



意德减速 专注细节



高效率

免维护



# SPEED REDUCER 意德减速机

杭 州 兴 达 机 械 有 限 公 司



杭州兴达机械有限公司

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# BRIEF

## Introduction 企业简介

杭州兴达机械有限公司成立于1984年，以机械精加工为特点。工厂占地面积33000平方米，拥有CNC等加工生产设备和检测设备100多台。公司自行开发的 **意德**® RX系列涡轮减速机，广泛应用于食品机械，炊事机械，印刷机械，木工机械，小型纺织机械，橡胶机械，小型化工机械，塑料机械等。产品通过ISO 9001质量管理体系认证，产品销往国内外百余个城市和地区。

我们深信，至优品源于设计及每一个制造“细节”，**意德**® 减速，完美设计，专注细节，不断超越。

Founded in 1984, specialized in the development, manufacture and sales of mechanic products. The factory has more than 33000 square meters workshop, and with more than 100 sets of advanced process machines and test equipments. Our main produces **意德**® MRX worm speed reducer, passed the ISO 9001, are sold to more than hundreds of cities all over the world, both at home and abroad, in area of food industries, Kitchen work machinery, printing machinery, woodworking machinery, small textile machinery, rubber machinery, small chemical machinery, plastic machinery etc.

We believe that the perfect products are from the perfect design and every perfect steps. **意德**® Our deeds, your needs, can offer you a perfect solution for your transmission.



杭州兴达机械有限公司  
HANGZHOU XINDA MACHINERY CO., LTD.

意德减速 专注细节

# CONTENTS

## 目录

工欲善其事，必先利其器  
A workman must first sharpen his tools if he is to do his work well.



# Machining equipment

加工设备

国内一流自动化加工设备为零件加工精度的稳定性提供最稳固的基础。

The first-rate automatic equipments have provided solid foundation for machining accuracy.

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## 意德减速机

产品图片

Product picture

SPEED REDUCER



MRX 025~150



RX 030~150



MRX-MRX ...



RX-MRX ...



UDL.B3



UDL-MRX ...



## 一、MRX 系列减速机

产品概述

Summarize

MRX SERIES WORM GEAR UNITS



MRX 025~150



RX 030~150

## 结构特点 STRUCTURE FEATURES

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

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

## 主要材料 MAIN MATERIALS

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

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

## 表面涂装 SURFACE PAINTING

铝合金外壳：

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

铸铁外壳：

先涂红色防锈漆，后喷涂RAL5010A蓝色或银白色涂料。

Aluminum alloy housing:

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

Cast iron housing:

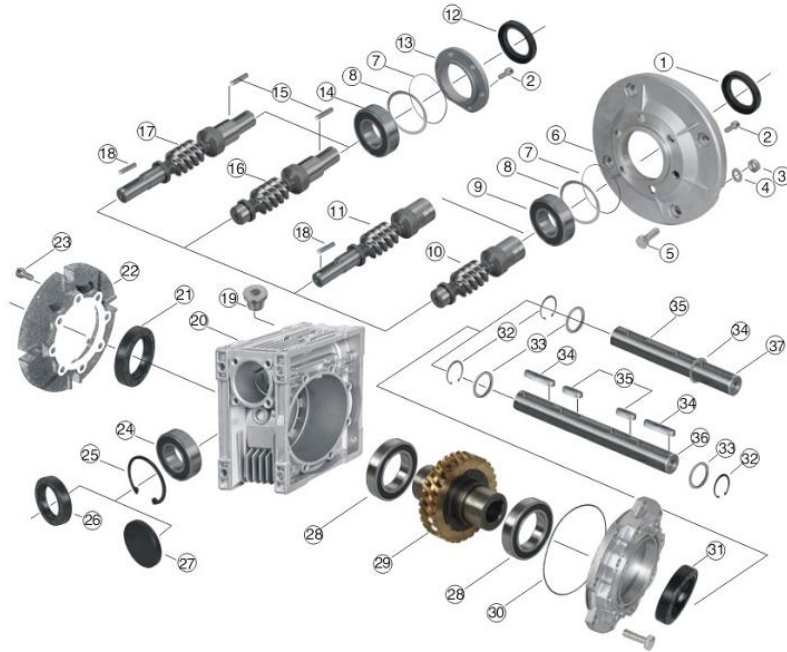
First paint with red antirust paint, then paint with RAL5010 blue or silvery white paint.



意德减速机

零件爆炸视图及名称  
Exploded view & name of parts

SPEED REDUCER



- |             |                                   |          |                     |
|-------------|-----------------------------------|----------|---------------------|
| 1、油封        | Oil seal                          | 19、油塞    | Oil plug            |
| 2、内六角螺钉     | Inner hex screw                   | 20、箱体    | Casing              |
| 3、螺母        | Nut                               | 21、油封    | Oil seal            |
| 4、弹性垫圈      | Spring washer                     | 22、输出法兰  | Output flange       |
| 5、六角头螺栓     | Hex screw                         | 23、内六角螺钉 | Inner hex screw     |
| 6、输入法兰      | Input flange                      | 24、轴承    | Bearing             |
| 7、O形圈       | O-Ring                            | 25、孔用挡圈  | Hole-circlip        |
| 8、调整垫片      | Adjust spacer                     | 26、油封    | Oil seal            |
| 9、轴承        | Bearing                           | 27、盖子    | Cover               |
| 10、孔输入蜗杆    | Hole input worm                   | 28、轴承    | Bearing             |
| 11、孔输入轴输出蜗杆 | Hole input and shaft output worm  | 29、蜗轮    | Worm wheel          |
| 12、油封       | Oil seal                          | 30、O形圈   | O-Ring              |
| 13、输入端盖     | Input cover                       | 31、轴用挡圈  | Output cover        |
| 14、轴承       | Bearing                           | 32、轴用挡圈  | Shaft-circlip       |
| 15、平键       | Key                               | 33、垫片    | Spacer              |
| 16、轴输入蜗杆    | Shaft input worm                  | 34、平键    | Key                 |
| 17、轴输入轴输出蜗杆 | Shaft input and shaft output worm | 35、平键    | Key                 |
| 18、平键       | Key                               | 36、双向输出轴 | Double output shaft |
|             |                                   | 37、单向输出轴 | Single output shaft |



MRX 蜗轮蜗杆减速机与减速器

型号标记  
Model Mark

WORM GEARED MOTORS AND WORM GEAR UNITS

MRX 063-40-E-FA1-AS1 71B5 B3-7124或/or0.37-4/1



NO	说 明	Comments
1	型号代码 1). MRX :孔输入带输入法兰 2). RX :轴输入不带输入法兰	Model code 1). MRX :Hole input with flange 2). RX :Shaft input without flange
2	蜗轮蜗杆减速机中心距 (规格)	Central distance of worm gear units(spec)
3	减速器速比 (i=7.5;10;15;20;25;30;40;50;60;80;100)	Speed ratio of reducer (i=7.5;10;15;20;25;30;40;50;60;80;100)
4	1).无代号表示不带蜗杆同向输出轴 2).E:带蜗杆同向输出轴	1).No mark means single extension worm shaft 2).E: Double extension worm shaft
5	1).无代号表示不带输出法兰 2).FA,FB,FC,FD,FE(1/2):输出法兰代号和位置	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).AS(1/2):单向输出轴和位置 3).AB:双向输出轴	1).No mark means hole output 2).AS(1/2): Single output shaft and position 3).AB: Double output shaft
7	输入法兰规格型式(不带电机时)	Normalized form of input flange(without motor)
8	安装方位代号	Installation position code
9	1).无代号表示不带电机 2).电机型号或功率、极数	1).No mark means without motor 2).Model motors (poles of power)
10	电机接线盒位置,默认位置1可以不写	Position diagram for motor terminal box default position 1 can be no mention



MRX



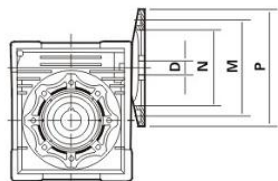
RX



MRX 规格与电机连接法兰和速比配置

意德减速机  
Speed reducer

THE CONFIGURATION COMBINE MRX SPEC WITH MOTORS COUPLING FLANGE AND RATIO



\*如果要特殊平键请与技术部联系。  
\*If you want special key, please call our Technical Service

	电机法兰 Motor flange				输入轴直径 D The hole diameter of input shaft											
	PAM IEC	P	M	N	传动比 i Transmission ratio											
					7.5	10	15	20	25	30	40	50	60	80	100	
MRX025	56B14	80	65	50	9	9	9	9	9	9	9	9	9			
	63B5	140	115	95												
MRX030	63B14	90	75	60	11	11	11	11	11	11	11	11				
	56B5	120	100	80												
MRX040	56B14	80	65	50	9	9	9	9	9	9	9	9	9	9		
	71B5	160	130	110	14	14	14	14	14	14						
	71B14	105	85	70												
	63B5	140	115	95	11	11	11	11	11	11	11	11	11	11	11	
MRX050	56B5	120	100	80								9	9	9	9	
	80B5	200	165	130												
	80B14	120	100	80	19	19	19	19	19	19						
	71B5	160	130	110	14	14	14	14	14	14	14	14	14	14		
MRX063	71B14	105	85	70												
	90B5	200	165	130	24	24	24	24	24	24						
	90B14	140	115	95								11	11	11	11	
	80B5	200	165	130	19	19	19	19	19	19	19	19	19	19	19	
MRX075	80B14	120	100	80								14	14	14	14	
	71B5	160	130	110												
	100/112B5	250	215	180	28	28	28									
	110/112B14	160	130	110												
MRX090	90B5	200	165	130	24	24	24	24	24	24						
	90B14	140	115	95	24	24	24	24	24	24	24	24				
	80B5	200	165	130							19	19	19	19	19	
	80B14	120	100	80												
MRX110	132B5	300	265	230	38*	38*	38*	38*								
	110/112B5	250	215	180	28	28	28	28	28	28	28	28	28			
	90B5	200	165	130					24	24	24	24	24	24	24	
	80B5	200	165	130										19	19	
MRX130	132B5	300	265	230	38*	38*	38*	38*	38*	38*	38*					
	100/112B5	250	215	180					28	28	28	28	28	28	28	
	90B5	200	165	130										24	24	
MRX150	160B5	350	320	250	42	42	42	42	42							
	132B5	300	265	230					38	38	38	38	38			
	100/112B5	250	215	180								28	28	28	28	

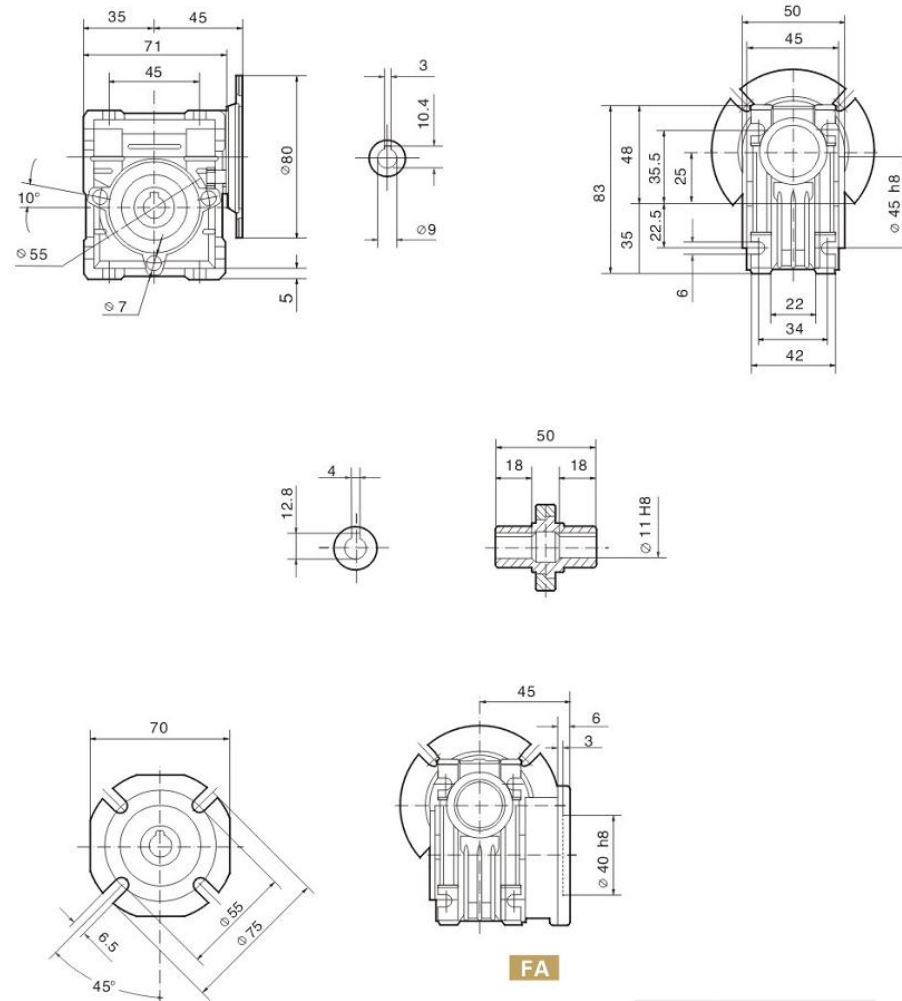


MRX 外形尺寸图表

MRX 025

OUTLINE DIMENSION SHEET FO MRX

MRX 025



重量(不包括马达) ~0.7kg  
Weight without motor ~0.7kg

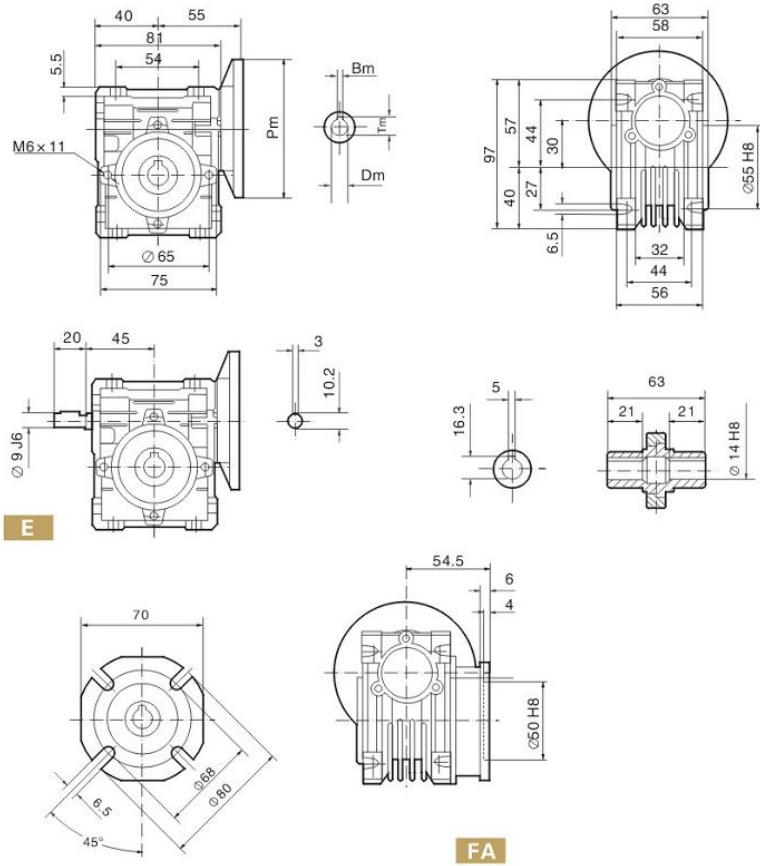


MRX 外形尺寸图表

MRX 030

OUTLINE DIMENSION SHEET FOR MRX

MRX 030



PAM IEC	Pm	DmE8	Bm	Tm
63B5	140	11	4	12.8
56B5	120	9	3	10.4
63B14	90	11	4	12.8
56B14	80	9	3	10.4

重量(不包括马达) ≈ 1.2kg  
Weight without motor ≈ 1.2kg

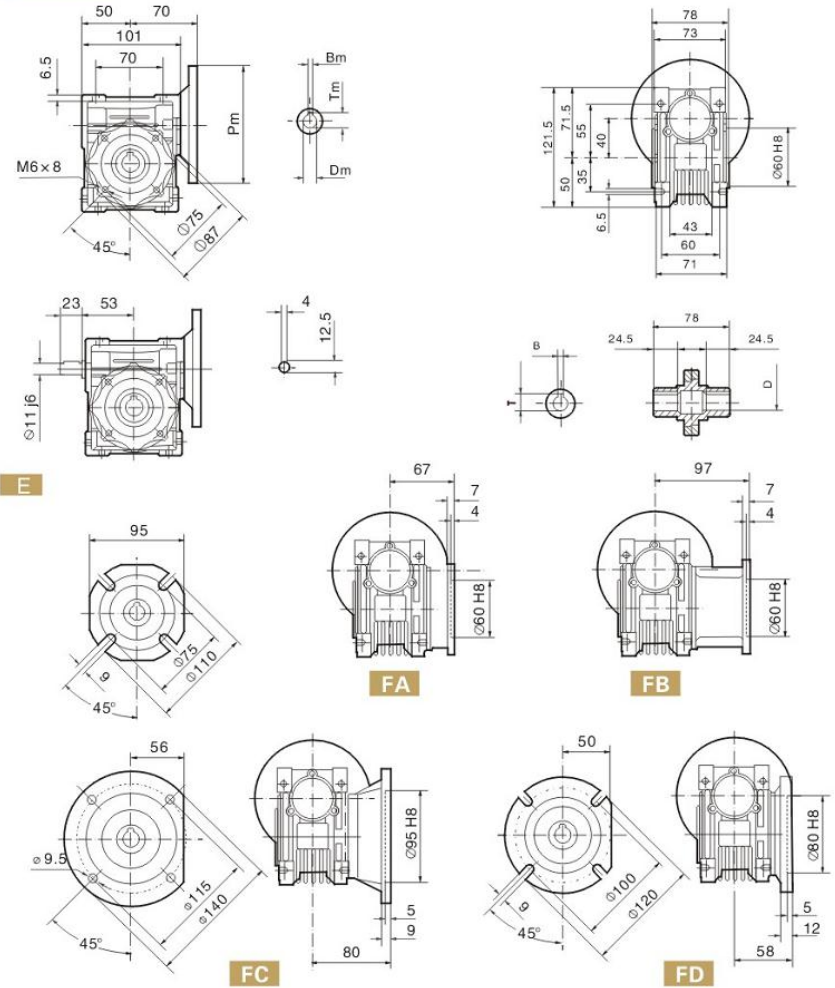


MRX 外形尺寸图表

MRX 040

OUTLINE DIMENSION SHEET FOR MRX

MRX 040



PAM IEC	Pm	DmE8	Bm	Tm	DH8	B	T
71B5	160	14	5	16.3	18	6	20.8
63B5	140	11	4	12.8	19	6*	21.8*
56B5	120	9	3	10.4			
71B14	105	14	5	16.3			
63B14	90	11	4	12.8			

\*Only on request  
\*非标产品, 订单时请说明

重量(不包括马达) ≈ 2.3kg  
Weight without motor ≈ 2.3kg

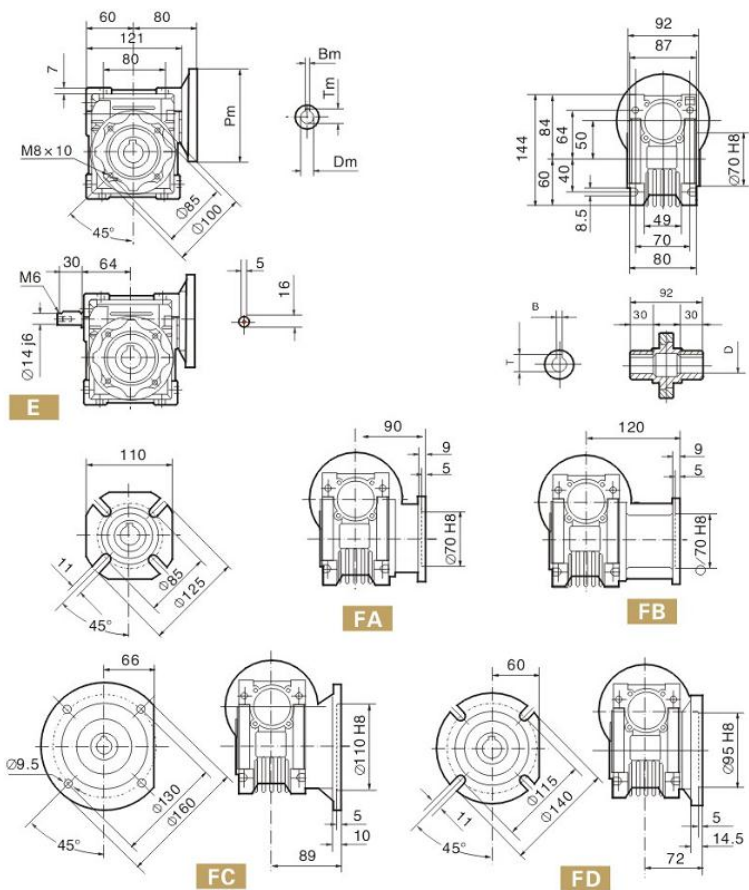


# MRX 外形尺寸图表

## MRX 050

OUTLINE DIMENSION SHEET FOR MRX

### MRX 050



PAM IEC	Pm	DmE8	Bm	Tm	DH8	B	T
80B5	200	19	6	21.8	25	8	28.3
71B5	160	14	5	16.3	24*	8*	27.3*
63B5	140	11	4	12.8			
80B14	120	19	6	21.8			
71B14	105	14	5	16.3			

