	20	1.83	0.7	
5.6	44	250	10	25	1.83	0.8	
4.7	59	300	10	30	3.49	1.2	**25/40**
3.5	71	400	10	40	3.49	0.9	
2.8	82	500	20	25	3.49	0.7	
2.3	101	600	20	30	3.49	0.6	
1.9	116	750	25	30	3.49	0.5	
1.6	143	900	30	30	3.49	0.5	
1.2	171	1200	30	40	3.49	0.4	
0.9	197	1500	50	30	3.49	0.3	
0.8	217	1800	60	30	3.49	0.3	
0.6	268	2400	60	40	3.49	0.2	
0.5	324	3000	60	50	3.49	0.2	
0.4	294	4000	50	80	3.49	0.1	
0.3	356	5000	50	100	3.49	0.1	
4.7	57	300	10	30	3.49	1.3	**30/40**
3.5	70	400	10	40	3.49	0.9	
2.8	96	500	20	25	3.49	0.6	
2.3	104	600	20	30	3.49	0.7	
1.9	121	750	25	30	3.49	0.6	
1.6	139	900	30	30	3.49	0.5	
1.2	166	1200	30	40	3.49	0.4	
0.9	196	1500	50	30	3.49	0.4	
0.8	218	1800	60	30	3.49	0.3	
0.58	261	2400	60	40	3.49	0.2	
0.4	300	3200	80	40	3.49	0.2	
0.4	279	4000	50	80	3.49	0.1	
0.28	338	5000	50	100	3.49	0.1	
1.6	141	900	30	30	4.84	1.0	**30/50**
1.2	169	1200	30	400	4.84	0.7	

输出转速 Output speed r/min	输出转矩 Output torque N·M	总传动比 General transmission ration i	高速级传动比 High speed transmission ratio i1	低速级传动比 Low speed transmission ratio i2	输出轴径向力 Output radial force kN	使用系数 fs	组合机型规格 Combination model Size
0.06kw							
0.93	199	1500	50	30	4.84	0.7	**30/50**
0.78	222	1800	60	30	4.84	0.7	
0.6	266	2400	60	40	4.84	0.5	
0.5	307	3000	60	50	4.84	0.4	
0.35	288	4000	50	80	4.84	0.3	
0.29	311	4800	60	80	4.84	0.3	
0.9	203	1500	30	50	6.27	1.1	**30/63**
0.78	225	1800	30	60	6.27	0.9	
0.58	276	2400	60	40	6.27	0.8	
0.47	319	3000	60	50	6.27	0.7	
0.35	306	4000	50	80	6.27	0.6	
0.28	360	5000	50	100	6.27	0.4	
0.6	330	2400	60	40	7.38	1.1	**40/75**
0.47	377	3000	60	50	7.38	0.8	
0.35	355	4000	50	80	7.38	0.7	
0.28	419	5000	50	100	7.38	0.5	
0.5	405	3000	60	50	8.18	1.4	**40/90**
0.35	365	4000	50	80	8.18	1.3	
0.28	431	5000	50	100	81.8	1.0	
0.09kw							
14	37	100	10	10	1.62	0.8	**25/30**
9.3	49	150	10	15	1.83	0.6	
7.0	62	200	10	20	1.83	0.5	
5.6	66	250	10	25	1.83	0.5	
4.7	75	300	10	30	1.83	0.4	
3.5	107	400	10	40	1.83	0.3	
2.8	115	500	20	25	1.83	0.2	
2.3	135	600	20	30	1.83	0.2	
1.9	151	750	25	30	1.83	0.2	
1.6	178	900	30	30	1.83	0.2	
1.2	212	1200	30	40	1.83	0.1	
0.9	247	1500	50	30	1.83	0.1	