\*Only on request  
\*非标产品, 订单时请说明

重量(不包括马达) ≈ 3.5kg  
Weight without motor ≈ 3.5kg

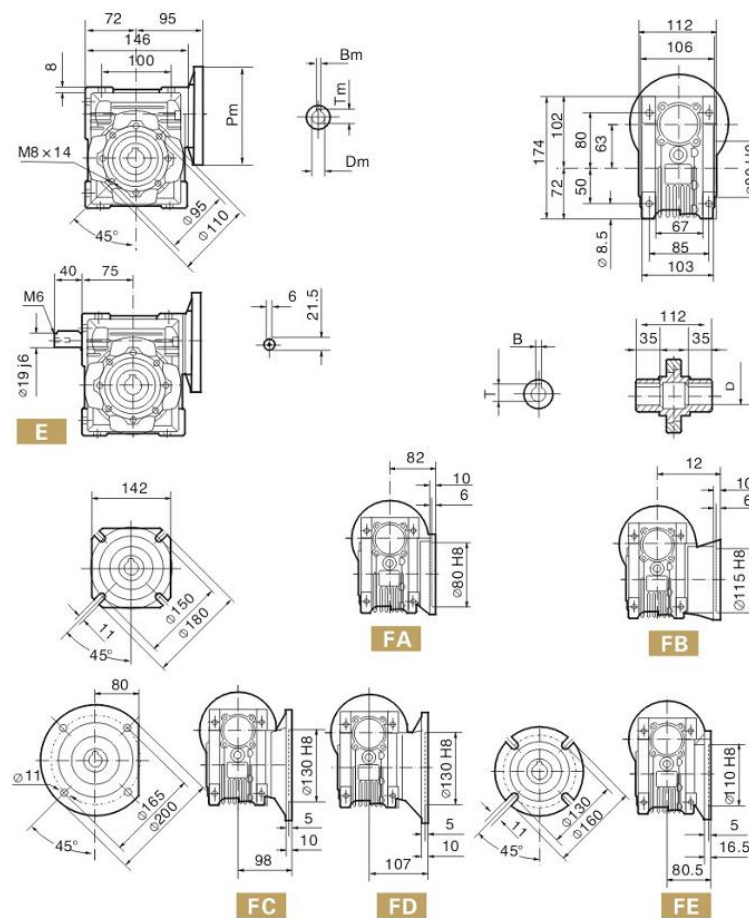


# MRX 外形尺寸图表

## MRX 063

OUTLINE DIMENSION SHEET FOR MRX

### MRX 063



PAM IEC	Pm	DmE8	Bm	Tm	DH8	B	T
90B5	200	24	8	27.3	25	8	28.3
80B5	200	19	6	21.8	28*	8*	31.3*
71B5	160	14	5	16.3			
90B14	140	24	8	27.3			
80B14	120	19	6	21.8			
71B14	105	14	5	16.3			

\*Only on request  
\*非标产品, 订单时请说明

重量(不包括马达) ≈ 6.2kg  
Weight without motor ≈ 6.2kg



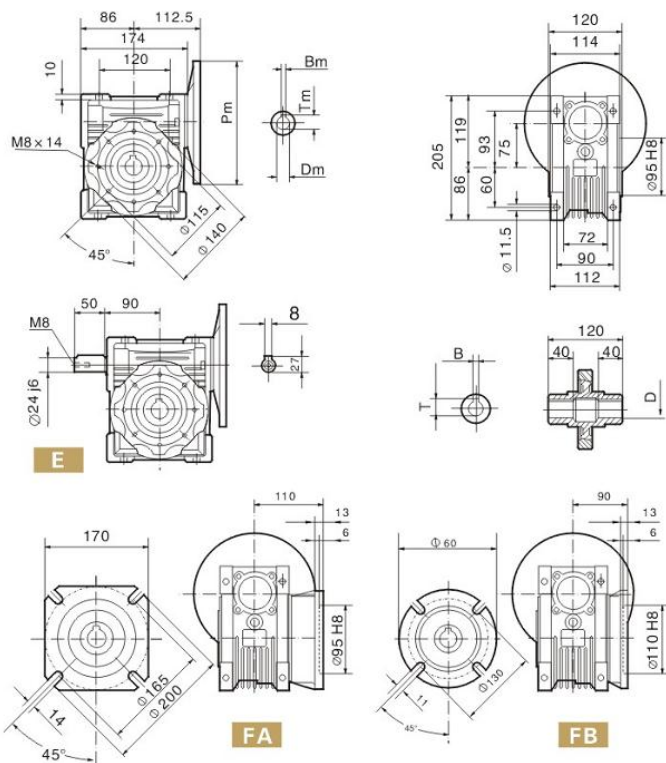


MRX 外形尺寸图表

MRX 075

OUTLINE DIMENSION SHEET FOR MRX

MRX 075



PAMIEC	Pm	DmE8	Bm	Tm	DH8	B	T
100/112B5	250	28	8	31.3	28	8	31.3
90B5	200	24	8	27.3	35*	10*	38.3*
80B5	200	19	6	21.8	*Only on request *非标产品, 订单时请说明		
71B5	160	14	5	16.3			
100/112B14	160	28	8	31.3			
90B14	140	24	8	27.3			
80B14	120	19	6	21.8			

重量(不包括马达) ≈ 9kg  
Weight without motor ≈ 9kg

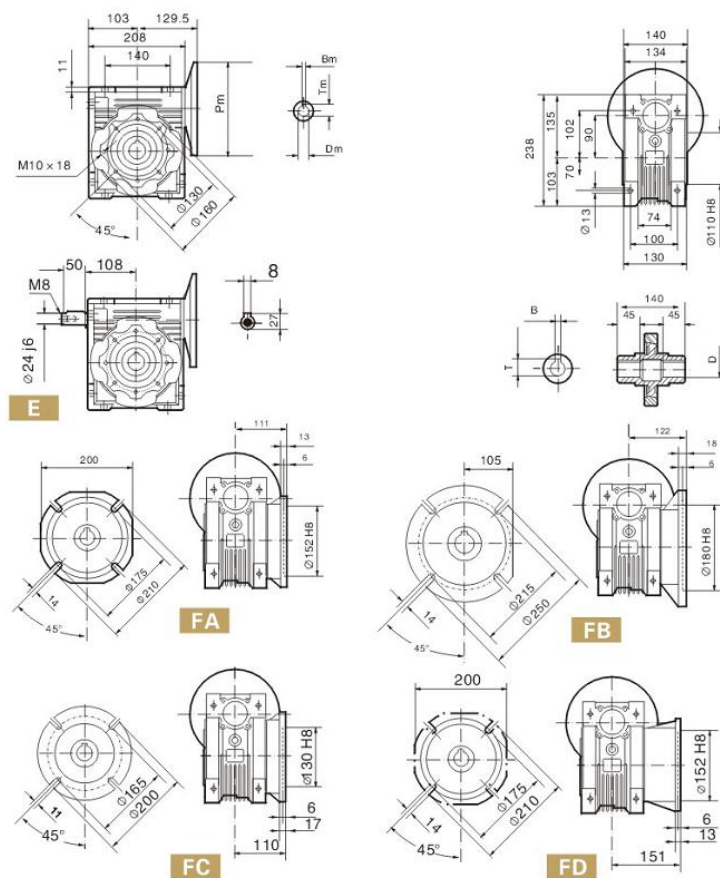


MRX 外形尺寸图表

MRX 090

OUTLINE DIMENSION SHEET FOR MRX

MRX 090



PAMIEC	Pm	DmE8	Bm	Tm	DH8	B	T
100/112B5	250	28	8	31.3	35	10	38.3
90B5	200	24	8	27.3	38*	10*	41.3*
80B5	200	19	6	21.8	*Only on request *非标产品, 订单时请说明		
100/112B14	160	28	8	31.3			
90B14	140	24	8	27.3			
80B14	120	19	6	21.8			

重量(不包括马达) ≈ 13kg  
Weight without motor ≈ 13kg

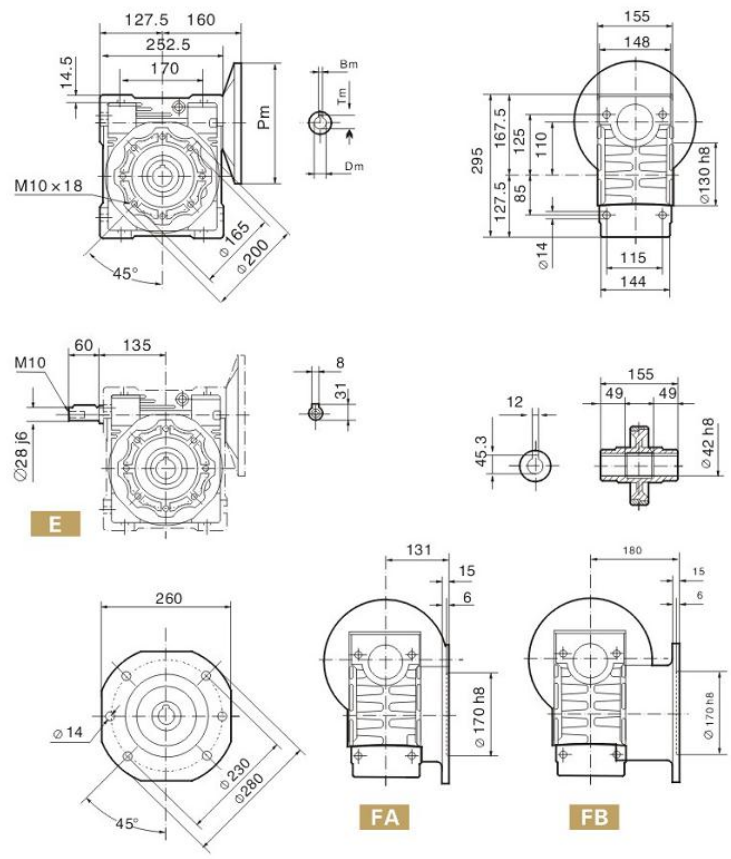


MRX 外形尺寸图表

MRX 110

OUTLINE DIMENSION SHEET FOR MRX

MRX 110



PAM IEC	Pm	DmE8	Bm	Tm
132B5	300	38	10	41.3
112B5	250	28	8	31.3
100B5	250	28	8	31.3
90B5	200	24	8	27.3
80B5	200	19	6	21.8

重量(不包括马达) ≈ 35kg  
Weight without motor ≈ 35kg

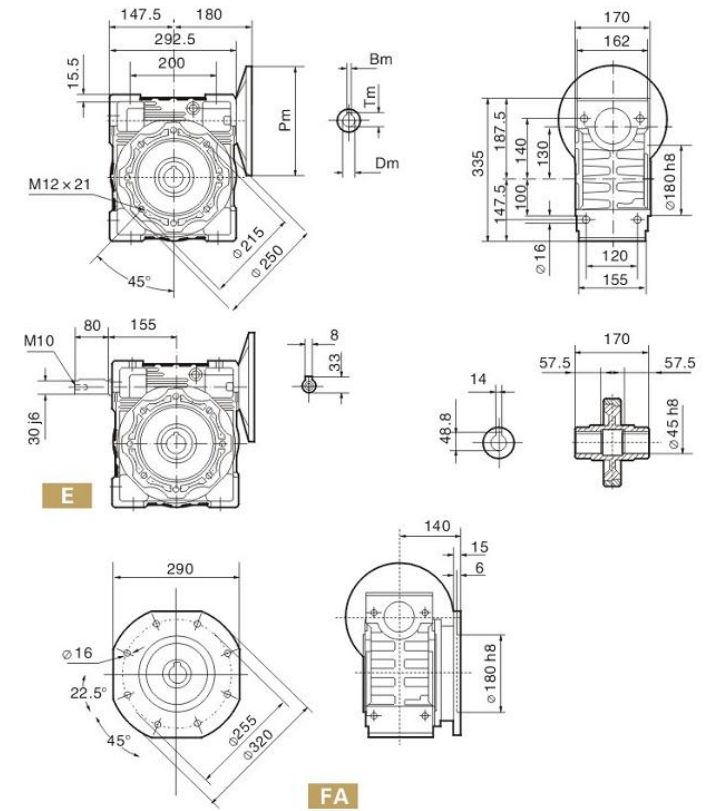


MRX 外形尺寸图表

MRX 130

OUTLINE DIMENSION SHEET FOR MRX

MRX 130



PAM IEC	Pm	DmE8	Bm	Tm
132B5	300	38	10	41.3
112B5	250	28	8	31.3
100B5	250	28	8	31.3
90B5	200	24	8	27.3

重量(不包括马达) ≈ 48kg  
Weight without motor ≈ 48kg

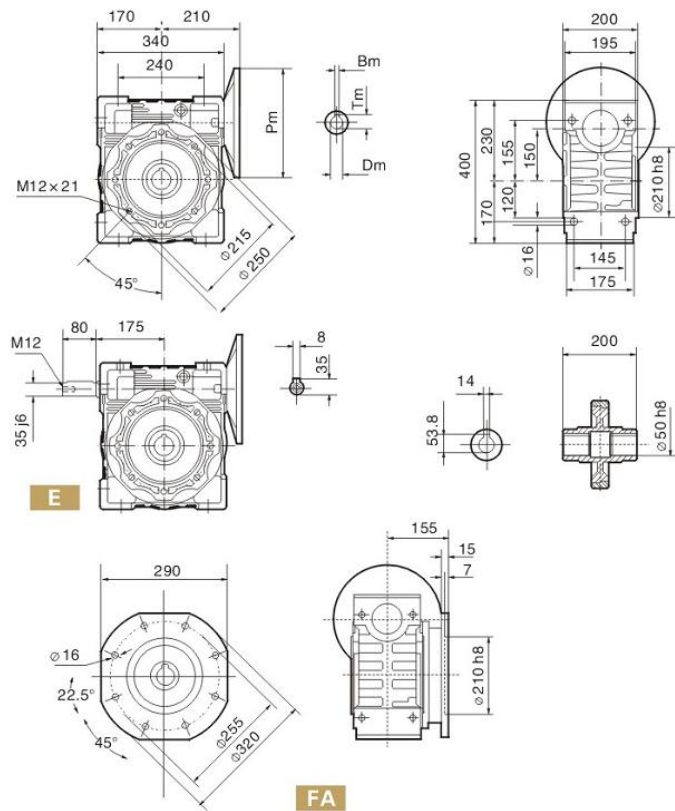


MRX 外形尺寸图表

MRX 150

OUTLINE DIMENSION SHEET FOR MRX

MRX 150



PAM IEC	Pm	DmE8	Bm	Tm
160B5	350	42	12	45.3
132B5	300	38	10	41.3
112B5	250	28	8	31.3
100B5	250	28	8	31.3

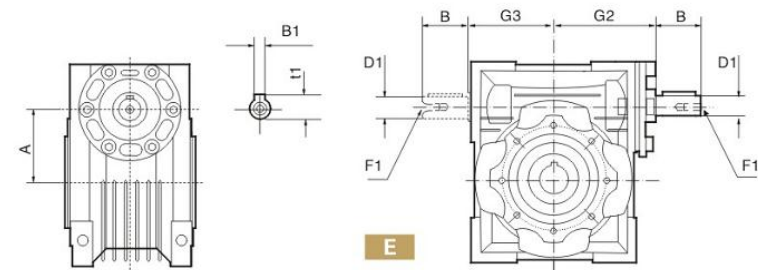
重量(不包括马达)  $\approx$  84kg  
Weight without motor  $\approx$  84kg



RX 外形尺寸图表

NRV蜗轮杆减速器  
Worm gear units

OUTLINE DIMENSION SHEET FOR RX



RX	030	040	050	063	075	090	110	130	150
B	20	23	30	40	50	50	60	80	80
D1j6	9	11	14	19	24	24	28	30	35
G2	51	60	74	90	105	125	142	162	195
G3	45	53	64	75	90	108	135	155	175
A	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

没有列出的外型尺寸,请查阅06-15页  
For the missing dimensions, please refer to page06-15

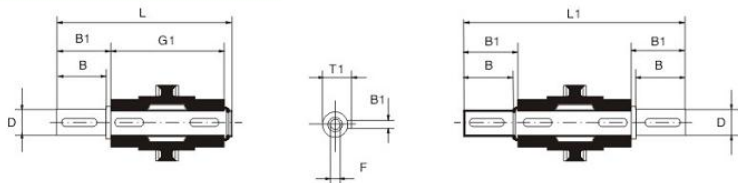


附件

意德减速机  
Speed reducer

ACCESSORIES

输出轴 OUTPUT SHAFT

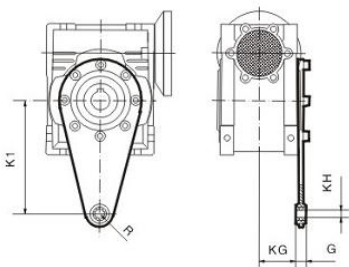


单向输出轴 Single Output Shaft

双向输出轴 Double Output Shaft

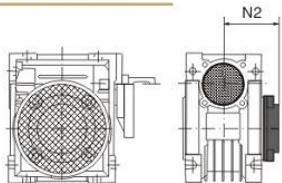
	Dh6	B	B1	G1	L	L1	F	B1	T1
MRX 025	11g6	23	25.5	50	81	101	-	4	12.5
	9*	25*	30	50	85.5*	101	-	3*	10.2*
MRX 030	14	30	32.5	63	102	128	M6	5	16
MRX 040	18	40	43	78	128	164	M6	6	20.5
MRX 050	25	50	53.5	92	153	199	M10	8	28
MRX 063	25	50	53.5	112	173	219	M10	8	28
MRX 075	28	60	63.5	120	192	247	M10	8	31
MRX 090	35	80	84.5	140	234	309	M12	10	38
MRX 110	42	80	84.5	155	249	324	M16	12	45
MRX 130	45	80	85	170	265	340	M16	14	48.5
MRX 150	50	82	87	200	297	374	M16	14	53.5

扭力臂 TORQUE ARM



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

防尘盖 COVER



	N2	N2	N2
MRX 030	47	MRX 090	94
MRX 040	55	MRX 110	102
MRX 050	63	MRX 130	117
MRX 063	73	MRX 150	122
MRX 075	79		



二、MRX / RX - MRX 双级减速机

概述  
Summarize

COMBINATION WORM GEAR UNITS

介绍:

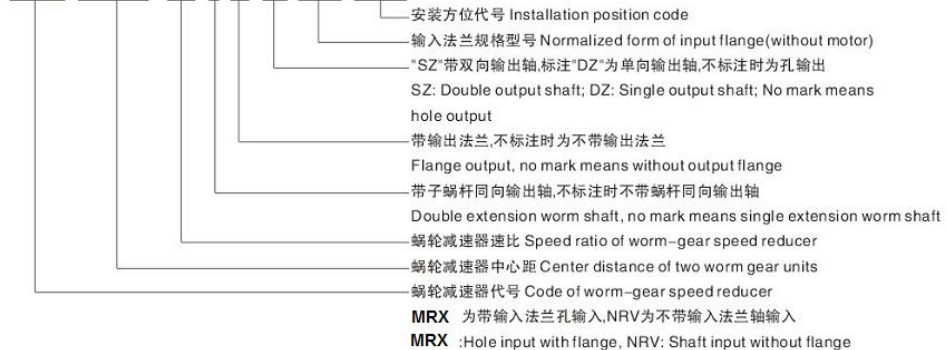
由单机蜗轮减速机组合而成, 具有单机NMRV的一切优点, 和获得大的传动比。

It is combined by two single step reducers and has all the virtues of them, with larger ratio.