输出转速 Output speed r/min	输出转矩 Output torque N·M	总传动比 General transmission ration i	高速级传动比 High speed transmission ratio i1	低速级传动比 Low speed transmission ratio i2	输出轴径向力 Output radial force kN	使用系数 fs	组合机型规格 Combination model Size
0.09kw							
0.78	304	1800	60	30	1.83	0.1	**25/30**
0.58	340	2400	60	40	1.83	0.1	
0.47	405	3000	60	50	1.83	0.1	
4.7	87	300	10	30	3.49	0.8	**30/40**
3.5	106	400	10	40	4.84	1.2	**30/50**
2.8	123	500	10	50	4.84	1.0	
2.3	159	600	20	30	4.84	0.9	
1.9	185	750	25	30	4.84	0.8	
1.6	212	900	30	30	4.84	0.7	
1.6	200	900	15	60	6.27	1.0	**30/63**
1.2	263	1200	30	40	6.27	0.9	
0.93	305	1500	30	50	6.27	0.7	
0.9	359	1500	50	30	7.38	1.1	**40/75**
0.78	404	1800	60	30	7.38	1	
0.58	496	2400	60	40	7.38	0.7	
0.5	608	3000	60	50	8.18	0.9	**40/90**
0.35	548	4000	50	80	8.18	0.8	
0.12kw							
4.7	118	300	10	30	4.84	1.2	**30/50**
3.5	142	400	10	40	4.84	0.9	
2.8	164	500	10	50	4.84	0.7	
2.8	171	500	10	50	6.27	1.3	**30/63**
2.3	208	600	15	40	6.27	1.1	
1.9	241	750	15	50	6.27	0.9	
1.6	324	900	30	30	7.38	1.2	**40/75**
1.2	399	1200	30	40	7.38	0.9	
0.8	546	1800	30	60	8.18	0.9	**40/90**
0.58	695	2400	60	40	8.18	0.9	

输出转速 Output speed r/min	输出转矩 Output torque N·M	总传动比 General transmission ration i	高速级传动比 High speed transmission ratio i1	低速级传动比 Low speed transmission ratio i2	输出轴径向力 Output radial force kN	使用系数 fs	组合机型规格 Combination model Size
0.12kw							
0.5	883	3000	60	50	10.32	1.2	**50/110**
0.35	784	4000	50	80	10.32	1.0	
0.28	928	5000	50	100	10.32	0.8	
0.18kw							
3.5	221	400	10	40	6.27	1.0	**30/63**
2.8	257	500	10	50	6.27	0.8	
2.3	362	600	20	30	7.38	1.1	**40/75**
1.9	435	750	25	30	7.38	0.9	
1.6	487	900	30	30	7.38	0.8	
1.2	629	1200	30	40	8.18	1.0	**40/90**
0.93	735	1500	30	50	8.18	0.8	
0.8	860	1800	60	30	10.32	1.5	**50/110**
0.58	1113	2400	60	40	10.32	1.1	
0.25kw							
3.5	159	400	10	40	6.27	1.4	**30/63**
2.8	185	500	10	50	6.27	1.2	
3.5	336	400	10	40	7.38	1.1	**40/75**
2.8	384	500	10	50	7.38	0.8	
2.3	511	600	15	40	8.18	1.2	**40/90**
1.9	598	750	15	50	8.18	0.9	
1.6	667	900	15	60	8.18	0.8	
1.2	943	1200	30	40	10.32	1.3	**50/110**
0.93	1064	1500	50	30	10.32	1.2	
0.78	1195	1800	60	30	10.32	1.1	
0.6	1624	2400	60	40	13.5	1.0	**63/130**
0.47	1935	3000	60	50	13.5	0.8	
0.35	2046	4000	50	80	13.5	0.6	
0.28	2430	5000	50	100	13.5	0.5	
0.8	1199	1800	60	30	18	1.8	**63/150**

输出转速 Output speed r/min	输出转矩 Output torque N·M	总传动比 General transmission ration i	高速级传动比 High speed transmission ratio i1	低速级传动比 Low speed transmission ratio i2	输出轴径向力 Output radial force kN	使用系数 fs	组合机型规格 Combination model Size
0.25kw							
0.8	1199	1800	60	30	18	1.8	**63/150**
0.6	1446	2400	60	40	18	1.8	
0.5	1713	3000	60	50	18	1.4	
0.4	2026	4000	50	80	18	0.9	
0.3	2251	5000	50	100	18	0.7	
0.37kw							
4.7	405	300	10	30	7.38	1.0	**40/75**
3.5	498	400	10	40	7.38	0.7	
4.7	401	300	7.5	40	8.18	1.5	**40/90**
3.5	523	400	10	40	8.18	1.2	
2.8	611	500	10	50	8.18	0.9	
2.3	757	600	15	40	8.18	0.8	
1.9	949	750	25	30	10.32	1.3	**50/110**
1.6	1079	900	30	30	10.32	1.2	
1.2	1396	1200	30	40	10.32	0.8	
0.9	1674	1500	50	30	13.5	1.1	**63/130**
0.78	1887	1800	60	30	13.5	0.9	
0.8	1774	1800	60	30	18	1.2	**63/150**
0.6	2141	2400	60	40	18	1.2	
0.5	2535	3000	60	50	18	0.9	
0.55kw							
4.7	638	300	10	30	10.32	2.0	**50/110**
3.5	826	400	10	40	10.32	1.4	
2.8	984	500	10	50	10.32	1.1	
2.3	1181	600	15	40	10.32	1.0	
1.9	1411	750	25	30	10.32	0.9	
2.8	995	500	10	50	13.5	1.6	**63/130**
1.9	1471	750	25	30	13.5	1.2	
1.2	2132	1200	30	40	13.5	0.8	
0.8	2637	1800	60	30	18	0.8	**63/150**
0.6	3182	240	60	40	18	0.8	

输出转速 Output speed r/min	输出转矩 Output torque N·M	总传动比 General transmission ration i	高速级传动比 High speed transmission ratio i1	低速级传动比 Low speed transmission ratio i2	输出轴径向力 Output radial force kN	使用系数 fs	组合机型规格 Combination model Size
0.75kw							
4.7	871	300	10	30	10.32	1.5	**50/110**
3.5	1126	400	10	40	10.32	1.1	
2.8	1357	500	10	50	13.5	1.1	**63/130**
2.3	1631	600	15	40	13.5	1.0	
1.9	2005	750	25	30	13.5	0.9	
1.6	2283	900	30	30	13.5	0.8	
2.8	1290	500	10	50	18	1.8	**63/150**
2.3	1529	600	15	40	18	1.7	
1.9	1783	750	25	30	18	1.3	
1.6	2215	900	30	30	18	0.9	**63/150**
1.2	2680	1200	30	40	18	1.0	
1.1kw							
4.7	1312	300	10	30	13.5	1.3	**63/130**
3.5	1671	400	10	40	13.5	1.0	
2.8	1991	500	10	50	13.5	0.8	
9.3	752	150	10	15	18	3.1	**63/150**
7.0	966	200	10	20	18	2.4	
5.6	1175	250	10	25	18	1.7	
4.7	1364	300	10	30	18	1.7	
3.5	1619	400	10	40	18	1.6	
2.8	1893	500	10	50	18	1.2	
2.3	2242	600	15	40	18	1.2	
1.9	2616	750	25	30	18	0.9	
1.5kw							
4.7	1789	300	10	30	13.5	1.0	**63/130**
3.5	2279	400	10	40	13.5	0.7	
9.3	1026	150	10	15	18	2.3	**63/150**
7	1317	200	10	20	18	1.8	
5.6	1602	250	10	25	18	1.3	
4.7	1860	300	10	30	18	1.3	
3.5	2208	400	10	40	18	1.2	
2.8	2582	500	10	50	18	0.9	
2.3	3057	600	15	40	18	0.9	

NRV单级(轴伸输入，输入转速1400r/min)/(配4极电机)

NRV Single step reducer(shaft extend input, input speed is 1400r/min)

输入轴功率 Input Power kW	输出转速 Output speed r/min	输出转矩 Output torque N·m	传动比 Transmission ration i	输出轴径向力 Output radial force kN	输入轴径向力 Input radial force kN	机型代号 Model code
0.4	186.7	18	7.5	0.68	0.15	**NMRV30**
0.3	140	18	10	0.75	0.16	
0.2	93.3	18	15	0.86	0.16	
0.2	70	18	20	0.94	0.19	
0.2	56	21	25	1.02	0.21	
0.2	46.7	20	30	1.08	0.21	
0.1	35	18	40	1.19	0.21	
0.1	28	17	50	1.28	0.21	
0.1	23.3	16	60	1.36	0.21	
0.1	17.5	13	80	1.5	0.21	
0.9	186.7	40	7.5	1.31	0.29	**NRV40**
0.7	140	40	10	1.44	0.33	
0.5	93.3	40	15	1.65	0.33	
0.4	70	39	20	1.82	0.35	
0.3	56	38	25	1.96	0.35	
0.3	46.7	45	30	2.08	0.35	
0.2	35	41	40	2.29	0.35	
0.2	28	39	50	2.47	0.35	
0.2	23.3	36	60	2.63	0.35	
0.1	17.5	33	80	2.89	0.35	
0.1	14	29	100	3.11	0.35	
1.6	186.7	71	7.5	1.8	0.4	**NRV50**
1.2	140	72	10	1.98	0.49	
0.9	93.3	74	15	2.27	0.49	
0.7	70	73	20	2.5	0.49	
0.5	56	70	25	2.69	0.49	
0.6	46.7	84	30	2.86	0.49	
0.4	35	76	40	3.15	0.49	
0.3	28	73	50	3.39	0.49	