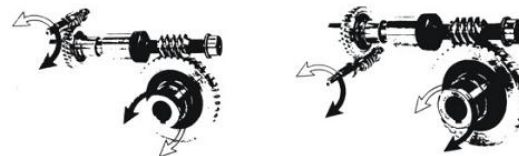


型号标记  
Model & mark

MRX 050/110-900 E F1 SZ 71B5 B3.56



蜗杆 蜗轮旋转方向  
Direction of Rotation





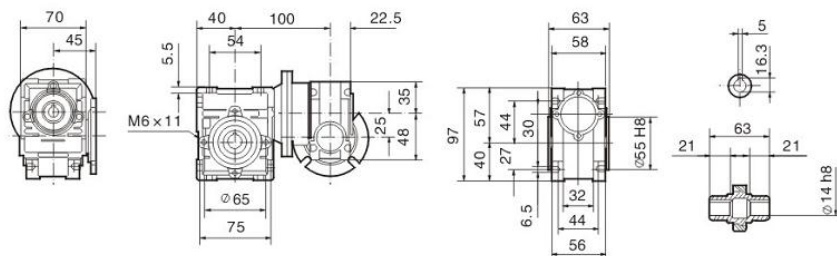
MRX - MRX 外形尺寸图表

外形尺寸图表  
Outline dimension sheet

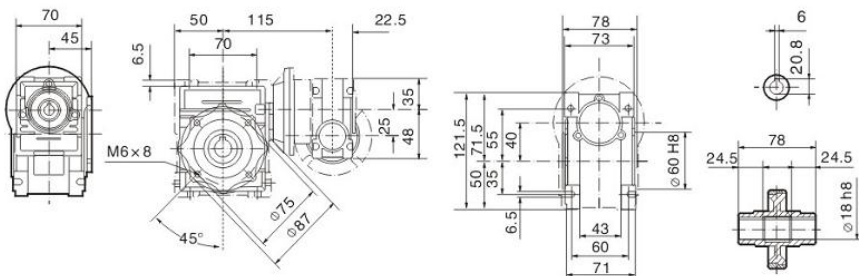
OUTLINE DIMENSION SHEET FOR MRX - MRX

- ◆有关输出法兰尺寸,请查阅06-15页
- ◆有关输出空心轴尺寸,请查阅06-15页
- ◆有关单、双向输出轴尺寸, 请查阅17页
- ◇For the dimensions of the output flanges , please refer to page06-15
- ◇For the dimensions of the hollow shafts , please refer to page06-15
- ◇For the dimensions of the double extension warm shafts please refer to page17

MRX 025/030



MRX 025/040

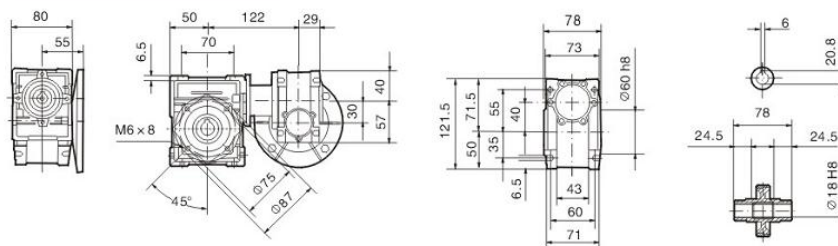


MRX - MRX 外形尺寸图表

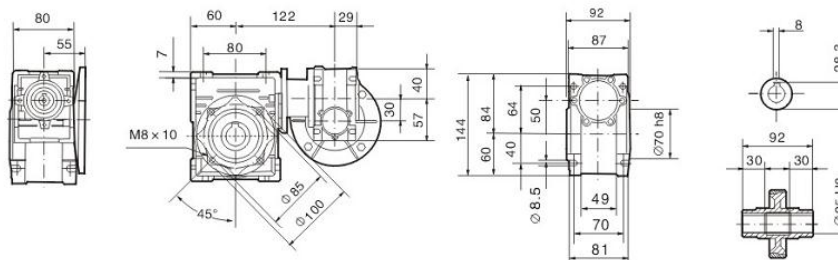
意德减速机  
Speed reducer

OUTLINE DIMENSION SHEET FOR MRX - MRX

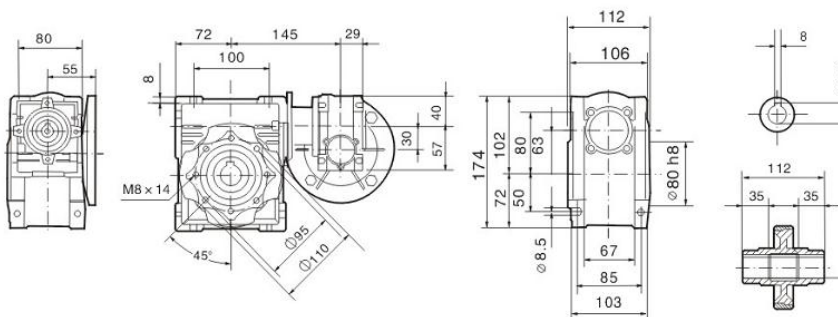
MRX 030/040



MRX 030/050



MRX 030/063



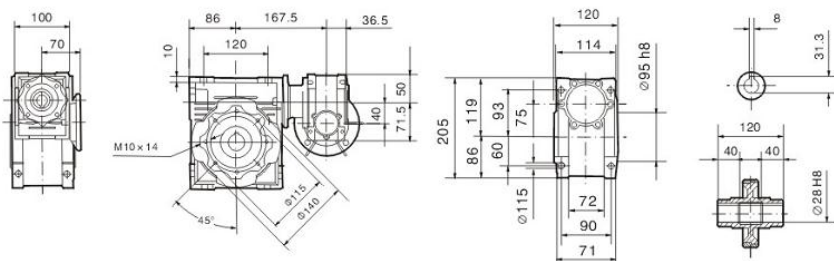


MRX - MRX 外形尺寸图表

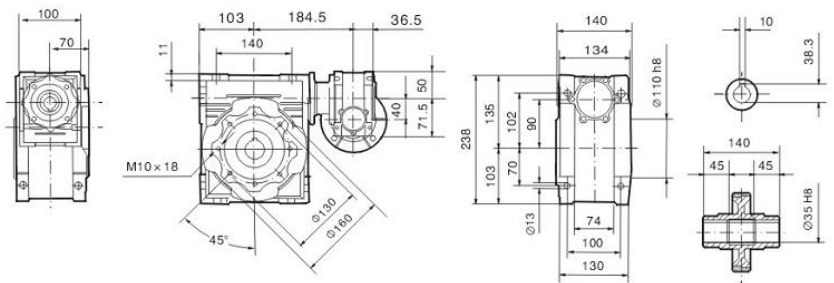
意德减速机  
Speed reducer

OUTLINE DIMENSION SHEET FOR MRX - MRX

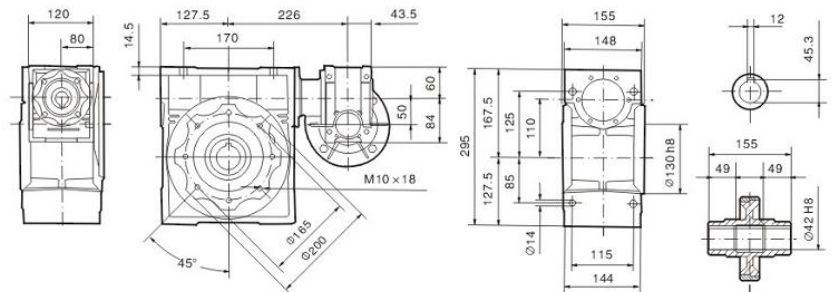
MRX 040/075



MRX 040/090



MRX 050/110

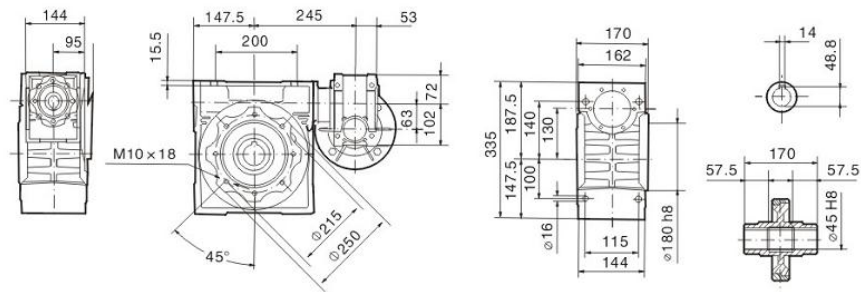


MRX - MRX / RX - MRX 外形尺寸图表

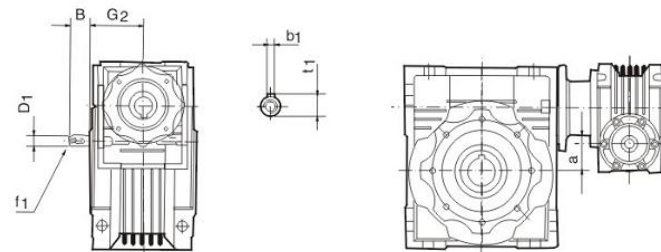
意德减速机  
Speed reducer

OUTLINE DIMENSION SHEET FOR MRX - MRX / RX - MRX

MRX 063/130



RX - MRX 双蜗轮减速机 COMBINATION WORM GEAR UNITS OF RX - MRX



RX - MRX	030/040	030/050	030/063	040/073	040/093	050/110	063/130
B	20	20	20	23	23	30	40
D1j6	9	9	9	11	11	14	19
G2	51	51	51	60	60	74	90
A	10	20	33	35	50	60	67
B1	3	3	3	4	4	5	6
F1	-	-	-	-	-	M6	M6
Tl	10.2	10.2	10.2	12.5	12.5	16	21.5

◆没有列出的外形尺寸,请查阅06-15页  
◆For the missing dimensions, please refer to page06-15

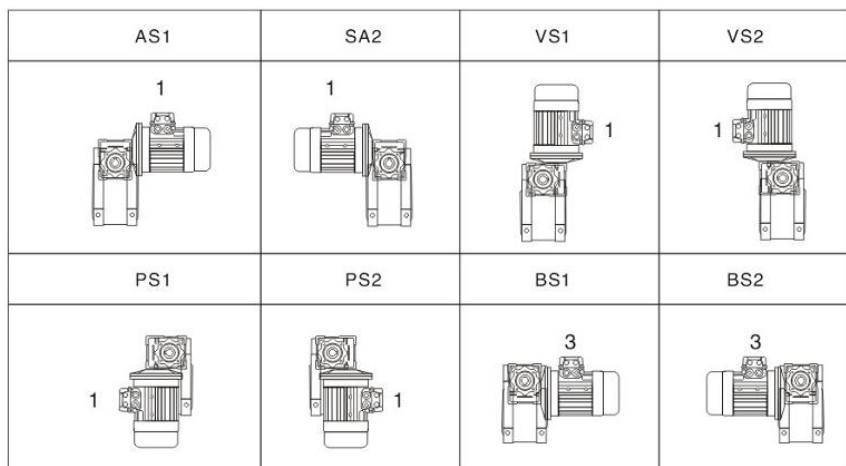


MRX - MRX / RX - MRX 安装方位图

意德减速机  
Speed reducer

INSTALLATION POSITIONS DIAGRAM FOR MRX - MRX/ RX - MRX

MRX --- MRX .../ RX --- MRX ...



第一级减速器和第二级减速组合方位按上图类型，除非特别说明，一般出厂时的标准位置是按BS2方位供应的。第一级减速器安装方位参照06-15页说明。

The position of the 1st reducer with respect to the 2nd gear reducer depends on the versions. Unless specified at the time of order, combination groups are supplied in version Bs2. The specified mounting position refers to the 1nd gear reducer, see page 06-15 for the possible mounting positions.



MRX - MRX / RX - MRX 组合传动速比分配表

意德减速机  
Speed reducer

ASSIGNMENT TABLE OF COMBINATION RATIO FOR MRX - MRX/ RX - MRX

n1=1400r/min		MRX 025/030			MRX 025/040			MRX 030/040			MRX 030/050			MRX 030/063		
i	n2	P1 (kw)	i025	i030	P1 (kw)	i025	i040	P1 (kw)	i030	i040	P1 (kw)	i030	i050	P1 (kw)	i030	i060
100	14	0.09	10	10	—	—	—	—	—	—	—	—	—	—	—	—
150	9.3	0.06	10	15	—	—	—	—	—	—	—	—	—	—	—	—
200	7	0.06	10	20	—	—	—	—	—	—	—	—	—	—	—	—
250	5.6	0.06	10	25	—	—	—	—	—	—	—	—	—	—	—	—
300	4.7	0.06	10	30	0.06	10	30	0.09	10	30	0.18	10	30	0.22	10	30
400	3.5	0.06	20	20	0.06	10	40	0.06	10	40	0.12	10	40	0.18	10	40
500	2.8	0.06	20	25	0.06	20	25	0.06	20	25	0.09	10	50	0.18	10	50
600	2.3	0.06	20	30	0.06	20	30	0.06	20	30	0.09	20	30	0.12	20	30
750	1.9	0.06	30	25	0.06	25	30	0.06	25	30	0.09	25	30	0.12	25	30
900	1.6	0.06	30	30	0.06	30	30	0.06	30	30	0.06	30	30	0.09	30	30
1200	1.2	0.06	40	30	0.06	40	30	0.06	40	30	0.06	40	30	0.09	40	30
1500	0.93	0.06	50	30	0.06	50	30	0.06	50	30	0.06	50	30	0.06	50	30
1800	0.78	0.06	60	30	0.06	60	30	0.06	60	30	0.06	60	30	0.06	60	30
2400	0.58	0.06	60	40	0.06	60	40	0.06	60	40	0.06	60	40	0.06	60	40
3000	0.47	0.06	60	50	0.06	60	50	0.06	—	—	0.06	60	50	0.06	60	50
3200	0.44	—	—	—	—	—	—	—	80	40	—	—	—	—	—	—
4000	0.35	—	—	—	0.06	50	80	0.06	80	50	0.06	80	50	0.06	80	50
4800	0.29	—	—	—	—	—	—	—	—	—	0.06	80	60	—	—	—
5000	0.28	—	—	—	0.06	50	100	0.06	50	100	—	—	—	0.06	100	50

N1=1400r/min		MRX 040/075			MRX 040/090			MRX 050/110			MRX 063/130		
i	n2	P1 (kw)	i040	i075	P1 (kw)	i040	i090	P1 (kw)	i050	i0110	P1 (kw)	i063	i030
300	4.7	0.37	10	30	0.37	10	30	0.75	10	30	1.5	10	30
400	3.5	0.25	10	40	0.37	10	40	0.75	10	40	1	10	40
500	2.8	0.25	10	50	0.37	10	50	0.55	20	25	1	10	50
600	2.3	0.18	20	30	0.37	20	30	0.55	20	30	0.75	15	40
750	1.9	0.18	25	30	0.25	25	30	0.55	25	30	0.75	25	30
900	1.6	0.12	30	30	0.25	30	30	0.37	30	30	0.75	30	30
1200	1.2	0.12	40	30	0.18	40	30	0.25	40	30	0.55	40	30
1500	0.93	0.09	50	30	0.18	50	30	0.25	50	30	0.37	50	30
1800	0.78	0.09	60	30	0.12	60	30	0.25	60	30	0.37	60	30
2400	0.58	0.06	60	40	0.12	60	40	0.18	60	40	0.25	60	40
3000	0.47	0.06	60	50	0.09	60	50	0.12	60	50	0.25	60	50
4000	0.35	0.06	80	50	0.06	80	50	0.12	80	50	0.25	80	50
5000	0.28	0.06	100	50	0.06	100	50	0.12	100	50	0.25	100	50

用户有特殊要求时,可根据实际需要选择025、030、040、050、063、075、090、110、130、150作为组合单位另行组合  
You can choose 025、030、040、050、063、075、090、110、130、150 as combination unit to combine according to the fact your special needs.



## 三、UDL 无级变速器

意德减速机  
Speed reducer

## UDL STEPLESS SPEED VARIATOR



UDL...B3



UDL...B5

## 无线变速器简介 BRIEF INTRODUCTION TO STEPLESS SPEED VARIATOR

UDL系列无级变速器的设计，融合了国内外的先进技术，产品有以下主要特点：

- 1、调速精度高：达0.5-1转。
- 2、变速范围大，输出速比可在1: 1.4至1:7之间变化；
- 3、强度高，寿命长。
- 4、调速方便。
- 5、可连续工作运转，且可正反方向运转，运转平稳，性能稳定，噪音低。
- 6、全密封，对环境要求低。
- 7、机构紧凑，体积小。
- 8、采用优质铝合金压铸成型，外形美观，重量轻，永不生锈。
- 9、适应性好。UDL系列无级变速器可与各种减速机组合，实现低速无级变速。

UDL系列无级变速器可广泛用于食品、包装、化工、制药、塑料、造纸、机床、交通以及各种需调速的自动生产线，输送装配流水线，是您机器上理想的伙伴。

The design of UDL series stepless speed variator comprises the advanced technology both at home and abroad. The products include the following main characteristics:

- 1、High speed-regulating precision : up to 0.5-1 rotation.
- 2、Large speed-changing range: The speed ratio ranges from 1: 1.4 to 1:7 freely.
- 3、High in strength and long in service life.
- 4、Convenient to regulate the speed.
- 5、Continuous in running , front-to-back in running direction , smooth in driving , stable in performance and low in noise.
- 6、Full in sealing and suitable for any environment.
- 7、Compact in structure and small in volume.
- 8、Made in high-quality aluminium alloy diecast into forming , good-looking in appearance , light in weight and it never gets rusty.
- 9、Good in adaptation: UDL series stepless speed variators can be combined with all kinds of speed reducers , as to achieve low stepless speed-changing.

UDL series stepless speed variators are widely used for foodstuffs, ceramics, packing, chemicals, pharmacy, plastics , paper-making , machine-tools , communications , and all kinds of automatic lines , pipelines and assembly lines which need speed-regulation , it is a good companion for your production.

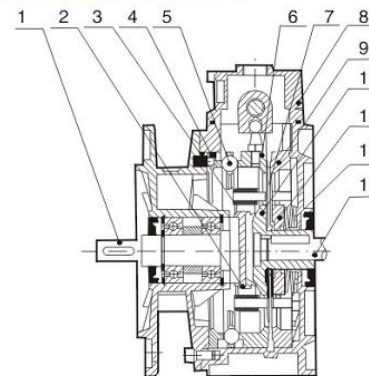


## UDL 结构 型号标记

UDL 无级变速器  
UDL Stepless speed variator

## STRUCTURE &amp; MODEL MARK FOR UDL

## 结构 STRUCTURE



- |         |                                |
|---------|--------------------------------|
| 1、输出轴   | 1、Output shaft                 |
| 2、行星架   | 2、Planet carrier               |
| 3、滑块    | 3、Friction bearing-planet disk |
| 4、调整轨   | 4、Cam ring                     |
| 5、钢珠环   | 5、Ball ring                    |
| 6、滑动轨   | 6、Adjustable annulus ring      |
| 7、行星轮   | 7、Planet disk                  |
| 8、操作盒   | 8、Control cover                |
| 9、固定轨   | 9、Fixed annulus ring           |
| 10、太阳轮  | 10、Fixed sun race              |
| 11、太阳轮片 | 11、Adjustable sun race         |
| 12、蝶形弹簧 | 12、Belleville spring           |
| 13、电机轴  | 13、Motor shaft                 |

## UDL 型号标记 UDL MODEL MARK

UD-L-0.75 B5 B5

① ② ③ ④ ⑤

NO	说明	Comments
1	无线变速器代号	Code of step less speed variator
2	1) L铝合金机壳 2) 不标注时为铸铁机壳	1)L:Aluminium alloy casing 2)No mark means iron casting
3	电机功率	Motor power
4	1) B3脚底安装机型 2) B5法兰安装机型	1)B3:Foot-mounted model 2)B5:Flange-mounted model
5	安装方位代号	Code of installation position



## UDL 性能参数表/安装方位图

意德减速机  
Speed reducer

UDL PERFORMANCE TABLE/INSTALLATION POSITION DIAGRAM

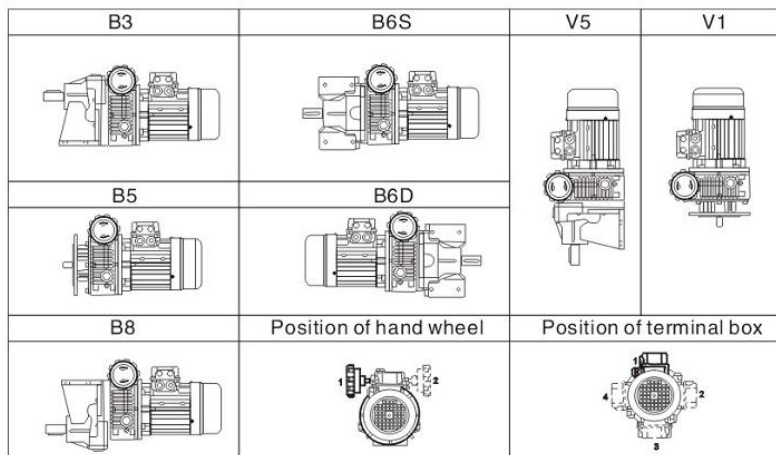
### UDL 系列无级变速器性能参数

#### PERFORMANCE TABLE FOR UDL SERIES SPEED VARIATOR

N1=1400 r/min

B	型号Model	I	N <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]
0.18KW	UDL0.18	1.6~8.2	880~170	1.5~3
0.37KW	UDL0.37	1.4~7	1000~200	3~6
0.55KW	UDL0.55	1.4~7	1000~200	4~8
0.75KW	UDL0.75	1.4~7	1000~200	6~12
1.1KW	UD1.1	1.4~7	1000~200	9~18
1.5KW	UD1.5	1.4~7	1000~200	12~24
2.2KW	UD2.2	1.4~7	1000~200	18~36
3.0KW	UD3.0	1.4~7	1000~200	24~48
4.0KW	UD4.0	1.4~7	1000~200	32~64
5.5KW	UD5.5	1.4~7	1000~200	45~90
7.5KW	UD7.5	1.4~7	1000~200	59~118

### 安装方位图 INSTALLATION POSITION DIAGRAM



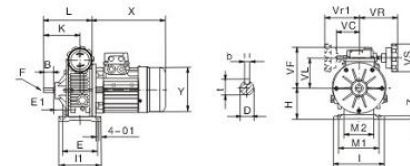
- 如果对接线盒位置有特殊要求,请在下单时如上图所示来指定接线盒安装方位,否则接线盒的位置按标准1形式提供。
- 如没有特殊要求,一般按出厂的标准位置B3或B5形式提供。
- 如需要特殊的位置,请与我们技术服务人员联系。
- For special requirements, orders must specify the position of the terminal box with reference to the diagram. Unless otherwise specified the terminal box, the position of that will be mounted as shown in the diagram for the mounting position.
- Unless specified otherwise, the standard positions are B3 or B5.
- For positions not envisaged, it is necessary to call our Technical Service.

## UDL 外形及安装尺寸

无级变速器  
Stepless speed variator

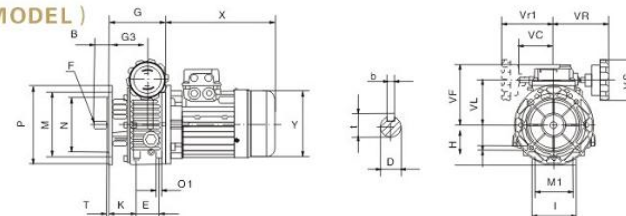
OUTLINE & INSTALLATION SIZES FOR UDL

### B3型 ( MODEL )



	B	Dp	E	E1	H	I	I1	K	L	M1	M2	O1	VC	VF	VL	VR	Vr1	VS	B	F	T	X	Y	Z
UDL0.18B3	23	11	105	18	80	145	120	88	136	110	71	9	71	111	78	110	110	85	4	-	12.5	200	120	10
UDL0.37B3	30	14	104	20	93	149	125	104	140	120	96	9	71	123	90	110	110	85	5	M6	16	227	141	10
UDL0.75B3	40	19	125	26	113	190	150	126	179	160	135	11	79	140	107	120	120	110	6	M6	21.5	268	160	15
UD1.1B3	40	24	105	35	100	207	130	136	187	160	115	13	-	124	102	150	-	110	8	M8	27	265	195	15
UD1.5B3	50	30	115	54	123	241	150	165	238	190	143	13	-	144	122	150	-	110	8	M8	27	290	195	18
UD2.2B3	60	30	230	25	150	300	270	191	268	245	190	14	-	188	150	150	-	110	8	M8	33	320	215	25
UD3.0B3	60	30	230	25	150	300	270	191	268	245	190	14	-	188	150	150	-	110	8	M8	33	320	215	25
UD4.0B3	60	30	230	25	150	300	270	191	268	245	190	14	-	188	150	150	-	110	8	M8	33	340	240	25
UD5.5B3	70	35	250	33	200	365	290	201	319	315	245	18	-	192	192	-	110	10	M10	38	395	275	30	
UD7.5B3	70	35	250	33	200	365	290	201	319	315	245	18	-	192	192	-	110	10	M10	38	435	275	30	

### B5型 ( MODEL )



	B	Dp	E	G	G3	H	I	M	M1	N	D	D1	P	T	K	VC	VF	VL	VR	Vr1	VS	B	F	T	X	Y
UDL0.18B3	23	11	50	113	64.5	70	72	115	60	95	9	M6	140	3.5	46	71	111	78	110	110	85	4	-	13	200	120
UDL0.37B3	30	14	40	110	74	80	90	130	77	110	9	M8	160	3.5	53	71	123	90	100	110	85	5	M6	16	227	141
UDL0.75B3	40	19	58	139	85.5	100	98	165	84	130	11	M8	200	3.5	60	79	140	107	120	120	110	6	M6	22	268	160
UD1.1B3	40	24	-	147	95	98	207	165	-	130	11	-	200	3.5	-	-	124	102	150	-	110	8	M8	27	265	195
UD1.5B3	50	24	-	188	115	126	241	165	-	130	11	-	200	3.5	-	-	144	122	150	-	110	8	M8	27	290	195
UD2.2B3	60	30	-	208	131	150	270	165	-	230	15	-	300	4	-	-	188	150	160	-	100	8	M8	33	320	215
UD3.0B3	60	30	-	208	131	150	270	265	-	230	15	-	300	4	-	-	188	150	160	-	100	8	M8	33	320	215
UD4.0B3	60	30	-	208	131	150	270	265	-	230	15	-	300	4	-	-	188	150	160	-	110	8	M8	33	320	240
UD5.5B3	70	35	-	244	131	200	-	300	-	250	19	-	350	5	-	-	192	194	-	110	10	M10	38	395	275	
UD7.5B3	70	35	-	244	131	200	-	300	-	250	19	-	350	5	-	-	192	194	-	110	10	M10	38	435	275	

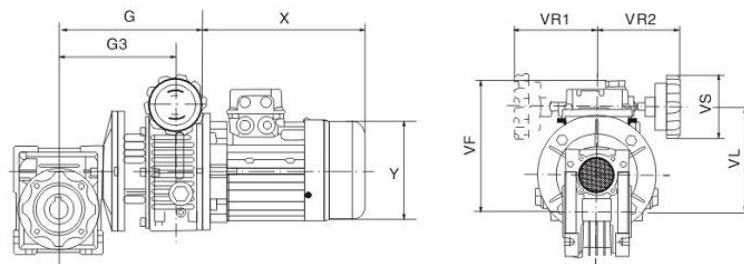


## UDL- MRX 变速器与蜗轮减速器组合

外形尺寸图表

Outline dimension sheet

COMBINATION OF SPEED VARIATOR AND WORM GEAR UNITS



Model	G	G3	VF	VL	VS	VR	VR1	机座号4P Base No. 4P n1=1400/min	X	Y
UDL0.18- MRX 040	183	135	151	118	85	110	110	63	200	120
UDL0.18- MRX 050	193	145	161	128	85	110	110			
UDL0.37- MRX 050	190	154	173	140	85	110	110	71	227	141
UDL0.37- MRX 063	205	169	186	153	85	110	110			
UDL0.55- MRX 063	234	181	203	170	110	120	120	80	268	160
UDL0.75- MRX 063	234	181	203	170	110	120	120			
UDL0.37- MRX 0.75	223	187	198	165	85	110	110	71	227	141
UDL0.55- MRX 075	252	198	215	182	110	120	120			
UDL0.75- MRX 075	252	198	215	182	110	120	120	80	268	160
UD1.1- MRX 075	259.5	207.5	199	177	110	150	-			
UD1.5- MRX 075	300.5	227.5	219	197	110	150	-	90L	290	195
UDL0.55- MRX 090	269	215	230	197	110	120	120	80	268	160
UDL0.75- MRX 090	269	215	230	197	110	120	120			
UD1.1- MRX 090	276.5	224.5	214	192	110	150	-	90S	265	195
UD1.5- MRX 090	317.5	244.5	234	212	110	150	-	90L	290	195
UD1.1- MRX 110	307	255	234	212	110	120	-	90S	265	195
UD1.5- MRX 110	348	275	254	232	110	150	-	90L	290	195
UD2.2- MRX 110	368	291	298	260	110	160	-	100L	320	215
UD3.0- MRX 110	368	291	298	260	110	160	-			
UD4.0- MRX 110	368	291	298	260	110	160	-	112M	340	240
UD1.5- MRX 130	368	295	274	252	110	150	-	90L	290	195
UD2.2- MRX 130	388	311	318	280	110	160	-	100L	320	215
UD3.0- MRX 130	388	311	318	280	110	160	-			
UD4.0- MRX 130	388	311	318	280	110	160	-	112M	340	240

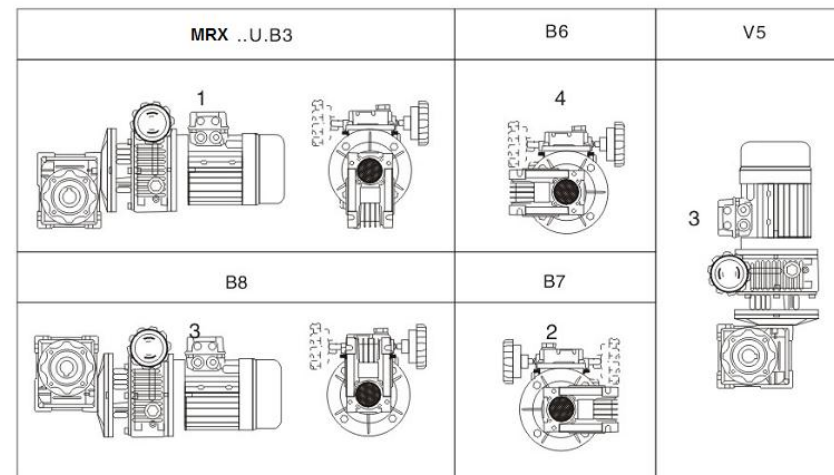
◆ 没有列出的外型尺寸, 请查阅06-15页  
 ◆ For the missing dimensions, please refer to page06-15



## UDL...- MRX ..安装方位图

意德减速机  
Speed reducer

UDL - MRX MOUNTED POSITION





- 1、轴伸形式全部圆柱形、按《圆柱形轴伸》GB1569-1990选定，键联接按《普通平键》GB1095-2003选定。
- 2、联轴器与电动机联接时应使轴线保持同心、安装误差不应大于所用联轴器的允许误差值。
- 3、输出轴装联轴器或带轮时，用轴端螺孔压入，或加热装配，严禁锤击！
- 4、机械无级变速器不宜用于可能超负荷或堵转使用场合。
- 5、调速应在运转中进行，严禁停车转动调速手轮。
- 6、操作盒下的两端调速限位螺钉已调整好，请勿再动！
- 7、本机不宜工作在高于40℃的环境中，温升不得高于45℃。关于本机的温升，请看下面介绍：  
变速器采用四极电机时，此时部件在跑合（空车运转）开始时，温度高于正常工作的环境温度约40℃-50℃。跑合60-80小时后，温升逐渐下降，此后温度高于环境20℃，并保持稳定的温升。跑合时高的温升影响正常允许的工作条件，但对部件的使用寿命并无有害影响。
- 8、变速器采用润湿油油浴润滑。润滑油牌号为UBb-3x，使用前请检查油位。
- 9、出厂前润滑油已加入，首次使用2000小时后应更换润滑油，以后每隔5000小时换一次油。
- 10、变速器内润滑油应保持在油标的三分之二高度，用户应经常检查油位高度，严禁润滑不良的情况下使用，操作盒上透气螺母出厂时为防止搬运中漏油已旋紧，运转时须松开，严禁未松开使用。

- 1、The shapes of shaft extension are all cylindrical. It is subject to GB 1569-1990 Cylindrical shaft extension. The key joint refers to GE1095-2003 Ordinary flat key.
- 2、The shaft lines should be kept concentric when the coupling is connected with a motor. The installation error should be no more than the tolerance value of the coupling.
- 3、When the output shaft is installed with the coupling or belt wheel, they should be pressed into the screw hole on shaft end or assembled by heating. No hammering on it.
- 4、The mechnal stepless speed variator is not used in such an occasion where overload or running-blockage happene to occur.
- 5、Speed-regulation should be effected in running. Do not turn the hand wheel of speed-regulation when the machine stops!
- 6、The limit screws of speed-regulation on two ends under the operating box are well adjusted, Please don't touch them!
- 7、This set is not suited to work in the environment over 40 temperature, especially no more than 45 temperature when the temperature rises. In regard to its temperature rise, please read the explanation as follows.  
If a 4-pole motor is used for the speed variator, the temperature under running-in(empty running)is 40-50temperature higher than that of normal working environment. After running-in up to 60-80 hours, the temperature rise will go down gradually. From that time on, it is 20 temperature higher than of environment; and the temperatuer will keep on rising stably. The high temperature rise in running will affect normal permissive working condition, but it won't bring any bad effects to the service life of parts.
- 8、The liquid lubricating oil is used for the speed variator. Its trade mark is Ub-3x, Please check up the oil level before use.
- 9、The machine is filled with lubricating oil before leaving factory. When it starts to work up to 2000 hours for the first time, its lubricating oil should be replaced, changing the lubricating oil every 5000 hours later.
- 10、The lubricating oil level inside the speed variator should be kept at the height of tow-third in the oil scale Users should usually check the height of oil level. It is strictly prohibited to operate it when short of lubricating oil. The air screw nut on the operating box is screwed up for preventing from oil leakage in moving before leaving factory. It should be loosed when it starts to run. It is strictly forbidden to use it before loosing!



## 4. 1 选型方法 Model selections

## 4.1.1符号及计量单位 Symbols and units of measure

- P: 功率 Power (KW)
- P<sub>1</sub>: 输入功率 Input power
- P<sub>2</sub>: 输出功率 Output power
- P<sub>1in</sub>: 选用电机功率 Select motor power
- η<sub>d</sub>: 动态效率 Dynamic efficiency

η<sub>d</sub>是蜗轮箱经过足够长的时间跑和后，表面温度下降并最终稳定后计算得到P2和P1之间的关系  
The dynamic efficiency is the relationship of power delivered at output shaft P2 to power applied at input shaft P1. Value of η<sub>d</sub> are calculated for gearboxes after a sufficiently long running-in period. After the running-in period the surface temperature in operation reduces and finally stabilises.

$$\eta_d = \frac{P_2}{P_1} \cdot 100\%$$

$$P_{1in} \geq P_1 \cdot f_s$$

η<sub>s</sub>: 静态效率 Static efficiency

η<sub>s</sub>是蜗轮箱启动阶段的效率，在间歇工作制的选型中，是非常重要的考虑因素。  
Efficiency applicable at star-up of the gearbox. It is critical when selecting worm gearbox operating under intermittent duty.

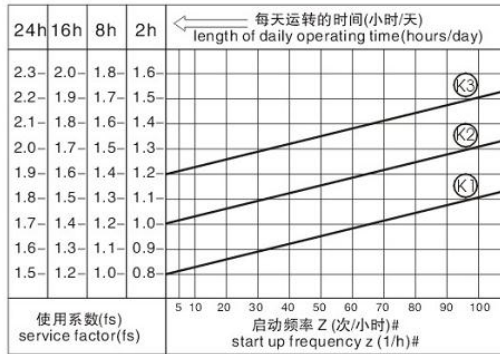
f<sub>s</sub>: 使用系数 Service factor

使用系数用来表示减速机的负载特性，它考虑到与减速机应用场合有关的每天的运转条件，负载的变化，过载等因素。在下面的图标中，在选型合适的“每天运行时间”列后，即可由每小时的启动次数与曲线K1、K2或K3相交点获得使用系数。K曲线是通过惯性加速K与负载特性（大致可分为：均匀负载，中等负载和重负载）相联系的，且与被驱动装置的转动惯量和电机的转动惯量壁纸有关。

This factor is the numeric value describing reducer service duty. It takes into consideration, with unavoidable approximation, daily operating condition, load variations and overloads connected with reducer application. In the graph below, after selecting proper "daily working hours" column, the service factor is given by intersecting the number of starts per hour and one of the K1, K2 or K3 curves. K curves are linked with the service nature (approximately: uniform, medium and heavy) through the acceleration factor of masses K, connected to the ratio between driven masses and motor inertia values.



## Fs取决于负荷 K-CURVES



受环境温度影响, 使用系数做以下调整:

A. 环境温度30-40℃:  $f_s \times (1.1-1.2)$

B. 环境温度40-50℃:  $f_s \times (1.3-1.4)$

C. 环境温度50-60℃:  $f_s \times (1.5-1.6)$

Service factor should be adjusted as followings:

A, ambient temperature is 30-40℃,  $f_s \times (1.1-1.2)$

B, ambient temperature is 40-50℃,  $f_s \times (1.3-1.4)$

C, ambient temperature is 50-60℃,  $f_s \times (1.5-1.6)$

●  $n_1$ : 减速机输入转速(r/min) Gear unit input speed(r/min)

$n_2$ : 减速机输出转速(r/min) Gear unit output speed(r/min)

i: 速比 Ratio

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

● Fr1: 输入轴径向载荷

Input shaft radial loads

● Fr2: 输出轴径向载荷

Output shaft radial loads

●  $M_2$ : 输出扭矩(Nm) Output Torque (Nm)

$M_{2s}$ : 选用输出扭矩 Selected output torque

$$M_2 = \frac{9550 \cdot P_1 \cdot \eta_d}{n_2}$$

$$M_{2s} \geq M_2 \cdot f_s$$



4.1.2 选型考虑因素: Understanding the following when select the gearbox

- 负荷条件 Load condition
- 使用转速范围或速比 (与双极组合, UDL 组合等) Speed scope or ratio in application
- 工作运转情况及环境 (温度, 湿度, 腐蚀) Working condition and environment
- 安装空间 Installation space

4.1.3 选型举例 Examples for model chosen

● 被驱动的设备扭矩是150 N.m, 输入转速是1400 r/min, 输出转速是 70 r/min, 中等负荷, 每天运行8小时, 每小时启动20次, 环境温度30℃。电机要求B3安装方位

(1) 确定速比  $i = n_1/n_2 = 1400/70 = 20$

(2) 确定工作系数, 中等负荷, 选用K2曲线, 取20次频率的交点, 查得8小时/天的  $f_s = 1.25$

(3) 温度36℃, 温度系数是1.1, 则  $f_s = 1.25 \times 1.1 = 1.38$

(4) 确定选用扭矩  $M_{2s} \geq M_2 \cdot f_s = 150 \times 1.43 = 214.5 \text{ Nm}$

(5) 查性能参数表, 符合3个条件, 速比是20,  $M_{2s}$  等于或者大于214.5Nm,  $f_s$  要等于或大于1.38, 查得最接近的是 NMRV 90-20-B3-2.2-4

Required torque 150 Nm on driven machine,  $n_1 = 1400 \text{ r/min}$ ,  $n_2 = 70 \text{ r/min}$ , medium load, running for 8 hours per day, start 20 times per hours, the ambient temperature is 30℃, B3 mounted.