输入轴功率 Input Power kW	输出转速 Output speed r/min	输出转矩 Output torque N·m	传动比 Transmission ration i	输出轴径向力 Output radial force kN	输入轴径向力 Input radial force kN	机型代号 Model code
0.3	23.3	68	60	3.61	0.49	**NRV50**
0.2	17.5	65	80	3.97	0.49	
0.2	14	55	100	4.28	0.49	
2.8	186.7	128	7.5	2.35	0.5	**NRV63**
2.2	140	130	10	2.59	0.57	
1.6	93.3	140	15	2.97	0.61	
1.2	70	135	20	3.27	0.66	
1.0	56	130	25	3.52	0.70	
1.1	46.7	160	30	3.74	0.70	
0.8	35	145	40	4.12	0.70	
0.6	28	135	50	4.44	0.70	
0.5	23.3	130	60	4.71	0.70	
0.4	17.5	122	80	5.19	0.70	
0.3	14	118	100	5.59	0.70	
4.1	186.7	185	7.5	2.78	0.70	**NRV75**
3.2	140	195	10	3.06	0.83	
2.3	93.3	200	15	3.50	0.85	
1.9	70	210	20	3.86	0.98	
1.5	56	200	25	4.16	0.98	
1.5	46.7	230	30	4.42	0.98	
1.1	35	220	40	4.86	0.98	
0.9	28	210	50	5.24	0.98	
0.8	23.3	200	60	5.56	0.98	
0.6	17.5	190	80	6.13	0.98	
0.5	14	180	100	6.60	0.98	
6.3	186.7	290	7.5	3.08	0.90	**NRV90**
5.1	140	310	10	3.39	1.08	
4.1	93.3	360	15	3.88	1.25	

输入轴功率 Input Power kW	输出转速 Output speed r/min	输出转矩 Output torque N·m	传动比 Transmission ration i	输出轴径向力 Output radial force kN	输入轴径向力 Input radial force kN	机型代号 Model code
2.4	56	340	25	4.60	1.27	**NRV90**
2.6	46.7	410	30	4.89	1.27	
1.8	35	360	40	5.38	1.27	
1.4	28	340	50	5.79	1.27	
1.1	23.3	320	60	6.16	1.27	
0.8	17.5	285	80	6.78	1.27	
0.7	14	270	100	7.30	1.27	
12	186.7	552	7.5	3.89	1.20	**NRV110**
9.8	140	598	10	4.28	1.46	
7.5	93.3	656	15	4.90	1.60	
5.6	70	644	20	5.39	1.70	
4.7	56	679	25	5.81	1.70	
4.5	46.7	725	30	6.18	1.70	
3.3	35	702	40	6.80	1.70	
2.6	28	660	50	7.32	1.70	
2.1	23.3	616	60	7.78	1.70	
1.4	17.5	515	80	8.57	1.70	
1.1	14	483	100	9.23	1.70	
16.1	186.7	750	7.5	5.09	1.50	**NRV130**
13.5	140	820	10	5.60	1.84	
10.3	93.3	920	15	6.41	2.07	
7.8	70	910	20	7.06	2.10	
6.5	56	930	25	7.60	2.10	
6.4	46.7	1040	30	8.08	2.10	
4.9	35	1050	40	8.89	2.10	
3.8	28	980	50	9.58	2.10	
3.1	23.3	900	60	10.18	2.10	
2.3	17.5	840	80	11.21	2.10	
1.7	14	740	100	12.07	2.10	

输入轴功率 Input Power kW	输出转速 Output speed r/min	输出转矩 Output torque N·m	传动比 Transmission ration i	输出轴径向力 Output radial force kN	输入轴径向力 Input radial force kN	机型代号 Model code
25.8	186.7	1200	7.5	6.96	1.95	**NRV150**
20.2	140	1240	10	7.66	2.26	
13.9	93.3	1250	15	8.77	2.28	
11.1	70	1300	20	9.65	2.67	
8.4	56	1200	25	10.40	2.80	
7.1	46.7	1200	30	11.05	2.80	
7.3	35	1550	40	12.16	2.80	
5.4	28	1400	50	13.10	2.80	
4.2	23.3	1260	60	13.92	2.80	
3.1	17.5	1150	80	15.32	2.80	
2.3	14	1000	100	16.50	2.80	

NRV+NMRV双级减速机(轴伸输入，输入转速1400r/min)/(配4极电机)

NRV+NMRVDouble step reducer(shaft extend input, input speed is 1400r/min)