(1)  $i = n_1/n_2 = 1400/70 = 20$

(2) Get the  $f_s = 1.25$  from turning time and start frequency on Curve K2,

(3) Get the  $f_s = 1.25 \times 1.1 = 1.38$  from the working condition

(4) Choose the  $M_{2s} \geq M_2 \cdot f_s = 150 \times 1.43 = 214.5 \text{ Nm}$

(5) To get the  $i = 20$ ,  $M_{2s} \geq 214.5 \text{ Nm}$ ,  $f_s \geq 1.38$  from the performance parameter, choose NMRV 90-20-B3-2.2-4

● 被驱动的设备输入功率是1.5 KW 输入转速是900 r/min, 输出转速是 60 r/min, 重冲击负荷, 每天运行16小时, 每小时启动100次, 环境温度20℃。

(1) 确定速比  $i = n_1/n_2 = 900/60 = 15$

(2) 确定工作系数, 重负荷, 选用K3曲线, 找到16小时和100次的交叉点, 查得  $f_s = 1.9$

(3) 温度20℃, 温度系数是1.0, 则修正  $f_s = 1.9 \times 1 = 1.9$

(4) 确定选用电机  $P_{1s} \geq P_1 \cdot f_s = 1.5 \times 1.9 = 2.85 \text{ kw}$

(5) 查性能参数表, 符合3个条件,  $i = 15$ ,  $f_s$  要等于或大于1.9,  $P_{1s}$  要等于或者大于2.85kw, 查得最接近的是 MRX 110-15-132S6

The input power of the driver machine is 1.5kw,  $n_1 = 900 \text{ r/min}$ ,  $n_2 = 60 \text{ r/min}$ , heavy load, running 16 hours per day, starts 100 times for hour, ambient temperature is 20℃

(1)  $i = n_1/n_2 = 900/60 = 15$

(2) Get the  $f_s = 1.9$  from turning time and start frequency on Curve K3,

(3) Get the  $f_s = 1.9 \times 1.0 = 1.9$  from the working condition

(4) Choose the  $P_{2s} \geq P_2 \cdot f_s = 1.5 \times 1.9 = 2.85 \text{ KW}$















(5) To get the  $i = 15$ ,  $P_{2s} \geq 2.85 \text{ KW}$ ,  $f_s \geq 1.9$  from the performance parameter, choose MRX 110-15-132S6.



MRX , MRX - MRX 性能参数

意德减速机  
Speed reducer

MRX ,MRX -MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i	Fr2 [N]	fs			Page					
0.06 (5614)	186.7	2.6	7.5	503	4.2			06					
	140	3.4	10	553	3.5								
	93.3	4.9	15	633	2.5								
	70	6.2	20	697	2								
	56	7.5	25	751	1.8								
	46.7	8.3	30	798	1.6								
	35	10	40	878	1.3								
	28	12	50	946	0.9								
	23.3	14	60	1006	0.7								
	186.7	2.6	7.5	683	6.9						07		
	140	3.4	10	752	5.4								
	93.3	4.7	15	861	3.8								
	70	6	20	948	3								
	56	7	25	1021	3								
	46.7	8	30	1085	2.5								
	35	9.7	40	1194	1.9								
	28	11.3	50	1286	1.5								
	23.3	12.5	60	1367	1.3								
17.5	12.5	80	1504	0.9									
14	25	100	1620	1.3			19						
9.3	33	150	1830	0.9									
7	41	200	1830	0.7									
5.6	45	250	1830	0.8									
4.7	56	300	3490	1.2									19
3.5	69	400	3490	0.9									
2.8	94	500	3490	0.7									
2.3	100	600	3490	0.6									
1.9	115	750	3490	0.5									
1.6	125	900	3490	0.5									
1.2	153	1200	3490	0.4									
0.93	185	1500	3490	0.3									
0.78	198	1800	3490	0.3									
0.58	247	2400	3490	0.2									
0.47	280	3000	3490	0.2									
0.35	295	4000	3490	0.1									
0.28	348	5000	3490	0.1									
4.7	55	300	3490	1.3							20		
3.5	67	400	3490	0.9									
2.8	88	500	3490	0.6									
2.3	95	600	3490	0.7									
1.9	103	750	3490	0.6									
1.6	118	900	3490	0.5									
1.2	143	1200	3490	0.4									
0.93	166	1500	3490	0.4									
0.78	184	1800	3490	0.3									
0.58	217	2400	3490	0.2									
0.44	247	3200	3490	0.2									
0.35	278	4000	3490	0.1									
0.28	327	5000	3490	0.1									
1.6	118	900	4840	1			20						
1.2	143	1200	4840	0.7									
0.93	166	1500	4840	0.7									
0.78	184	1800	4840	0.7									
0.58	227	2400	4840	0.5									
0.47	256	3000	4840	0.4									
0.35	278	4000	4840	0.3									
0.29	316	4800	4840	0.3									





















 N1=1400  
 N1=2800  
 N1=900



MRX , MRX - MRX 性能参数

意德减速机  
Speed reducer

MRX ,MRX -MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i	Fr2 [N]	fs			Page									
0.06 (5614)	0.93	173	1500	6270	1.1			20									
	0.78	191	1800	6270	0.9												
	0.58	227	2400	6270	0.8												
	0.47	256	3000	6270	0.7												
	0.35	295	4000	6270	0.6												
	0.28	327	5000	6270	0.4												
	0.58	267	2400	7380	1.1						21						
	0.47	305	3000	7380	0.8												
	0.35	360	4000	7380	0.7												
	0.28	409	5000	7380	0.5												
	0.47	329	3000	8180	1.4									21			
	0.35	393	4000	8180	1.3												
	0.28	430	5000	8180	1												
	373.3	2.0	7.5	399	3.9												06
	280	2.6	10	439	3.4												
	186.7	3.8	15	503	2.4												
	140	4.9	20	553	1.9												
	112	5.9	25	590	1.5												
93.3	6.7	30	633	1.3													
70	8.5	40	697	1.1													
56	10.0	50	751	0.9													
186.7	3.9	7.5	503	2.8			06										
140	5.1	10	553	2.4													
93.3	7.3	15	633	1.6													
70	9.3	20	697	1.3													
56	11	25	751	1.2													
46.7	13	30	798	1.1													
35	16	40	878	0.9													
373.3	2.0	7.5	542	6.5						07							
280	2.6	10	597	5													
186.7	3.7	15	683	3.5													
140	4.7	20	752	2.5													
112	5.5	25	810	2.8													
93.3	6.4	30	861	2.3													
70	8.0	40	948	1.7													
56	9.4	50	1021	1.4													
46.7	10	60	1085	1.1													
35	13	80	1194	0.9													
186.7	3.9	7.5	683	4.6									07				
140	5.0	10	752	3.6													
93.3	7.0	15	861	2.5													
70	8.8	20	948	2													
56	10	25	1021	1.9													
46.7	12	30	1085	1.7													
35	14	40	1194	1.2													
28	17	50	1286	1													
23.3	18	60	1367	0.9													
28	18	100	1286	1.6			19										
18.7	25	150	1472	1.1													
14	31	200	1620	0.9													
14	37	100	1620	0.8						19							
9.3	50	150	1830	0.6													
7	61	200	1830	0.5													
5.6	68	250	1830	0.5													
4.7	77	300	1830	0.4													
3.5	106	400	1830	0.3													
2.8	117	500	1830	0.3													

 N1=1400  
 N1=2800  
 N1=900



MRX , MRX - MRX 性能参数

意德减速机  
Speed reducer

MRX , MRX - MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i	Fr2 [N]	fs			Page
0.09 (5612) (5624)	2.3	135	600	1830	0.2			19
	1.9	149	750	1830	0.2			
	1.6	167	900	1830	0.2			
	1.2	201	1200	1830	0.1			
	0.93	231	1500	1830	0.1			
	0.78	264	1800	1830	0.1			
	0.58	311	2400	1830	0.1			
	0.47	347	3000	1830	0.1			
	28	19	50	2475	2			
	23.3	21	60	2630	1.7			
0.09 (5612) (5624)	17.5	25	80	2895	1.3			8
	14	29	100	3118	1			
	9.3	43	300	3490	1.6			
	7	52	400	3490	1.2			
	5.6	71	500	3490	0.8			
	4.7	82	300	3490	0.8			
	3.5	103	400	4840	1.2			
	2.8	120	500	4840	1			
	2.3	146	600	4840	0.9			
	1.9	158	750	4840	0.8			
0.12 (5622) (6314)	1.6	177	900	4840	0.7			20
	1.6	188	900	6270	1			
	1.2	222	1200	6270	0.9			
	0.93	259	1500	6270	0.7			
	0.93	305	1500	7380	1.1			
	0.78	331	1800	7380	1			
	0.58	400	2400	7380	0.7			
	0.47	494	3000	8180	0.9			
	0.35	589	4000	8180	0.8			
	373.3	2.7	7.5	399	3			
0.12 (5622) (6314)	280	3.5	10	439	2.6			06
	186.7	5.1	15	503	1.8			
	140	6.5	20	553	1.4			
	112	7.9	25	590	1.1			
	93.3	9.0	30	633	1			
	70	11	40	697	0.8			
	186.7	5.2	7.5	683	3.4			
	140	6.6	10	752	2.7			
	93.3	9.3	15	861	1.9			
	70	12	20	948	1.5			
0.12 (5622) (6314)	56	14	25	1021	1.5			07
	46.7	16	30	1085	1.3			
	35	19	40	1194	0.9			
	28	22	50	1286	0.8			
	46.7	17	30	2087	2.6			
	35	21	40	2298	1.9			
	28	25	50	2475	1.5			
	23.3	28	60	2630	1.3			
	17.5	33	80	2895	1			
	14	38	100	3118	0.8			
0.12 (5622) (6314)	23.3	29	60	3610	2.3			08
	17.5	35	80	3973	1.9			
	14	39	100	4280	1.4			
	4.7	112	300	4840	1.2			
	3.5	138	400	4840	0.9			
	2.8	160	500	4840	0.7			
	2.8	168	500	6270	1.3			
	2.8	168	500	6270	1.3			
	2.8	168	500	6270	1.3			
	2.8	168	500	6270	1.3			

N1=1400  
N1=2800  
N1=900



MRX , MRX - MRX 性能参数

意德减速机  
Speed reducer

MRX , MRX - MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i	Fr2 [N]	fs			Page
0.12 (5612) (5614)	2.3	199	600	6270	1.1			20
	1.9	217	750	6270	0.9			
	1.6	279	900	7380	1.2			
	1.2	344	1200	7380	0.9			
	0.78	470	1800	8180	0.9			
	0.58	593	2400	8180	0.9			
	0.47	731	3000	10320	1.2			
	0.35	884	4000	10320	1			
	0.28	1023	5000	10320	0.8			
	373.3	4	7.5	542	3.2			
0.12 (5622) (6314)	280	5.2	10	597	2.5			07
	186.7	7.4	15	683	1.7			
	140	9.5	20	752	1.3			
	112	11	25	810	1.4			
	93.3	13	30	861	1.1			
	70	16	40	948	0.9			
	186.7	7.7	7.5	683	2.3			
	140	10	10	752	1.8			
	93.3	14	15	861	1.3			
	70	18	20	948	1			
0.12 (5622) (6314)	56	20	25	1021	0.9			07
	46.7	24	30	1085	0.8			
	93.3	14	30	1657	2.4			
	70	17	40	1824	1.8			
	56	21	50	1964	1.4			
	70	19	20	1824	2			
	56	23	25	1964	1.7			
	46.7	25	30	2087	1.7			
	35	32	40	2298	1.3			
	28	37	50	2475	1			
0.18 (6312) (6324) (7116)	23.3	42	60	2630	0.8			07
	45	28	20	2113	1.5			
	36	34	25	2276	1.3			
	30	38	30	2419	1.3			
	22.5	47	40	2662	1			
	46.7	24	60	2865	2.1			
	35	30	80	3153	1.5			
	28	34	100	3397	1.2			
	35	33	40	3153	2.3			
	28	39	50	3397	1.9			
0.18 (6312) (6324) (7116)	23.3	44	60	3610	1.6			09
	17.5	52	80	3973	1.2			
	14	59	100	4280	0.9			
	18	56	50	3936	1.4			
	15	63	60	4183	1.1			
	11.3	75	80	4604	0.9			
	15	66	60	5467	2.1			
	11.3	79	80	6018	1.6			
	9	90	100	6270	1.4			
	3.5	216	400	6270	1			
0.18 (6312) (6324) (7116)	2.8	252	500	6270	0.8			20
	2.3	336	600	7380	1.1			
	1.9	371	750	7380	0.9			
	1.6	419	900	7380	0.8			
	1.2	544	1200	8180	1			
	0.93	647	1500	8180	0.8			
	0.78	727	1800	10320	1.5			
	0.58	948	2400	10320	1.1			
	0.78	727	1800	10320	1.5			
	0.58	948	2400	10320	1.1			

N1=1400  
N1=2800  
N1=900



MRX , MRX - MRX 性能参数

意德减速机  
Speed reducer

MRX ,MRX - MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i	Fr2 [N]	fs			Page			
0.25 (6322) (7114) (7126)	373.3	5.6	7.5	542	2.3	MRX 030	6322	07			
	280	7.2	10	597	1.8						
	186.7	10	15	683	1.3						
	140	13	20	752	0.9						
	112	15	25	810	1						
	93.3	18	30	861	0.8						
	186.7	11	7.5	1315	3.6				MRX 040	7114	08
	140	14	10	1447	2.8						
	93.3	20	15	1657	1.9						
	70	26	20	1824	1.5						
56	32	25	1964	1.2							
46.7	35	30	2087	1.3							
35	44	40	2298	0.9							
120	17	7.5	1524	2.6	MRX 040	7126	08				
90	22	10	1677	2							
60	31	15	1920	1.4							
45	39	20	2113	1.1							
36	48	25	2276	0.9							
30	53	30	2419	0.9							
35	42	80	3153	1.1	MRX 050	6322	09				
28	48	100	3397	0.8							
70	27	20	2503	2.7	MRX 050	7114	09				
56	32	25	2696	2.2							
46.7	36	30	2865	2.3							
35	46	40	3153	1.7							
28	54	50	3397	1.4							
23.3	60	60	3610	1.1							
17.5	72	80	3973	0.9							
45	40	20	2900	1.9	MRX 050	7126	09				
36	48	25	3124	1.5							
30	54	30	3320	1.7							
22.5	67	40	3654	1.2							
18	78	50	3936	1							
15	88	60	4183	0.8							
28	55	50	4440	2.4	MRX 063	7114	10				
23.3	64	60	4719	2							
17.5	76	80	5193	1.6							
14	87	100	5595	1.4							
18	81	50	5145	1.8	MRX 063	7126	10				
15	92	60	5467	1.5							
11.3	110	80	6018	1.2							
9	125	100	6270	1							
7	150	400	6270	1.4	MRX 030/063	6322	20				
5.6	175	500	6270	1.2							
17.5	80	80	6130	2.3	MRX 075	7114	11				
14	94	100	6603	1.9							
11.3	116	80	7103	1.7	MRX 075	7126	11				
9	133	100	7380	1.4							
3.5	321	400	7380	1.1	MRX 040/075	7114	21				
2.8	375	500	7380	0.8							
2.3	488	600	8180	1.2	MRX 040/090	7114	21				
1.9	553	750	8180	0.9							
1.6	612	900	8180	0.8							
1.2	776	1200	10320	1.3	MRX 050/110	7114	21				
0.93	924	1500	10320	1.2							
0.78	1010	1800	10320	1.1							
0.58	1358	2400	13500	1	MRX 063/130	7114	20				
0.47	1626	3000	13500	0.8							

N1=1400  
N1=2800  
N1=900



MRX , MRX - MRX 性能参数

意德减速机  
Speed reducer

MRX ,MRX - MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i	Fr2 [N]	fs			Page
0.37 (7112) (7124) (8026)	0.35	1910	4000	13500	0.6	MRX 063/130	7114	22
	0.28	2132	5000	13500	0.5			
	0.8	1199	1800	18000	1.8	MRX 063/150	7114	15
	0.6	1446	2400	18000	1.8			
	0.5	1713	3000	18000	1.4			
	0.4	2026	4000	18000	0.9			
	0.3	2251	5000	18000	0.7			
	373.3	8.3	7.5	1044	3.3			
	280	11	10	1149	2.6			
	186.7	16	15	1315	1.9			
140	20	20	1447	1.4				
112	25	25	1559	1.1				
186.7	16	7.5	1315	2.4	MRX 040	7124	08	
140	21	10	1447	1.9				
93.3	30	15	1657	1.3				
70	39	20	1824	1				
56	47	25	1964	0.8				
46.7	52	30	2087	0.8				
112	25	25	2140	2	MRX 050	7112	09	
93.3	29	30	2274	2.2				
70	37	40	2503	1.6				
56	44	50	2696	1.2				
46.7	50	60	2865	1				
35	62	80	3153	0.7				
140	21	10	1987	3.3	MRX 050	7124	09	
93.3	31	15	2274	2.4				
70	39	20	2503	1.8				
56	47	25	2696	1.5				
46.7	54	30	2865	1.5				
35	68	40	3153	1.1				
28	80	50	3397	0.9				
23.3	89	60	3610	0.8				
120	25	7.5	2091	3.3	MRX 050	8016	09	
90	33	10	2302	2.5				
60	47	15	2635	1.8				
45	59	20	2900	1.3				
36	72	25	3124	1				
30	80	30	3320	1.1				
35	70	40	4122	2.1	MRX 063	7124	10	
28	82	50	4440	1.6				
23.3	94	60	4719	1.4				
17.5	113	80	5193	1.1				
14	129	100	5595	0.9				
45	60	20	3791	2.4				MRX 063
36	73	25	4084	1.9				
30	82	30	4339	2.1				
22.5	102	40	4776	1.6				
18	120	50	5145	1.2				
15	137	60	5467	1				
9.3	182	300	6270	1.3	MRX 030/063	7112	20	
7	222	400	6270	1				
23.3	97	60	5569	2	MRX 075	7124	11	
17.5	119	80	6130	1.6				
14	139	100	6603	1.3				
18	124	50	6073	1.8	MRX 075	8016	11	
15	141	60	6453	1.5				
11.3	172	80	7103	1.2				
9	196	100	7380	1				



N1=1400  
N1=2800  
N1=900



MRX , MRX - MRX 性能参数

意德减速机  
Speed reducer

MRX ,MRX -MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i	Fr2 [N]	fs			Page
0.37 (7112) (7124) (8016)	4.7	383	300	7380	1	MRX 040/075	7124	21
	3.5	474	400	7380	0.7			
	11.3	184	80	7859	1.7	MRX 090	8016	12
	9	212	100	8180	1.3			
	4.7	406	300	8180	1.5	MRX 040/090	7124	21
	3.5	505	400	8180	1.2			
	2.8	593	500	8180	0.9	MRX 040/090	7124	21
	2.3	722	600	8180	0.8			
	1.9	837	750	10320	1.3	MRX 050/110	7124	21
	1.6	928	900	10320	1.2			
	1.2	1148	1200	10320	0.8			
	0.93	1444	1500	13500	1.1	MRX 063/130	7124	22
	0.78	1586	1800	13500	0.9			
	0.8	1774	1800	18000	1.2	MRX 063/150	7124	15
0.6	2141	2400	18000	1.2				
0.5	2535	3000	18000	0.9				
0.55 (7122) (8014) (8026)	373.3	12	7.5	1044	2.2	MRX 040	7122	08
	280	16	10	1149	1.8			
	186.7	24	15	1315	1.3			
	140	30	20	1447	0.9			
	112	37	25	1559	0.8			
	140	31	20	1987	1.7	MRX 050	7122	09
	112	38	25	2140	1.4			
	93.3	43	30	2274	1.5			
	70	55	40	2503	1.1			
	56	65	50	2696	0.8			
	46.7	74	60	2865	0.7	MRX 050	8014	09
	186.7	24	7.5	1805	2.9			
	140	32	10	1987	2.2			
	93.3	46	15	2274	1.6			
	70	59	20	2503	1.2			
	56	70	25	2696	1	MRX 050	8026	09
	46.7	80	30	2865	1			
	120	37	7.5	2091	2.2			
	90	48	10	2302	1.7			
	60	69	15	2635	1.2			
	45	88	20	2900	0.9	MRX 063	7122	10
	70	56	40	3272	1.9			
	56	68	50	3524	1.5			
	46.7	78	60	3745	1.2			
35	96	80	4122	0.9				
28	111	100	4440	0.7	MRX 063	8014	10	
70	60	20	3272	2.2				
56	72	25	3524	1.8				
46.7	82	30	3745	1.9				
35	104	40	4122	1.4				
28	122	50	4440	1.1	MRX 063	8026	10	
23.3	140	60	4719	0.9				
60	70	15	3444	2.2				
45	90	20	3791	1.6				
36	108	25	4084	1.3				
30	123	30	4339	1.4	MRX 063	8026	10	
22.5	152	40	4776	1.1				
35	99	80	4865	1.3				
28	116	100	5241	1				
35	108	40	4865	2				MRX 075
28	128	50	5241	1.6				
35	108	40	4865	2	MRX 075	8014	11	
28	128	50	5241	1.6				