输入轴功率 Input Power kW	输出转速 Output speed r/min	输出转矩 Output torque N·m	传动比 Transmission ration i	输出轴径向力 Output radial force kN	输入轴径向力 Input radial force kN	机型代号 Model code
0.1	4.7	73	300	3.49	0.21	**30/40**
0.1	3.5	65	400	3.49	0.21	
0.08	2.8	61	500	3.49	0.21	
0.06	2.3	73	600	3.49	0.21	
0.04	1.9	73	750	3.49	0.21	
0.03	0.6	73	900	3.49	0.21	
0.02	1.2	65	1200	3.49	0.21	
0.02	0.9	73	1500	3.49	0.21	
0.02	0.8	73	1800	3.49	0.21	
0.01	0.58	65	2400	3.49	0.21	
0.01	0.4	65	3200	3.49	0.21	
0.01	0.35	33	4000	3.49	0.21	
0.01	0.28	29	5000	3.49	0.21	
0.15	4.7	145	300	4.84	0.21	**30/50**
0.1	3.5	124	400	4.84	0.21	
0.1	2.8	120	500	4.84	0.21	
0.1	2.3	145	600	4.84	0.21	
0.1	1.9	145	750	4.84	0.21	
0.1	1.6	145	900	4.84	0.21	
0.08	1.2	124	1200	4.84	0.21	
0.06	0.93	145	1500	4.84	0.21	
0.04	0.78	145	1800	4.84	0.21	
0.03	0.6	124	2400	4.84	0.21	
0.02	0.5	120	3000	4.84	0.21	
0.02	0.35	82	4000	4.84	0.21	
0.02	0.29	82	4800	4.84	0.21	
0.24	4.7	230	300	6.27	0.21	**30/63**
0.2	3.5	230	400	6.27	0.21	

输入轴功率 Input Power kW	输出转速 Output speed r/min	输出转矩 Output torque N·m	传动比 Transmission ration i	输出轴径向力 Output radial force kN	输入轴径向力 Input radial force kN	机型代号 Model code
0.2	2.8	216	500	6.27	0.21	**30/63**
0.13	2.3	230	600	6.27	0.21	
0.11	1.9	216	750	6.27	0.21	
0.1	1.6	198	900	6.27	0.21	
0.1	1.2	230	1200	6.27	0.21	
0.1	0.93	216	1500	6.27	0.21	
0.1	0.78	198	1800	6.27	0.21	
0.1	0.58	230	2400	6.27	0.21	
0.08	0.47	216	3000	6.27	0.21	
0.06	0.35	172	4000	6.27	0.21	
0.04	0.28	150	5000	6.27	0.21	
0.4	4.7	390	300	7.38	0.35	**40/75**
0.3	3.5	360	400	7.38	0.35	
0.21	2.8	320	500	7.38	0.35	
0.2	2.3	390	600	7.38	0.35	
0.2	1.9	390	750	7.38	0.35	
0.14	1.6	390	900	7.38	0.35	
0.11	1.2	360	1200	7.38	0.35	
0.1	0.93	390	1500	7.38	0.35	
0.1	0.78	390	1800	7.38	0.35	
0.1	0.58	360	2400	7.38	0.35	
0.1	0.47	320	3000	7.38	0.35	
0.08	0.35	250	4000	7.38	0.35	
0.06	0.28	230	5000	7.38	0.35	
0.6	4.7	610	300	8.18	0.35	**40/90**
0.43	3.5	610	400	8.18	0.35	
0.34	2.8	560	500	8.18	0.35	
0.3	2.3	610	600	8.18	0.35	

输入轴功率 Input Power kW	输出转速 Output speed r/min	输出转矩 Output torque N·m	传动比 Transmission ration i	输出轴径向力 Output radial force kN	输入轴径向力 Input radial force kN	机型代号 Model code
0.23	1.9	560	750	8.18	0.35	**40/90**
0.2	1.6	505	900	8.18	0.35	
0.2	1.2	610	1200	8.18	0.35	
0.14	0.93	560	1500	8.18	0.35	
0.11	0.78	505	1800	8.18	0.35	
0.11	0.58	610	2400	8.18	0.35	
0.1	0.47	560	3000	8.18	0.35	
0.1	0.35	460	400	8.18	0.35	
0.1	0.28	410	5000	8.18	0.35	
1.1	4.7	1265	300	10.32	0.49	**50/110**
0.8	3.5	1185	400	10.32	0.49	
0.61	2.8	1100	500	10.32	0.49	
0.6	2.3	1185	600	10.32	0.49	
0.5	1.9	1265	750	10.32	0.49	
0.43	1.6	1265	900	10.32	0.49	
0.31	1.2	1186	1200	10.32	0.49	
0.3	0.93	1265	1500	10.32	0.49	
0.3	0.78	1265	1800	10.32	0.49	
0.2	0.58	1185	2400	10.32	0.49	
0.15	0.47	1100	3000	10.32	0.49	
0.13	0.35	819	4000	10.32	0.49	
0.1	0.28	746	5000	10.32	0.49	
1.5	4.7	1760	300	13.5	0.7	**63/130**
1.1	3.5	1650	400	13.5	0.7	
0.9	2.8	1550	500	13.5	0.7	
0.8	2..3	1650	600	13.5	0.7	
0.7	1.9	1760	750	13.5	0.7	
0.6	1.6	1760	900	13.5	0.7	
0.4	1.2	1650	1200	13.5	0.7	