N1=1400  
N1=2800  
N1=900



MRX , MRX - MRX 性能参数

意德减速机  
Speed reducer

MRX ,MRX -MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i	Fr2 [N]	fs			Page
0.55 (7112) (8014) (8026)	23.3	144	60	5569	1.4	MRX 075	8014	11
	17.5	177	80	6130	1.1			
	14	206	100	6603	0.9			
	30	124	30	5122	2	MRX 075	8026	11
	22.5	156	40	5637	1.5			
	18	184	50	6073	1.2			
	15	210	60	6453	1	MRX 090	8014	12
	17.5	189	80	6783	1.5			
	14	221	100	7306	1.2			
	18	196	50	6719	2	MRX 090	8026	12
	15	224	60	7140	1.6			
	11.3	274	80	7859	1.1			
	9	315	100	8180	0.9	MRX 040/090	7122	21
	9.3	305	300	8180	2			
7	375	400	8180	1.5				
5.6	441	500	8180	1.2	MRX 110	8014	13	
17.5	201	80	8571	2.6				
14	236	100	9232	2				
11.3	293	80	9931	1.9	MRX 110	8026	13	
9	344	100	10320	1.5				
4.7	615	300	10320	2	MRX 050/110	8014	21	
3.5	810	400	10320	1.4				
2.8	938	500	10320	1.1				
2.3	1096	600	10320	1				
1.9	1244	750	10320	0.9				
2.8	957	500	13500	1.6	MRX 063/130	8014	22	
1.9	1382	750	13500	1.2				
1.2	2057	1200	13500	0.8				
0.8	2637	1800	1800	0.8	MRX 063/150	8014	15	
0.6	3182	2400	2400	0.8				
0.75 (8012) (8024) (90S6)	373.3	17	7.5	1433	3	MRX 050	8012	09
	280	22	10	1577	2.4			
	186.7	31	15	1805	1.7			
	140	41	20	1987	1.3			
	112	49	25	2140	1			
	93.3	56	30	2274	1.1	MRX 050	8024	09
	186.7	33	7.5	1805	2.1			
	140	43	10	1987	1.6			
	93.3	62	15	2274	1.2			
	70	80	20	2503	0.9			
	140	43	20	2597	2.3	MRX 063	8012	10
	112	52	25	2797	1.8			
	93.3	60	30	2973	2			
	70	77	40	3272	1.4			
	56	92	50	3524	1.1			
	46.7	106	60	3745	0.9	MRX 063	8024	10
	93.3	63	15	2973	2.2			
	70	82	20	3272	1.6			
	56	98	25	3524	1.3			
	46.7	112	30	3745	1.4			
	35	141	40	4122	1	MRX 063	90S6	10
	120	51	7.5	2734	2.9			
	90	67	10	3009	2.3			
	60	96	15	3444	1.6			
45	123	20	3791	1.2				
36	147	25	4084	0.9	MRX 063	90S6	10	
30	167	30	4339	1				

N1=1400  
N1=2800  
N1=900







MRX , MRX - MRX 性能参数

意德减速机  
Speed reducer

MRX ,MRX - MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i	Fr2 [N]	fs			Page
0.75 (8012) (8024) (90S6)	46.7	107	60	4421	1.3	MRX 075	8012	11
	28	159	100	5241	0.8			
	56	101	25	4160	2	MRX 075	8024	11
	46.7	117	30	4421	2			
	35	147	40	4865	1.5	MRX 075	90S6	11
	28	174	50	5241	1.2			
	23.3	197	60	5569	1			
	60	97	15	4065	2.4			
	45	124	20	4474	1.9			
	36	149	25	4820	1.4			
	30	170	30	5122	1.5	MRX 090	8012	12
	22.5	213	40	5637	1.1			
	35	143	80	5383	1.6	MRX 090	8024	12
	28	169	100	5799	1.2			
	28	182	50	5799	1.8	MRX 090	90S6	12
	23.3	209	60	6163	1.5			
	17.5	258	80	6783	1.1			
	14	302	100	7306	0.9			
	30	179	30	5667	2.6	MRX 090	8012	21
	22.5	226	40	6238	1.8			
	18	267	50	6719	1.4			
	15	306	50	7140	1.4			
	7	512	400	8180	1.1	MRX 040/090	8012	21
	5.6	601	500	8180	0.9			
	17.5	274	80	8571	1.9	MRX 110	8024	13
	14	322	100	9232	1.5			
	15	325	60	9023	2.1	MRX 110	90S6	13
	11.3	399	80	9931	1.4			
9	470	100	10320	1.1	MRX 050/110	8012	21	
9.3	424	300	10320	2.8				
7	553	400	10320	2.1				
5.6	640	500	10320	1.6				
4.7	838	300	10320	1.5	MRX 050/110	8024	21	
3.5	1105	400	10320	1.1				
11.3	399	80	12989	2.1	MRX 130	90S6	07	
9	470	100	13500	1.7				
2.8	1305	500	13500	1.1	MRX 063/130	8024	22	
2.3	1557	600	13500	1				
1.9	1772	750	13500	0.9				
1.6	2014	900	13500	0.8				
2.8	1290	500	18000	1.8	MRX 063/150	90L6	15	
2.3	1529	600	18000	1.7				
1.9	1783	750	18000	1.3				
1.6	2215	900	18000	0.9				
1.2	2680	1200	18000	1				
373.3	25	7.5	1433	2.1				MRX 050
280	33	10	1577	1.6				
186.7	48	15	1805	1.2				
140	62	20	1987	0.9				
186.7	46	15	2359	2.1	MRX 063	8022	10	
140	60	20	2597	1.6				
112	72	25	2797	1.2				
93.3	82	30	2973	1.1				
70	104	40	3272	1				
120	75	7.5	2734	2				MRX 063
90	98	10	3009	1.5				
60	140	15	3444	1.1				
45	180	20	3791	0.8				



N1=1400  
N1=2800  
N1=900



MRX , MRX - MRX 性能参数

意德减速机  
Speed reducer

MRX ,MRX - MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i	Fr2 [N]	fs			Page
1.1 (8022) (90L6) (90S4)	186.7	50	7.5	2359	2.6	MRX 063	90S4	10
	140	65	10	2597	2			
	93.3	92	15	2973	1.5			
	70	120	20	3272	1.1			
	56	144	25	3524	0.9	MRX 075	8022	11
	46.7	164	30	3745	1			
	112	77	25	3302	1.9			
	93.3	89	30	3509	1.9			
	70	114	40	3862	1.4			
	56	137	50	4160	1.1			
	46.7	157	60	4421	0.9	MRX 075	90L6	11
	90	98	10	3551	2.3			
	60	142	15	4065	1.6			
	45	182	20	4474	1.3			
	36	219	25	4820	1	MRX 075	90S4	11
	30	249	30	5122	1			
	93.3	95	15	3509	2.1			
	70	122	20	3862	1.7			
	56	148	25	4160	1.3	MRX 090	8022	12
	46.7	171	30	4421	1.3			
	35	216	40	4865	1			
	35	210	80	5383	1.1			
	28	248	100	5799	0.8	MRX 090	90L6	12
	36	228	25	5333	1.6			
	30	263	30	5667	1.8			
	22.5	331	40	6238	1.2			
	18	391	50	6719	1	MRX 090	90S4	12
	15	448	60	7140	0.8			
	35	222	40	5383	1.6	MRX 090	90L6	13
	28	266	50	5799	1.3			
	23.3	307	60	6163	1			
	22.5	345	40	7882	2.3			
	18	414	50	8491	1.8	MRX 110	90S4	13
	15	476	60	9023	1.4			
	11.3	586	80	9931	1			
	28	278	50	7328	2.3			
	23.3	325	60	7787	1.9	MRX 110	8022	21
	17.5	402	80	8571	1.3			
	14	473	100	9232	1			
	9.3	621	300	10320	1.9			
	7	810	400	10320	1.4	MRX 050/110	8022	21
	5.6	938	500	10320	1.1			
11.3	586	80	12989	1.4				
9	689	100	13500	1.1				
17.5	408	80	11210	2.1	MRX 130	90S4	07	
14	480	100	12076	1.5				
4.7	1274	300	13500	1.3	MRX 063/130	90S4	22	
3.5	1621	400	13500	1				
2.8	1913	500	13500	0.8				
9.3	752	150	18000	3.1				
7	966	200	18000	2.4	MRX 063/150	90S4	15	
5.6	1175	250	18000	1.7				
4.7	1364	300	18000	1.7				
3.5	1619	400	18000	1.6				
2.8	1893	500	18000	1.2				
2.3	2242	600	18000	1.2				
1.9	2616	750	18000	0.9				



N1=1400  
N1=2800  
N1=900



MRX , MRX - MRX 性能参数

意德减速机  
Speed reducer

MRX ,MRX - MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i	Fr2 [N]	fs			Page
1.5 (90S2) (90L4) (100L6)	373.3	34	7.5	1433	1.5	MRX 050	90S2	09
	280	45	10	1577	1.2			
	186.7	65	15	1805	0.9			
	186.7	68	7.5	2359	1.9	MRX 063	90L4	10
	140	88	10	2597	1.5			
	93.3	126	15	2973	1.1			
	70	164	20	3272	0.8	MRX 063	90S2	10
	373.3	35	7.5	1873	2.7			
	280	45	10	2061	2.1			
	186.7	66	15	2359	1.6	MRX 075	100L6	11
	140	86	20	2597	1.2			
	112	105	25	2797	0.9			
	93.3	120	30	2973	1	MRX 075	90L4	11
	120	103	7.5	3227	2			
	90	134	10	3551	1.7			
	60	193	15	4065	1.2	MRX 075	90L4	11
	140	89	10	3065	2.2			
	93.3	129	15	3509	1.5			
	70	166	20	3862	1.3	MRX 075	90S2	11
	56	202	25	4160	1			
	46.7	233	30	4421	1			
	280	45	10	2433	3.1	MRX 075	90S2	11
	186.7	66	15	2785	2.2			
	140	86	20	3065	1.8			
	112	105	25	3302	1.4	MRX 090	100L6	12
	93.3	121	30	3509	1.4			
	70	156	40	3862	1			
	56	187	50	4160	0.8	MRX 090	90L4	12
46.7	215	60	4421	0.7				
90	137	10	3929	2.7				
60	198	15	4498	2.1	MRX 090	100L6	12	
45	258	20	4951	1.5				
36	310	25	5333	1.2				
30	358	30	5667	1.3	MRX 090	90L4	12	
70	170	20	4273	2.1				
56	207	25	4603	1.6				
46.7	239	30	4891	1.7	MRX 090	90S4	12	
35	303	40	5383	1.2				
28	363	50	5799	0.9				
23.3	418	60	6163	0.8	MRX 090	100L6	13	
56	197	50	4603	1.4				
46.7	227	60	4891	1.1				
45	264	20	6256	2.7	MRX 110	90L4	13	
36	322	25	6739	2.4				
30	363	30	7161	2.3				
22.5	471	40	7882	1.7	MRX 110	90L4	13	
18	565	50	8491	1.3				
15	649	60	9023	1.1				
35	315	40	6803	2.2	MRX 110	90S2	13	
28	379	50	7328	1.7				
23.3	443	60	7787	1.4				
17.5	548	80	8571	0.9	MRX 110	90S2	13	
46.7	236	60	6181	2				
35	299	80	6803	1.3				
28	358	100	7328	1	MRX 050/110	90S2	21	
9.3	847	300	10320	1.4				
7	1105	400	10320	1				
5.6	1279	500	10320	0.8				



N1=1400  
N1=2800  
N1=900



MRX , MRX - MRX 性能参数

意德减速机  
Speed reducer

MRX ,MRX - MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i	Fr2 [N]	fs			Page
1.5 (90S2) (90L4) (100L6)	22.5	471	40	10309	2.3	MRX 130	100L6	14
	18	565	50	11105	1.8			
	15	659	60	11801	1.4			
	11.3	799	80	12989	1.1	MRX 130	90L4	14
	17.5	557	80	11210	1.5			
	14	655	100	12076	1.1			
	9.3	878	300	13500	1.9	MRX 063/130	90S2	22
	7	1105	400	13500	1.4			
	5.6	1305	500	13500	1.1			
	4.7	1737	300	13500	1	MRX 063/130	90L4	22
	3.5	2210	400	13500	0.7			
	9.3	1026	150	18000	2.3			
	7	1317	200	18000	1.8			
	5.6	1602	250	18000	1.3			
	4.7	1860	300	18000	1.3	MRX 063	90L2	10
	3.5	2208	400	18000	1.2			
	2.8	2582	500	18000	0.9			
	2.3	3057	600	18000	0.9	MRX 075	100LA4	11
	373.3	51	7.5	1873	1.8			
	280	66	10	2061	1.5			
	186.7	97	15	2359	1.1	MRX 075	100LA4	11
	186.7	99	7.5	2785	1.8			
	140	131	10	3065	1.5			
	93.3	189	15	3509	1	MRX 075	90L2	11
	373.3	50	7.5	2210	2.5			
	280	66	10	2433	2.1			
	186.7	97	15	2785	1.5	MRX 090	100LA4	12
	140	126	20	3065	1.3			
112	154	25	3302	1				
93.3	178	30	3509	0.9	MRX 090	100LA4	12	
186.7	100	7.5	3081	2.9				
140	132	10	3391	2.3				
93.3	191	15	3882	1.9	MRX V090	112M6	12	
70	249	20	4273	1.4				
56	304	25	4603	1.1				
46.7	351	30	4891	1.2	MRX 090	90L2	12	
120	154	7.5	3570	2.2				
90	201	10	3929	1.8				
60	291	15	4498	1.4	MRX 090	90L2	12	
45	378	20	4951	1				
140	129	20	3391	2				
112	159	25	3653	1.6	MRX 110	100LA4	13	
93.3	185	30	3882	1.7				
70	237	40	4273	1.2				
56	289	50	4603	0.9	MRX 110	100LA4	13	
70	255	20	5399	2.5				
56	311	25	5816	2.2				
46.7	355	30	6181	2	MRX 110	112M6	13	
35	462	40	6803	1.5				
28	555	50	7328	1.2				
23.3	649	60	7787	1	MRX 110	90L2	13	
90	203	10	4965	3.5				
60	294	15	5684	2.6				
45	388	20	6256	1.9	MRX 110	90L2	13	
36	473	25	6739	1.6				
30	532	30	7161	1.6				
112	161	25	4616	3.1	MRX 110	90L2	13	
93.3	187	30	4905	3				



N1=1400  
N1=2800  
N1=900



MRX , MRX - MRX 性能参数

意德减速机  
Speed reducer

MRX ,MRX - MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i	Fr2 [N]	fs			Page
2.2 (90L2) (100LA4) (112M6)	70	243	40	5399	2.1	MRX 110	90L2	13
	56	296	50	5816	1.7			
	46.7	346	60	6181	1.4			
	35	468	40	8897	2.2	MRX 130	100LA4	14
	28	563	50	9584	1.7			
	23.3	658	60	10185	1.4			
	17.5	816	80	11210	1	MRX 130	112M6	14
	36	473	25	8814	2.2			
	30	539	30	9366	2.1			
	22.5	691	40	10309	1.6	MRX 130	90L2	14
	18	829	50	11105	1.2			
	15	966	60	11801	1			
35	444	80	8897	1.3	MRX 130	90L2	14	
28	525	100	9584	1				
28	570	50	13100	2.5				MRX 150
23.3	657	60	13920	1.9				
17.5	816	80	15320	1.4				
14	960	100	16500	1	MRX 075	100L2	11	
373.3	68	7.5	2210	1.9				
280	90	10	2433	1.6				
186.7	135	7.5	2785	1.4	MRX 075	100LB4	11	
140	178	10	3065	1.1				
93.3	258	15	3509	0.8				
373.3	70	7.5	2446	3	MRX 090	100L2	12	
280	92	10	2692	2.6				
186.7	137	7.5	3081	2.1				MRX 090
140	180	10	3391	1.7				
93.3	261	15	3882	1.4				
70	340	20	4273	1	MRX 090	100LB4	12	
56	414	25	4603	0.8				
46.7	479	30	4891	0.9				
93.3	264	15	4905	2.5	MRX 110	100LB4	13	
70	348	20	5399	1.9				
56	425	25	5816	1.6				
46.7	485	30	6181	1.5	MRX 110	100LB4	13	
35	630	40	6803	1.1				
28	757	50	7328	0.9				
120	210	7.5	4511	3.1	MRX 110	132S6	13	
90	277	10	4965	2.5				
60	401	15	5684	1.9				
45	528	20	6256	1.4	MRX 130	100LB4	14	
56	430	25	7607	2.2				
46.7	491	30	8084	2.1				
35	638	40	8897	1.6	MRX 130	100LB4	14	
28	767	50	9584	1.3				
23.3	898	60	10185	1				
17.5	1113	80	11210	0.8	MRX 130	132S6	14	
90	277	10	6494	3.4				
60	406	15	7434	2.6				
45	528	20	8182	1.9	MRX 130	132S6	14	
36	645	25	8814	1.6				
30	735	30	9366	1.6				
22.5	942	40	10309	1.2	MRX 130	132S6	14	
90	277	10	6494	3.4				
60	406	15	7434	2.6				



N1=1400  
N1=2800  
N1=900





MRX , MRX - MRX 性能参数


意德减速机  
Speed reducer

MRX ,MRX - MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i	Fr2 [N]	fs			Page
3.0 (100L2) (100LB4) (132S6)	28	777	50	13100	1.8	MRX 150	100LB4	15
	23.3	896	60	13920	1.4			
	17.5	1113	80	15320	1			
	14	1310	100	16500	0.8			
4.0 (112M2) (112M4) (132MA6)	373.3	91	7.5	2210	1.4	MRX 075	112M2	11
	280	120	10	2433	1.2			
	186.7	180	7.5	2785	1	MRX 075	112M4	11
	140	237	10	3065	0.8			
	373.3	93	7.5	2446	2.2	MRX 090	112M2	12
	280	123	10	2692	1.9			
	186.7	182	7.5	3081	1.6	MRX 090	112M4	12
	140	240	10	3391	1.3			
	93.3	348	15	3882	1	MRX 110	112M4	13
	70	453	20	4273	0.8			
	140	240	10	4285	2.5			
	93.3	352	15	4905	1.9	MRX 110	112M4	13
70	464	20	5399	1.4				
56	566	25	5816	1.2				
46.7	646	30	6181	1.1	MRX 110	132MA6	13	
120	280	7.5	4511	2.3				
90	369	10	4965	1.9				
60	535	15	5684	1.4	MRX 130	112M4	14	
56	573	25	7607	1.6				
46.7	654	30	8084	1.6				
35	851	40	8897	1.2	MRX 130	132MA6	14	
28	1023	50	9584	1				
23.3	1197	60	10185	0.8				
120	283	7.5	5901	3.1	MRX 130	132MA6	14	
90	369	10	6494	2.6				
60	541	15	7434	2				
45	705	20	8182	1.5	MRX 130	132MA6	14	
36	860	25	8814	1.2				
28	1036	50	13100	1.4				
23.3	1195	60	13920	1.1	MRX 150	112M4	15	
17.5	1484	80	15320	0.8				
186.7	250	7.5	3893	2.2				MRX 110
140	330	10	4285	1.8				
93.3	484	15	4905	1.4				
70	638	20	5399	1	MRX 130	132S4	14	
140	334	10	5605	2.5				
93.3	490	15	6416	1.9				
70	638	20	7062	1.4	MRX 130	132S4	14	
56	788	25	7607	1.2				
46.7	900	30	8084	1.2				
35	1171	40	8897	0.9	MRX 150	132S4	15	
70	645	20	9650	2				
56	788	25	10400	1.5				
46.7	934	30	11050	1.3	MRX 150	132S4	15	
35	1171	40	12160	1.3				
28	1426	50	13100	1				
23.3	1643	60	13920	0.8	MRX 150	132S4	15	
70	645	20	9650	2				
56	788	25	10400	1.5				

N1=1400  
N1=2800  
N1=900

P1n [Kw]	n2 [1/min]	M2n [Nm]	i	Fr2 [N]	fs			Page
7.5 (132M4)	186.7	341	7.5	3893	1.6	MRX 110	132M4	13
	140	450	10	4285	1.3			
	93.3	660	15	4905	1			
	186.7	345	7.5	5092	2.1	MRX 130	132M4	14
	140	455	10	5605	1.8			
	93.3	668	15	6416	1.4			
	70	870	20	7062	1			
	56	1074	25	7607	0.9			
	46.7	1227	30	8084	0.8			
	35	1596	40	8897	0.7			
	70	880	20	9650	1.5	MRX 150	132S4	15
	56	1074	25	10400	1.1			
	46.7	1274	30	11050	0.9			
	35	4596	40	12160	1			
	186.7	512	7.5	6960	2.3	MRX 150	132M4	11
	140	675	10	7660	1.8			
	93.3	990	15	8770	1.3			
	70	1291	20	9650	1			
	56	1576	25	10400	0.8			
	186.7	698	7.5	6960	1.7	MRX 150	132M4	15
140	921	10	7660	1.3				
93.3	1351	15	8770	0.9				
70	1760	20	9650	0.7				

M2n [Kw]	i	P1n [Kw]	n2 [1/min]	Fr2 [N]	Fr1 [N]		Page
13	7.5	0.58	373.3	542	125	RX 030	16
	10	0.45	280	597	140		
	15	0.31	186.7	683	140		
	20	0.23	140	752	146		
	25	0.25	112	810	210		
	30	0.21	93.3	861	210		
	40	0.16	70	948	127		
	50	0.12	56	1021	128		
	60	0.1	46.7	1085	126		
	80	0.08	35	1194	130		
	27	7.5	1.2	373.3	1044		
30	10	1.0	280	1149	272		
31	15	0.72	186.7	1315	291		
29	20	0.52	140	1447	204		
28	25	0.42	112	1559	236		
34	30	0.44	93.3	1657	350		
31	40	0.32	70	1824	350		
30	50	0.26	56	1964	350		
27	60	0.21	46.7	2087	350		
25	80	0.16	35	2298	350		
22	100	0.12	28	2475	350		
52	7.5	2.3	373.3	1433	324	RX 050	16
53	10	1.8	280	1577	378		
57	15	1.3	186.7	1805	399		
53	20	0.95	140	1987	417		
51	25	0.75	112	2140	482		
65	30	0.82	93.3	2274	490		
59	40	0.59	70	2503	490		
53	50	0.45	56	2696	490		
50	60	0.37	46.7	2865	490		
45	80	0.27	35	3153	490		
40	100	0.21	28	3397	490		
92	7.5	4.0	373.3	1873	395		
96	10	3.2	280	2061	463		
101	15	2.3	186.7	2359	492		
97	20	1.7	140	2597	538		
91	25	1.3	112	2797	593		
120	30	1.5	93.3	2973	700		
113	40	1.1	70	3272	700		
102	50	0.83	56	3524	700		
96	60	0.68	46.7	3745	700		
86	80	0.49	35	4122	700		
74	100	0.37	28	4440	700		

N1=1400  
 N1=2800  
 N1=900


N1=1400  
 N1=2800  
 N1=900



RX 性能参数

N1=2800

RX PERFORMANCE PARAMETER

M2n [Kw]	i	P1n [Kw]	n2 [1/min]	Fr2 [N]	Fr1 [N]		Page		
128	7.5	5.6	373.3	2210	560	RX 075	16		
141	10	4.7	280	2433	703				
150	15	3.4	186.7	2785	727				
160	20	2.8	140	3065	872				
147	25	2.1	112	3302	980				
170	30	2.1	93.3	3509	980				
166	40	1.6	70	3862	980				
149	50	1.2	56	4160	980				
143	60	1.0	46.7	4421	980				
130	80	0.72	35	4865	980				
123	100	0.58	28	5241	980				
207	7.5	8.9	373.3	2446	715			RX 090	16
236	10	7.7	280	2692	900				
270	15	6.0	186.7	3081	1034				
258	20	4.4	140	3391	1120				
246	25	3.4	112	3653	1270				
311	30	3.7	93.3	3882	1270				
280	40	2.6	70	4273	1270				
263	50	2.0	56	4603	1270				
242	60	1.6	46.7	4891	1270				
229	80	1.2	35	5383	1270				
203	100	0.9	28	5799	1270				
386	7.5	16.6	373.3	3090	950	RX 110	16		
433	10	14.1	280	3401	1194				
482	15	10.7	186.7	3893	1337				
475	20	8.0	140	4285	1485				
499	25	6.8	112	4616	1700				
552	30	6.4	93.3	4905	1700				
519	40	4.7	70	5399	1700				
498	50	3.7	56	5816	1700				
472	60	3.0	46.7	6181	1700				
398	80	2.0	35	6803	1700				
382	100	1.6	28	7328	1700				
514	7.5	22.1	373.3	4042	1190			RX 130	16
574	10	18.7	280	4449	1493				
669	15	14.7	186.7	5092	1725				
660	20	11	140	5605	1912				
660	25	9.0	112	6038	2100				
774	30	9.0	93.3	6416	2100				
727	40	6.5	70	7062	2100				
696	50	5.1	56	7607	2100				
638	60	4.0	46.7	8084	2100				
606	80	3.0	35	8897	2100				
525	100	2.2	28	9584	2100				


N1=1400  
 N1=2800  
 N1=900



RX 性能参数

N1=1400

RX PERFORMANCE PARAMETER

M2n [Kw]	i	P1n [Kw]	n2 [1/min]	Fr2 [N]	Fr1 [N]		Page		
18	7.5	0.41	186.7	683	150	RX 030	16		
18	10	0.32	140	752	169				
18	15	0.23	93.3	861	169				
18	20	0.18	70	948	190				
20	25	0.18	56	1021	210				
20	30	0.15	46.7	1085	210				
18	40	0.11	35	1194	210				
17	50	0.09	28	1286	210				
16	60	0.08	23.3	1367	210				
12	80	0.05	17.5	1504	210				
40	7.5	0.9	186.7	1315	294			RX 040	16
40	10	0.69	140	1447	331				
39	15	0.48	93.3	1657	331				
39	20	0.37	70	1824	350				
38	25	0.3	56	1964	350				
44	30	0.31	46.7	2087	350				
41	40	0.23	35	2298	350				
37	50	0.18	28	2475	350				
35	60	0.15	23.3	2630	350				
33	80	0.12	17.5	2895	350				
29	100	0.09	14	3118	350				
71	7.5	1.6	186.7	1805	401	RX 050	16		
70	10	1.2	140	1987	490				
73	15	0.88	93.3	2274	490				
72	20	0.68	70	2503	490				
69	25	0.54	56	2696	490				
83	30	0.57	46.7	2865	490				
77	40	0.42	35	3153	490				
73	50	0.34	28	3397	490				
68	60	0.28	23.3	3610	490				
64	80	0.22	17.5	3973	490				
52	100	0.16	14	4280	490				
126	7.5	2.8	186.7	2359	500			RX 063	16
129	10	2.2	140	2597	571				
134	15	1.6	93.3	2973	615				
131	20	1.2	70	3272	667				
131	25	1.0	56	3524	700				
164	30	1.1	46.7	3745	700				
143	40	0.76	35	4122	700				
133	50	0.6	28	4440	700				
130	60	0.51	23.3	4719	700				
119	80	0.39	17.5	5193	700				
118	100	0.34	14	5592	700				


N1=1400  
 N1=2800  
 N1=900



RX 性能参数

N1=1400

RX PERFORMANCE PARAMETER

M2n [Kw]	i	P1n [Kw]	n2 [1/min]	Fr2 [N]	Fr1 [N]		Page		
185	7.5	4.1	186.7	2785	700	<b>RX 075</b>	<b>16</b>		
190	10	3.2	140	3065	830				
198	15	23	93.3	3509	851				
210	20	1.9	70	3862	980				
202	25	1.5	56	4160	980				
233	30	1.5	46.7	4421	980				
216	40	1.1	35	4865	980				
206	50	0.89	28	5241	980				
197	60	0.75	23.3	5569	980				
187	80	0.58	17.5	6130	980				
180	100	0.48	14	6603	980				
287	7.5	6.3	186.7	3081	900			<b>RX 090</b>	<b>16</b>
306	10	5.1	140	3391	1082				
357	15	4.1	93.3	3882	1257				
351	20	3.1	70	4273	1270				
332	25	2.4	56	4603	1270				
415	30	2.6	46.7	4891	1270				
363	40	1.8	35	5383	1270				
339	50	1.4	28	5799	1270				
307	60	1.1	23.3	6163	1270				
285	80	0.83	17.5	6783	1270				
270	100	0.67	14	7306	1270				
546	7.5	12	186.7	3893	1200	<b>RX 110</b>	<b>16</b>		
588	10	9.8	140	4285	1463				
660	15	7.5	93.3	4905	1604				
649	20	5.6	70	5399	1700				
665	25	4.7	56	5816	1700				
727	30	4.5	46.7	6181	1700				
693	40	3.3	35	6803	1700				
656	50	2.6	28	7328	1700				
620	60	2.1	23.3	7787	1700				
512	80	1.4	17.5	8571	1700				
473	100	1.1	14	9232	1700				
741	7.5	16.1	186.7	5092	1500			<b>RX 130</b>	<b>16</b>
820	10	13.5	140	5605	1845				
917	15	10.3	93.3	6416	2070				
905	20	7.8	70	7062	2100				
931	25	6.5	56	7607	2100				
1047	30	6.4	46.7	8084	2100				
1043	40	4.9	35	8897	2100				
972	50	3.8	28	9584	2100				
928	60	3.1	23.3	10185	2100				
853	80	2.3	17.5	11210	2100				
742	100	1.7	14	12076	2100				


N1=1400  
N1=2800  
N1=900



RX 性能参数

N1=900

RX PERFORMANCE PARAMETER

M2n [Kw]	i	P1n [Kw]	n2 [1/min]	Fr2 [N]	Fr1 [N]		Page		
20	7.5	0.3	120	792	175	<b>RX 030</b>	<b>16</b>		
20	10	0.24	90	871	197				
20	15	0.17	60	997	197				
19	20	0.13	45	1098	210				
23	25	0.14	36	1183	210				
21	30	0.11	30	1257	210				
21	40	0.09	22.5	1383	210				
19	50	0.07	18	1490	210				
18	60	0.06	15	1583	210				
14	80	0.04	11.3	1743	210				
43	7.5	0.65	120	1524	319			<b>RX 040</b>	<b>16</b>
44	10	0.5	90	1677	350				
45	15	0.36	60	1920	350				
44	20	0.28	45	2113	350				
44	25	0.23	36	2276	350				
48	30	0.23	30	2419	350				
44	40	0.17	22.5	2662	350				
43	50	0.14	18	2868	350				
38	60	0.11	15	3047	350				
37	80	0.09	11.3	3354	350				
33	100	0.07	9	3490	350				
81	7.5	1.2	120	2091	448	<b>RX 050</b>	<b>16</b>		
83	10	0.94	90	2302	490				
84	15	0.67	60	2635	490				
76	20	0.48	45	2900	490				
76	25	0.39	36	3124	490				
91	30	0.42	30	3320	490				
83	40	0.31	22.5	3654	490				
78	50	0.25	18	3936	490				
74	60	0.21	15	4183	490				
66	80	0.16	11.3	4604	490				
56	100	0.12	9	4840	490				
151	7.5	2.2	120	2734	580			<b>RX 063</b>	<b>16</b>
152	10	1.7	90	3009	661				
153	15	1.2	60	3444	670				
149	20	0.91	45	3791	700				
135	25	0.69	36	4084	700				
176	30	0.79	30	4339	700				
160	40	0.058	22.5	4776	700				
146	50	0.45	18	5145	700				
137	60	0.37	15	5467	700				
127	80	0.29	11.3	6018	700				
125	100	0.25	9	6270	700				


N1=1400  
N1=2800  
N1=900



RX 性能参数

N1=900

RX PERFORMANCE PARAMETER

M2n [Kw]	i	P1n [Kw]	n2 [1/min]	Fr2 [N]	Fr1 [N]		Page		
212	7.5	3.1	120	3227	810	<b>RX 075</b>	<b>16</b>		
223	10	2.5	90	3551	975				
232	15	1.8	60	4065	980				
232	20	1.4	45	4474	980				
219	25	1.1	36	4820	980				
249	30	1.1	30	5122	980				
236	40	0.83	22.5	5637	980				
217	50	0.64	18	6073	980				
206	60	0.54	15	6453	980				
200	80	0.43	11.3	7103	980				
191	100	0.36	9	7380	980				
336	7.5	4.8	120	3570	1040			<b>RX 090</b>	<b>16</b>
365	10	4.0	90	3929	1270				
410	15	3.0	60	4498	1270				
395	20	2.3	45	4951	1270				
372	25	1.8	36	5333	1270				
454	30	1.9	30	5667	1270				
422	40	1.4	22.5	6238	1270				
391	50	1.1	18	6719	1270				
350	60	0.86	15	7140	1270				
314	80	0.63	11.3	7859	1270				
281	100	0.49	9	8180	1270				
644	7.5	9.2	120	4511	1390	<b>RX 110</b>	<b>16</b>		
702	10	7.6	90	4965	1700				
749	15	5.6	60	5684	1700				
722	20	4.1	45	6256	1700				
752	25	3.5	36	6739	1700				
847	30	3.5	30	7161	1700				
785	40	2.5	22.5	7882	1700				
753	50	2.0	18	8491	1700				
693	60	1.6	15	9023	1700				
586	80	1.1	11.3	9931	1700				
526	100	0.84	9	10320	1700				
871	7.5	12.3	120	5901	1740			<b>RX 130</b>	<b>16</b>
951	10	10.3	90	6494	2100				
1055	15	7.8	60	7434	2100				
1022	20	5.8	45	8182	2100				
1031	25	4.8	36	8814	2100				
1152	30	4.7	30	9366	2100				
1099	40	3.5	22.5	10309	2100				
1017	50	2.7	18	11105	2100				
923	60	2.1	15	11801	2100				
852	80	1.6	11.3	12989	2100				
751	100	1.2	9	13500	2100				


N1=1400  
N1=2800  
N1=900



RX 性能参数

N1=500

RX PERFORMANCE PARAMETER

M2n [Kw]	i	P1n [Kw]	n2 [1/min]	Fr2 [N]	Fr1 [N]		Page		
24	7.5	0.21	66.7	963	210	<b>RX 030</b>	<b>16</b>		
24	10	0.16	50	1060	210				
24	15	0.12	33.3	1213	210				
23	20	0.09	25	1336	210				
29	25	0.1	20	1439	210				
26	30	0.08	16.7	1529	210				
24	40	0.06	12.5	1683	210				
22	50	0.05	10	1813	210				
20	60	0.04	8.3	1830	210				
17	80	0.03	6.3	1830	210				
53	7.5	0.45	66.7	1853	350			<b>RX 040</b>	<b>16</b>
53	10	0.35	50	2040	350				
56	15	0.26	33.3	2335	350				
52	20	0.19	25	2570	350				
49	25	0.15	20	2769	350				
58	30	0.16	16.7	2942	350				
53	40	0.12	12.5	3238	350				
52	50	0.1	10	3488	350				
46	60	0.08	8.3	3490	350				
40	80	0.06	6.3	3490	350				
38	100	0.05	5	3490	350				
102	7.5	0.86	66.7	2544	490	<b>RX 050</b>	<b>16</b>		
104	10	0.67	50	2800	490				
102	15	0.47	33.3	3205	490				
92	20	0.33	25	3528	490				
94	25	0.28	20	3800	490				
106	30	0.29	16.7	4038	490				
99	40	0.22	12.5	4445	490				
89	50	0.17	10	4788	490				
82	60	0.14	8.3	4840	490				
75	80	0.11	6.3	4840	490				
69	100	0.09	5	4840	490				
180	7.5	1.5	66.7	3325	700			<b>RX 063</b>	<b>16</b>
188	10	1.2	50	3660	700				
188	15	0.85	33.3	4190	700				
178	20	0.63	25	4611	700				
163	25	0.48	20	4967	700				
204	30	0.54	16.7	4967	700				
186	40	0.4	12.5	5279	700				
174	50	0.32	10	5810	700				
162	60	0.26	8.3	6259	700				
138	80	0.19	6.3	6270	700				
131	100	0.16	5	6270	700				


N1=500  
N1=1400  
N1=2800  
N1=900



RX 性能参数

N1=500

RX PERFORMANCE PARAMETER

M2n [Kw]	i	P1n [Kw]	n2 [1/min]	Fr2 [N]	Fr1 [N]		Page
253	7.5	2.1	66.7	3925	980	<b>RX 075</b>	<b>16</b>
266	10	1.7	50	4320	980		
268	15	1.2	33.3	4945	980		
281	20	0.98	25	5443	980		
251	25	0.73	20	5863	980		
299	30	0.77	16.7	6231	980		
279	40	0.58	12.5	6858	980		
248	50	0.44	1	7380	980		
234	60	0.37	8.3	7380	980		
220	80	0.29	6.3	7380	980		
206	100	0.24	5	7380	980		
406	7.5	3.3	66.7	4343	1270		
433	10	2.7	50	4780	1270		
488	15	2.1	33.3	5472	1270		
477	20	1.6	25	6022	1270		
430	25	1.2	20	6487	1270		
568	30	1.4	16.7	6894	1270		
486	40	0.95	12.5	7588	1270		
451	50	0.75	10	8174	1270		
407	60	0.59	8.3	8180	1270		
368	80	0.45	6.3	8180	1270		
328	100	0.35	5	8180	1270		
788	7.5	6.4	66.7	5488	1700	<b>RX 110</b>	<b>16</b>
844	10	5.2	50	6040	1700		
906	15	3.9	33.3	6914	1700		
856	20	2.8	25	7610	1700		
894	25	2.4	20	8198	1700		
988	30	2.4	16.7	8711	1700		
909	40	1.7	12.5	9588	1700		
882	50	1.4	10	10320	1700		
810	60	1.1	8.3	10320	1700		
668	80	0.76	6.3	10320	1700		
609	100	0.59	5	10320	1700		
1071	7.5	8.6	66.7	7178	2100		
1153	10	7.1	50	7900	2100		
1293	15	5.5	33.3	9043	2100		
1222	20	4.0	25	9953	2100		
1192	25	3.2	20	10722	2100		
1378	30	3.3	16.7	11394	2100		
1284	40	2.4	12.5	12540	2100		
1216	50	1.9	10	13500	2100		
1105	60	1.5	8.3	13500	2100		
967	80	1.1	6.3	13500	2100		
877	100	0.85	5	13500	2100		