输入轴功率 Input Power kW	输出转速 Output speed r/min	输出转矩 Output torque N·m	传动比 Transmission ration i	输出轴径向力 Output radial force kN	输入轴径向力 Input radial force kN	机型代号 Model code
0.4	0.93	1760	1500	13.5	0.7	**63/130**
0.3	0.78	1760	1800	13.5	0.7	
0.3	0.58	1650	2400	13.5	0.7	
0.2	0.47	1550	3000	13.5	0.7	
0.1	0.35	1220	4000	13.5	0.7	
0.1	0.28	1100	5000	13.5	0.7	
3.4	9.3	2340	150	18	0.7	**63/150**
2.7	7.0	2340	200	18	0.7	
1.9	5.6	2050	250	18	0.7	
1.9	4.7	2340	300	18	0.7	
1.8	3.5	2670	400	18	0.7	
1.4	2.8	2330	500	18	0.7	
1.3	2.3	2670	600	18	0.7	
1.0	1.9	2330	750	18	0.7	
0.7	1.6	2100	900	18	0.7	
0.7	1.2	2670	1200	18	0.7	
0.4	0.8	2100	1800	18	0.7	
0.5	0.6	2670	2400	18	0.7	
0.3	0.5	2330	3000	18	0.7	
0.2	0.4	1880	4000	18	0.7	
0.2	0.3	1650	5000	18	0.7	

使 用 说 明

1. 单级蜗杆减速机

1.1 减速机型号25~90采用优质铝合金压铸箱体, 外形轻巧美观, 结构紧凑, 体积小, 重量轻, 节省安装空间, 不易锈蚀。

1.2 减速机型号110~150采用灰铸铁铝模铸造, 外型美观坚固, 可多方位安装使用。

1.3 散热性能好, 安全可靠, 效率高。

1.4 承载能力高, 传动平稳, 振动小, 噪音低。

1.5 具有动力输入及转矩输出的多种联接结构, 满足多种联接需要; 箱体外形设计及底脚孔设置布局适应多种安装方式,通用性强。

2. 双级蜗杆减速机

2.1 由单级蜗杆减速机组合而成, 具有单级蜗杆减速机的一切优点, 和获得大的传动比。

2.2 常用双级组合机型为：25/30、25/40、30/40、30/50、30/63、40/75、40/90、50/110、63/130、63/150，用户若有特殊要求时, 可根据实际需要选择25、30、40、50、63、75、90、110、130、150作为组合单元另行组合。

3. 安装注意事项

3.1 减速机须安装在平整坚固的底座上, 底脚螺栓必须紧固、防震。

3.2 原动机--减速机--工作机的各联接轴伸, 安装后必须互相准确对准轴线。

3.3 减速机输入端及输出端轴伸外径尺寸公差按h6制作, 与之相匹配的联轴器、皮带轮、链轮等传动件内孔需按合适的公差尺寸配置, 避免装配过紧损坏轴承, 装配过松影响正常的动力传递。

3.4 链轮、齿轮等传动件装上轴伸时, 应尽量靠近轴承, 以减少轴伸弯曲应力。

3.5 减速机装配电机时, 应在蜗杆头部内孔孔壁及键槽处涂抹黄油, 避免装配过紧, 防止轴孔日久生锈。

3.6 使用各类电机直联型减速机时, 若电机重量偏大, 应设支撑装置。

4. 使用注意事项

4.1 使用前应注意检查减速机型式结构、中心距规格、传动比、输入轴连接方式、输出轴结构、输入轴输出轴轴指向和回转方向等是否符合使用要求, 蜗杆输入转速不宜超过1500r/min。