- N1=500
- N1=1400
- N1=2800
- N1=900



RX - MRX 性能参数

N1=1400

RX - MRX PERFORMANCE PARAMETER

M2n [Kw]	i	P1n [Kw]	n2 [1/min]	Fr2 [N]	Fr1 [N]		Page
73	300	0.08	4.7	3490	210	<b>RX 030/040</b>	<b>20</b>
67	400	0.06	3.5	3490	210		
59	500	0.04	2.8	3490	210		
63	600	0.04	2.3	3490	210		
68	750	0.04	1.9	3490	210		
59	900	0.03	1.6	3490	210		
48	1200	0.02	1.2	3490	210		
57	1500	0.02	0.9	3490	210		
60	1800	0.02	0.8	3490	210		
36	2400	0.01	0.58	3490	210		
45	3200	0.01	0.4	3490	210		
33	4000	0.01	0.4	3490	210		
29	5000	0.01	0.28	3490	210		
140	300	0.15	4.4	4840	210	<b>RX 030/050</b>	<b>20</b>
115	400	0.1	3.5	4840	210		
120	500	0.09	2.8	4840	210		
130	600	0.08	2.3	4840	210		
123	750	0.07	1.9	4840	210		
118	900	0.06	1.6	4840	210		
96	1200	0.04	1.2	4840	210		
111	1500	0.04	0.93	4840	210		
122	1800	0.04	0.78	4840	210		
110	2400	0.06	0.6	4840	210		
80	3000	0.02	0.5	4840	210		
82	4000	0.02	0.35	4840	210		
82	4800	0.02	0.29	4840	210		
234	300	0.24	4.7	6270	210	<b>RX 030/063</b>	<b>20</b>
228	400	0.19	3.5	6270	210		
210	500	0.15	2.8	6270	210		
216	600	0.13	2.3	6270	210		
199	750	0.11	1.9	6270	210		
188	900	0.09	1.6	6270	210		
197	1200	0.08	1.2	6270	210		
173	1500	0.06	0.93	6270	210		
159	1800	0.05	0.78	6270	210		
189	2400	0.05	0.58	6270	210		
171	3000	0.04	0.47	6270	210		
147	4000	0.03	0.35	6270	210		
109	5000	0.02	0.28	6270	210		
373	300	0.36	4.7	7380	350	<b>RX 040/075</b>	<b>21</b>
346	400	0.27	3.5	7380	350		
315	500	0.21	2.8	7380	350		
355	600	0.19	2.3	7380	350		
330	750	0.16	1.9	7380	350		
326	900	0.14	1.6	7380	350		

- N1=1400
- N1=2800
- N1=900






RX - MRX 性能参数

N1=1400

RX - MRX PERFORMANCE PARAMETER

M2n [Kw]	i	P1n [Kw]	n2 [1/min]	Fr2 [N]	Fr1 [N]		Page
315	1200	0.11	1.2	7380	350	RX 040/075	21
339	1500	0.1	0.93	7380	350		
331	1800	0.09	0.78	7380	350		
311	2400	0.07	0.58	7380	350		
254	3000	0.05	0.47	7380	350		
240	4000	0.04	0.35	7380	350		
205	5000	0.03	0.28	7380	350		
614	300	0.56	4.7	8180	350	RX 040/090	21
587	400	0.43	3.5	8180	350		
545	500	0.34	2.8	8180	350		
585	600	0.3	2.3	8180	350		
509	750	0.23	1.9	8180	350		
465	900	0.19	1.6	8180	350		
514	1200	0.17	1.2	8180	350		
503	1500	0.14	0.93	8180	350		
431	1800	0.11	0.78	8180	350		
543	2400	0.11	0.58	8180	350		
439	3000	0.08	0.47	8180	350		
460	4000	0.08	0.35	8180	350		
410	5000	0.06	0.28	8180	350		
1229	300	1.1	4.7	10320	490		
1164	400	0.79	3.5	10320	490		
1248	500	0.61	2.8	10320	490		
1096	600	0.55	2.3	10320	490		
1108	750	0.49	1.9	10320	490		
1078	900	0.43	1.6	10320	490		
962	1200	0.31	1.2	10320	490		
1109	1500	0.3	0.93	10320	490		
1051	1800	0.26	0.78	10320	490		
1001	2400	0.19	0.58	10320	490		
914	3000	0.15	0.47	10320	490		
819	4000	0.13	0.35	10320	490		
746	5000	0.1	0.28	10320	490		
1737	300	1.5	4.7	13500	700	RX 063/130	22
1621	400	1.1	3.5	13500	700		
1496	500	0.86	2.8	13500	700		
1578	600	0.76	2.3	13500	700		
1559	750	0.66	1.9	13500	700		
1558	900	0.58	1.6	13500	700		
1403	1200	0.43	1.2	13500	700		
1522	1500	0.39	0.93	13500	700		
1500	1800	0.35	0.78	13500	700		
1358	2400	0.25	0.58	13500	700		
1300	3000	0.2	0.47	13500	700		
1146	4000	0.15	0.35	13500	700		
938	5000	0.11	0.28	13500	700		



N1=1400  
N1=2800  
N1=900



UDL- MRX 性能参数

N1=1400

UDL- MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i			Page			
0.18	117-22.5	9-18	12-61.5	UDL0.18- MRX 040	6324	29			
	88-17	12-23	16-82						
	58.7-11.3	17-32	24-123						
	44-8.5	22-40	32-164						
	35.2-6.8	27-47	40-205						
	29.3-5.7	30-51	48-246						
	22-4.3	37-62	64-328						
	17.6-3.4	43-60	80-410						
	22-4.3	38-63	64-328				UDL0.18- MRX 050	6324	29
	17.6-3.4	44-73	80-410						
14.7-2.8	50-80	96-492							
0.37	133-26.7	19-36	10.5-52.5	UDL0.37- MRX 050	7124	29			
	100-20	25-47	14-70						
	66.7-13.3	36-65	21-105						
	50-10	46-82	28-140						
	40-8	55-97	35-175						
	33.3-6.7	61-107	42-210						
	25-5	76-124	56-280						
	20-4	89-120	70-350						
	25-5	79-134	56-280				UDL0.37- MRX 063	7124	29
	20-4	92-155	70-350						
16.7-3.3	104-173	84-420							
0.55	133-26.7	26-49	10.5-52.5	UDL0.55- MRX 063	8014	29			
	100-20	34-63	14-70						
	66.7-13.3	48-88	21-105						
	50-10	62-112	28-140						
	40-8	75-133	35-175						
	33.3-6.7	81-146	42-210						
	25-5	105-179	56-280						
	20-4	123-207	70-350						
	20-4	129-216	70-350				UDL0.55- MRX 075	8014	29
	16.7-3.3	146-242	84-420						
12.5-2.5	176-250	112-560							
0.75	133-26.7	39-73	10.5-52.5	UDL0.75- MRX 063	8024	29			
	100-20	51-94	14-70						
	66.7-13.3	72-132	21-105						
	50-10	92-168	28-140						
	40-8	112-199	35-175						
	33.3-6.7	126-219	42-210						
	25-5	156-232	56-280						
	20-4	185-310	70-350						
	20-4	192-320	70-350				UDL0.75- MRX 075	8024	29
	16.7-3.3	219-300	84-420						
16.7-3.3	230-389	84-420							
0.90	125-2.5	265-428	112-560	UDL0.75- MRX 090	8024	29			
	10-2	303-410	140-700						
	125-2.5	302-503	112-560						
	10-2	348-575	140-700						













N1=1400  
N1=2800  
N1=900



UDL-MRX 性能参数

N1=1400

UDL-MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i			Page			
1.1	133-26.7	59-111	10.5-52.5			29			
	100-20	77-144	14-70						
	66.7-13.3	110-203	21-105						
	50-10	142-258	28-140						
	40-8	172-308	35-175						
	33.3-6.7	195-340	42-210						
	25-5	245-360	56-280						
	100-20	78-146	14-70						
	66.7-13.3	113-208	21-105						
	50-10	146-266	28-140						
	40-8	177-320	35-175						
	33.3-6.7	202-356	42-210						
25-5	256-442	56-280							
20-4	304-517	70-350							
1.5	20-4	320-550	70-350			29			
	16.7-3.3	368-625	84-420						
	12.5-2.5	455-754	112-560						
	10-2	522-710	140-700						
	16.7-3.3	373-623	84-420						
	12.5-2.5	460-749	112-560						
	10-2	531-868	140-700						
	133-26.7	78-148	10.5-52.5						29
	100-20	102-192	14-70						
	66.7-13.3	147-270	21-105						
	50-10	190-344	28-140						
	40-8	229-330	35-175						
33.3-6.7	260-390	42-210							
25-5	327-360	56-280							
133-26.7	77-150	10.5-52.5			29				
100-20	104-195	14-70							
66.7-13.3	150-277	21-105							
50-10	194-355	28-140							
40-8	236-427	35-175							
33.3-6.7	270-474	42-210							
25-5	341-589	56-280							
20-4	406-560	70-350							
20-4	426-733	70-350						29	
16.7-3.3	490-833	84-420							
16.7-3.3	498-831	84-420							
12.5-2.5	614-999	112-560							
10-2	696-1100	140-700							















N1=1400  
N1=2800  
N1=900



UDL-MRX 性能参数

N1=1400

UDL-MRX PERFORMANCE PARAMETER

P1n [Kw]	n2 [1/min]	M2n [Nm]	i			Page			
2.2	133-26.7	120-226	10.5-52.5			29			
	100-20	157-294	14-70						
	66.7-13.3	228-418	21-105						
	50-10	298-549	28-140						
	40-8	364-664	35-175						
	33.3-6.7	413-717	42-210						
	25-5	533-931	56-280						
	25-5	542-932	56-280						29
	20-4	648-1097	70-350						
	16.7-3.3	746-1246	84-420						
	12.5-2.5	921-1499	112-560						
	10-2	1040-1690	140-700						
133-26.7	160-302	10.5-52.5			29				
100-20	210-392	14-70							
66.7-13.3	304-558	21-105							
50-10	398-732	28-140							
40-8	485-885	35-175							
33.3-6.7	547-956	42-210							
25-5	711-1030	56-280							
133-26.7	160-301	10.5-52.5						29	
100-20	211-395	14-70							
66.7-13.3	307-563	21-105							
50-10	402-733	28-140							
40-8	490-885	35-175							
33.3-6.7	562-973	42-210							
25-5	720-1242	56-280							
20-4	864-1463	70-350							
4.0	133-26.7	213-402	10.5-52.5						29
	100-20	279-523	14-70						
	66.7-13.3	405-744	21-105						
	50-10	530-975	28-140						
	40-8	647-1020	35-175						
	133-26.7	214-401	10.5-52.5					29	
	100-20	281-527	14-70						
	66.7-13.3	410-751	21-105						
	50-10	536-978	28-140						
	40-8	653-1180	35-175						
	33.3-6.7	749-1298	42-210						
	25-5	960-1650	56-280						

N1=1400  
N1=2800  
N1=900



## 安装

意德减速机  
Speed reducer

## INSTALLATION

## 安装 NOTES OF INSTALLATION

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, 避免装配过紧损坏轴承, 过松影响动力传递;
- 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、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
- 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。
- 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。

To install the reduction unit it is necessary to note the following recommendations;

- 1、Check the correct direction of rotation of the reduction unit output shaft before fitting the unit to the machine.
- 2、Before mount with the prime mover and device, please check the reducer's every axial diameter, aperture, key and 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、Drives such as sprocket wheel and gear must be fitted close to bearing in order to reduce bending stress of hanging shaft
- 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.
- 6、Supporting unit is required when reducers directly match with motors whose weight is bigger than normal types.

## 使用注意事项 NOTES OF OPERATING

- 1、使用前应注意检查减速机型式结构、中心距规格、传动比、输入轴联结方式、输出轴结构、输入轴输出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
- 2、开机时应逐步施加载荷, 不能满载启动
- 3、所有的减速机配有排气塞, 在使用时, 把密封塞换成随机附带的排气塞
- 4、使用时必须检查油位 (如油位镜孔或打开油塞)
- 5、尽可能地避免减速机暴露在烈日阳光下和恶劣环境中; 确保电机风扇附近有良好的通风环境, 以免影响散热效果;
- 6、如果减速机存放时间长达4-6个月, 应检查油封是否浸润滑油中, 可能油封唇口会粘在轴上, 甚至失去了弹性, 由于适当的弹性是油封必须的工作条件, 所以推荐更换油封; 所有橡胶和透气孔不能沾有油漆;
- 7、减速器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。

- 1、Before using, please check carefully whether the reducer model, distance size, ratio, input connecting method, output shaft structure, input and output shaft direction and revolving direction are tight according to requirement. It is better for the input speed of worm shaft not more than 1500r/min.
- 2、The load should be added step by step when using the machine. Never running it with full load.
- 3、All the reduction units are fitted with breather. Please replace the closed plug used for transportation with the breather plug supplied with the unit after installation.
- 4、Please check the correct level of the lubricant through the indicator or open the plug.
- 5、Whenever possible, protect the reduction unit against solar radiation and bad weather. Ensure the motor cools correctly by assuring good passage of air from the fan side.
- 6、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.
- 7、In the case of ambient temperatures < -5℃ or > +40℃ call the Technical Service.



## 润滑油

意德减速机  
Speed reducer

## LUBRICANTS

## 润滑油选用表 LUBRICANTS OIL CHOSEN TABLE

	TEMPERATURE		ISO	SHELL	AGIP	ESSO	MOBIL	CASTROL	BP	GEMER	
MRX 025-090	-25	+50	VG320	Tivela Oi1460	Tellum VSF320	S220	Glygoyle 30	Alpha syn Pg320	Emrth pl SGXP320		合成油 Synthetic oil
MRX 025-090	-5	+40	VG460	Omaia Oi1460	Biasia 460	Spartaun Ep450	Mobilgear 634	Alpha MAX 450	Energol GAXP460	CKE460	矿物油 Mineral oil
	-15	+25	VG220	Omaia Oi220	Biasia 220	Spartaun Ep220	Mobilgear 630	Alpha MAX 220	Energol GAXP220		
UDL	-25	+40	VG32	A.T.F.DXRON	A.T.F.DXRON	A.T.F.DXRON	A.T.F.220	TQ.DXRONII	Autral DX	Ub-3x	矿物油 Mineral oil

## 润滑油加注表(单位:升) LUBRICENT FILL QUANTITY(L)

	B3	B6	B7	B8	V5	V6
MRX 025	0.023					
MRX 030	0.05					
MRX 040	0.1					
MRX 050	0.15					
MRX 063	0.3					
MRX 075	0.5					
MRX 090	1					
MRX 110	3	2.5	2.5	2.2	3	2.2
MRX 130	4.5	3.5	3.5	3.3	4.5	3.3
MRX 150	7	5.1	5.1	5.4	7	5.1
UDL0.18	0.13				0.2	
UDL0.37	0.15				0.25	
UDL0.55	0.33				0.45	
UDL0.75	0.33				0.45	
UD1.1	0.8				1	
UD1.5	0.8				1	
UD2.2	1.2				1.2	
UD3.0	1.2				1.2	
UD4.0	1.2				1.2	



## 润滑油 LUBRICATION

工作环境温度不在表中范围内时，请与我们技术人员联系。

◆当工作环境温度低于-30℃或高于60℃时，要使用特殊材质的油封

◆工作环境温度低于0℃时，必须考虑下列情况：

→选用的电机必须在低温下能正常工作；

→电机的功率必须满足在低温下有较大启动扭矩要求；

→如果减速器箱体的材质是铸铁，在温度-15℃以下时，箱体会变得很脆，要注意尽量避免撞击；

→在开始使用阶段时，由于润滑油的粘度很高，可能会产生一些问题，所以刚开始启动时最好让它空载运转几分钟；

◆减速器运行大约5000小时后，应更换润滑油，换油频率按减速器实际运行情况和的工作环境条件而定；更换油应注意，不同的油品不能混用；

◆MRX 025、030、040、050、063、075、090规格的减速器在出厂时已加注了耐用的合成润滑油（SHELL TEVELA OIL 320），可以按照样本中安装方位所提到的方位安装。V5或V6安装时，请与我们技术服务人员联系；

◆减速器MRX 110、130、150规格在出厂时已加注了矿物润滑油（SHELL Omala Oil 460）；

◆无级变速器在出厂时也加了矿物润滑油（广研Ub-3X）；

◆减速器MRX 110、130、150规格的安装方位在下单时要说明，否则润滑油按B3方位提供；

◆In case of ambient temperatures not envisaged in the table, call our technical service.

In the case of temperature under -30℃ or over 60℃ it is necessary to use oil seals with special material.

◆For operating ranges with temperatures under 0℃ it is necessary to consider the following:

→The motors need to be suitable for operation at the envisaged ambient temperature.

→The power of the electric motor needs to be adequate for exceeding the higher starting torques required.

→In the case of reduction units with a cast-iron case, pay attention to impact loads since cast iron may have problems of fragility at temperatures under -15℃.

→During the early stages of service, problems of lubrication may arise due to the high level of viscosity taken on by the oil and so it is wise to have a few minutes of rotation under no load.

◆The oil needs to be changed after approximately 5000 hours. This period depends on the type of service and the environment where the reduction unit works. The synthetic oil and the mineral oil can not be combined used in the reduction units.

◆The reduction units size 025-030-040-050-063-075-090 are supplied complete with lubricant for life, synthetic oil (SHELL TEVELA OIL 320), and can therefore be mounted in any position envisaged in the catalogue. V5/V6 for which you should call our technical service to assess the condition of use.

◆The reduction units size 110、130 and 150 are supplied complete with lubricant, mineral oil, (SHELL TEVELA OIL 320)

◆The variator speed are supplied complete with lubricant, mineral oil (GUANGYAN Ub-3x).

◆For size 110、130 and 150 it is necessary to specify the position, otherwise the reduction units are supplied with the quantity of oil relating to pos.B3.



故障内容 Breakdown	可能的原因 Possible cause	排除的方法 The way of settlement
无负载状态下，电机不转 The motor does not run in case of no load	停电 Power off	检查电源，询问电力公司 Check power, consult with power company
	连接线断裂 Connecting wire break	检查接线 Check wire
	开关接触不良 The switch does not contact well	修理或更换 Repair or replace
	电机线圈断裂 The motor coil break	送专业工厂修理 Repair it in special factory
	三相电机接单相电压 3 phase motor connect single phase voltage	确认电压及接线方式 Confirm voltage and connecting ways
	单相电机未接电容器 Single phase motor does not connect condenser	连接电容器 Connect condenser
	单相电机启动器动作不良 Single motor's starter does work well	送专业工厂修理 Repair it at special factory
	齿轮、轴心及轴承损坏 Gear, axis and bearing are damaged	送专业工厂修理 Repair it at special factory
负载时，电机不转 The motor does not run in case of loading	电压过低 Voltage is too low	检查电源线是否过长或过细 Check to see if the wire is too long or too thin
	齿轮损坏 Gear is damaged	送专业工厂修理 Repair it in special factory
	超负载运转 Work with overload	减少负荷 Discharge load
异常发热 Very hot	超负载运转 Work with overload	减少负荷 Discharge load
	启动、停止过多 Start and stop too many	减少使用频率 Reduce using frequency
	轴承磨损 Bearing is damaged	修理或更换 Repair or replace
	电压过高或过低 Voltage is too high or too low	确认电压是否正常 Confirm to see if the voltage is normal
噪声太大 Loud noise	声音大且持续；轴承损坏，齿轮磨损 If the noise is loud and continuous, the bearing is damaged or the gear damaged	送专业工厂修理 Repair it in special factory
	偶尔声音大；齿轮损伤，有异物卡住 If the noise is loud and continuous, the gear must be damaged or something else block	与用户服务机构联系 Contact with the service institution
振动太大 Severe vibration	齿轮、轴承磨损 Gear or bearing is worn out	送专业工厂修理 Repair it in special factory
	固定不良，螺丝松动 Screw is loose	重新锁紧 Re-lock
异常的不稳定的运转噪声 Abnormal, unsteady, running noise	油已污染或油量不足 The oil is contaminated or short of	检查油颜色、浓度、油位 Check the color, density and level of oil
漏油 -在电机法兰处 -在电机油封处 -在减速机法兰处 -在输出部分的油封处 Leakage at flange and gasket	螺丝松动 The screw is loose	重新锁紧 Re-lock
	密封圈损坏 The gasket is damaged	替换之与用户服务机构联系 Replace it and contact service institution
通气塞处漏油 Leakage at ventilating plug	油量太多 The oil is too much	校正油量 Correct the oil amount
	通气塞安装不正确 The plug is not well installed	正确安装通气塞 Install it properly
	频繁冷启动 (油产生泡沫)或油位太高 Cold start too often (the oil produce foam) oil level is too high	将通气塞换成排气阀 Change the plug with ventilating valve
电机转动时输出轴不转 The output shaft does not move when the motor work	减速机轴键连接破坏 The connection between shaft and key is damaged	送专业工厂修理 Repair it in special factory