4.2 开机时应逐步施加载荷, 不能满载起动。

4.3 规格25~90减速机仅设加油孔, 出厂时减速机内已加好ISO VG320合成润滑油, 用户无需再加油, 机器连续运转约500小时后, 应该更换润滑油。以后换油周期为6000小时。

4.4 型号110~150减速机设有加油孔、放油孔和油标, 减速机内已加ISO VG460矿物润滑油, 用户在使用前须拉掉通气器上的橡胶环。首次运行400小时后换注新油, 以后每隔约4000小时换油一次。

4.5 减速机允许最高油温为95℃, 超过时应停机检查。

4.6 若减速机在使用前已放置时间超过4–6个月, 而油封又未浸入润滑油中, 推荐更换油封。

4.7 若减速机使用环境温度超出或低于表中规定使用环境温度5℃以上, 请与我公司人员联系。

Operating Instructions

1. Single step worm gear reducer

1.1 The reducer which is 25~90 made of Aluminum alloy die–casting box, good looking in appearance, compact in structure rust proofing on Surface and small volume to save mounting space.

1.2 The reducer model 110~150 is made of cast iron which casted with Aluminum mould. It's good looking and solid,and can be used through the setting of multi–azimuth.

1.3 Good radiating characteristic leads safe and high efficiency for using.

1.4 The strong capacity of loading and overload ensure stable transmission, make less vibration and noise.

1.5 Varies of connecting structure for power input and torque output meet different requirements; the design of box outline and the set of foot hole is apt to with high many kinds of mounting.

2. Double step worm gear reducer

2.1 It is combined by two single step reducers and has all the virtues of them. And you can get bigger ratio with it.

2.2 The models of 25/30、25/40、30/40、30/50、30/63、40/75、40/90、50/110、63/130、63/150, are in common use. You can choose 25、30、40、50、63、75、90、110、130、150 as combination units to combine according to the fact of your special needs.

3. Notes of installation

3.1 The base–plate must be plane and stoutness, and the base–bolts must be screwed down and shockproof.

3.2 The connecting shafts of prime mover, reducer and operation device must be coaxial after installation.

3.3 The diameter tolerance zone of input and output shaft is h6, the holes of fittings(such as couplings, belt–pulley, sprocket wheel and so on)must properly mate the shaft, which prevents bearing from breakage because of over–tight mate or avoid effecting normal power transmission because of over–loose mate.

3.4 Drivers such as sprocket wheel and gear must be fitted close to bearing in order to reduce bending stress of hanging shaft.

3.5 While assembling motor to the reducer, it is necessary to add butters to the worm shaft input hole and keyway, so as to avoid tightly assembling and rusting when it is used for a long time.

3.6 Supporting unit is required when reducers directly match with motors whose weight is bigger than normal types motor is a little bigger than normal.

4. Operating notes

4.1 Before using, please check carefully whether the reducer mode, distance size, ratio, input connecting method, output shaft structure, input and output shaft direction and revolving direction are right according to requirement. It is better for the input speed of worm shaft not more than 1500r/min.

4.2 The load should be added step by step when using the machine. Never running it with full load.

4.3 The reducer which model is among 25–90 has the oil add hole only.It has been full of synthetic lubrication oil ISO VG 320. User doesn't need to think about oil adding, after about 500 hours

continual running,please change lubrication oil. Then change the oilonceper 600 hours.

4.4 Ther reducer model of 110~150 has oil add hole,oil out hole and oil gauge. Mineral lubrication oil ISO VG 460 has been filled in enough, before using, user must ull out the rubber ring of vent plug.After the first 400 hours running, clean the inter box and change new oil in it. Then change the oil once per 4000 hours.

4.5 The permitted temperature of the oil in reducer is 95℃. If up to this value, it must be stopped and checked.

4.6 We propose to change oil seal when the reducer has been stored over four to six months and the oil seal has n't been immersed in lubrication oil before using.

4.7 When the ambient temperature is 5℃ upper or lower than the normal level stated in the table, please contact with us.

润滑油的选择使用
Choice of lubricant

润滑油选用表 Lubrication oil chosen table

减速机规格 Reducer size	25–90	110–150	
润滑油类型 Type of lubrication oil	合成润滑油 Complex lubrication oil	矿物润滑油 Mineral lubrication oil	
环境温度℃ Ambient temperature	–25 ~ +50	–5 ~ +40	–15 ~ +25
ISO VG	ISO VG 320	ISO VG 460	ISO VG 220
AGIP	TELIUM VSF320	BLASIA 460	BLASIA 220
SHELL	TIVELA OIL Sc320	OMALA OIL 460	OMALA OIL220
ESSO	S220	SPARTAN EP460	SPARTAN Ep220
MOBIL	GLYGOYLE 30	MOBIL GEAR 634	MOBIL GEAR 630
CASTROL	ALPHASYN PG320	ALPHA MAX 460	ALPHA MAX 220
BP	ENERGOL SG–XP320	ENERGOL GR–XP460	ENERGOL GR–XP220

润滑油注油量（L） Adding capacity of lubrication oil

规格 Type / 安装型式 Installation	025	030	040	050	063	075	090	110	130	150
B3	0.02	0.04	0.08	0.15	0.3	0.55	1	3	4.5	7
B6 B7								2.2	3.3	5.1
B8								2.5	3.5	5.4
V5								3	4.5	7
V6								2.2	3.3	5.1

故障分析

故障情况	故障原因	解决办法
过热	原动力、减速机、工作机连接不当	调整至适当位置，使三者相联轴线同轴
	超负荷运转	适当调整负荷
	油封过度磨擦	在油封唇口处滴润滑油
	☆润滑油过少或过多	按注油方式或调整油量
	☆润滑油杂质多或润滑性差	按润滑油选用表更换合适新油
振动	原动力、减速机、工作机固定不良	查出不良固定部件，正确固紧
	蜗轮副齿部磨耗或损伤	更换蜗轮副（需要时本公司配合）
	轴承磨损	更换轴承
	螺栓松脱	固紧螺栓
杂音	原动机与减速机连接不当	原动机重新调整连接
	轴承损伤或间隙过大	更换轴承
	蜗轮副啮合不良	修整齿面或更换蜗轮副（请与本公司联系）
	☆润滑油不足	按注油方式或补加润滑油
漏油	油封唇口磨损	更换油封
	油封档轴颈磨损	更换输入轴或带轮轴蜗轮
	放油螺塞未旋紧	螺纹处加密封胶，旋紧螺塞
	油标破损	更换油标
蜗轮副齿面磨损过快	超负荷运转	调整至适当负荷
	☆润滑油不符合要求	更换合适的润滑油
	☆润滑油不足	按油标指示点加足润滑油
	未按规定适时换油，润滑油劣化	按规定要求适时更换润滑油
	运转温度过高	1. 按“过热”故障处理 2. 采取合适措施，降低周遍环境温度

注：1.☆为换油后出现的故障原因。
2. 如果发生其他故障无法解决时，请随时与我们联系，以便提供咨询服务。

WGT®

Malfunctions analysis

Fault Description	Reasons	Solutions
Overheating	Improper connection among prime morer, reducer and the operation device	Adjust to proper position
	Overloading	Adjust to proper load
	Over friction of oil seals	Drop lubricant at oil seal
	☆Lubricant oil overmuch or shortage	Adjust to proper oil quantity as lubricant capa city tale
	☆Much impurity in oil or inferior oil	Refill proper oil
Vibration	Prime mover, reducer and the operation device mount badly	Find out the bad place, tighteh it
	Tooth surface of worm gear sets worn–out ordamaged	Replace worm gear sets(we will cooperate with you when necessary)
	Bearing worn–out	Replace Bearing
	Bolt loose	Tighten Screw
Noise	Improper connection among prime mover, reducer and the operation device	Adjust to proer position
	Bearing damaged or too large clearance	Replace Bearing
	Worm gear sets mesh badly	Mend tooth surface or replace worm gear sets (please contact to us)
	☆Lubricant oil shortage	Fill in adequate oil as lubricant capacity table
Oil leakage	Oil seal lip worn–out	Replace oil seal
	Shaft of oil seal area worn–out	Replace input or output shaft with worm gear
	Oil screw plug loose	Tighten oil screw plug
	Oil gauge damaged	Replace oil gauge
Tooth surface of worm gear sets abrade extra–quickly	Overload	Adjust to proper loading
	☆Lubricant oil not according with requirement	Replace proper lubricant oil
	☆Lubricant oil shortage	Fill adequate oil as indication
	Not replacing lubricant oil in time accord–ing to requirement, oil deteriorates	Replacing oil in time according to requirement
	Overheating while running	1. Deal with it as"Overheating" 2. Adopting proper measures to make environment temperatur fall

Annotate: 1.☆Accored after the lubricant changed.
2.If other faults not listed above occur,Please contact with us at any moment ,Our company will supply thorough consultation and service.