

OTHER Series

EZ系列弧齿锥齿轮减速机
EZ Series Spiral Bevel Gear Reducer

MB无级变速器
MB Variable Speed Machine

NMRV蜗轮减速机
NMRV Worm Wheel Reducer



EVERGEAR



1 概述
Summarize

- 1.EZ系列弧齿锥齿轮减速机是一级弧齿锥齿轮传动箱，传动比有1、1.5、2、2.5、3。
 - 2.传动效率高，单机型减速机效率高达96%。
 - 3.有单横轴、单纵轴、双纵轴可选。
- 1.EZ series bevel helical gear reductor is the first stage gear case with transmission ratio of 1,1.5,2,2.5 and 3.
- 2.High transmission efficiency. A single machine can reach a transmission efficiency as much as 96%.
- 3.There are single transverse shaft, single longitude shaft and double longitude shafts for select.

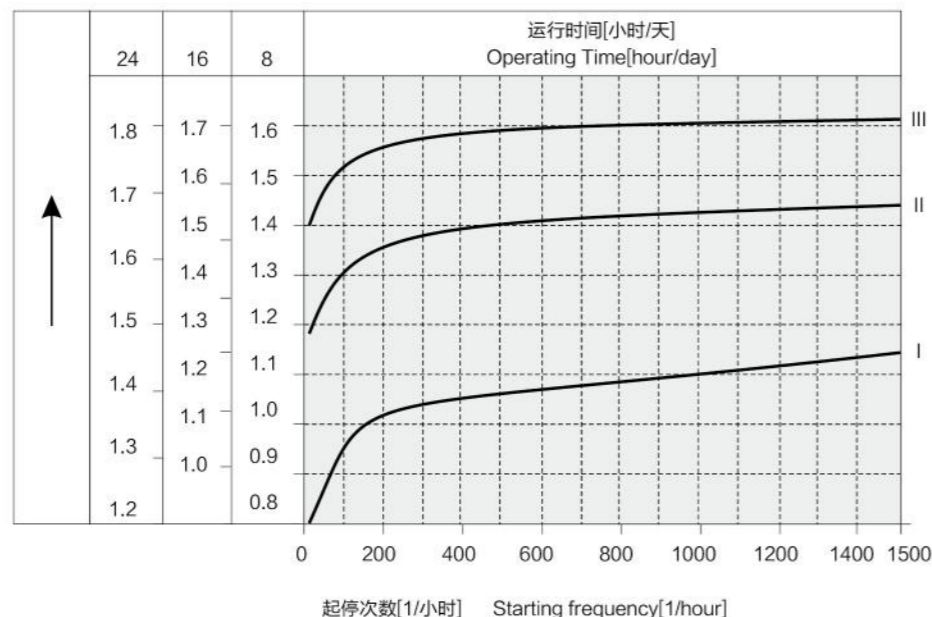
2 场所条件
Working Environment:

- 1.环境温度-40℃~50℃。(0° C以下启动时润滑油要加热到0° C以上。)
 - 2.海拔不超过1000米。
 - 3.输入转速不大于1800rpm，齿轮最高圆周速度不超过22m/s。
 - 4.可用于正反旋转。
 - 5.无行业限制。
 - 6.其他条件下使用请与我公司技术部联系。
- 1.Working temperature: -40℃~50℃ (The lubrication should be heated until above 0℃ if the machine works Below 0℃.)
- 2.The working place should be lower than 1,000 meters above sea level.
- 3.The input rotational speed should not exceed 1,800r/m. The circumferential speed of the gear should not exceed 22m/s.
- 4.Suitable for normal-reverse rotation.
- 5.Without industry limitation.
- 6.Please consult our technical supporting department for other circumstances.

3 选型指南
Instructions for Selection

在确定使用系数之前必须先确定一天的运行小时数，每小时的起停次数和负载类型。其中负载类型按下列公式计算：
The daily operating time, the starting frequency and the load classifications must be determined before deciding the service factor. The load classifications is calculated with the following formula:

工况系数 f_A Operating Mode Fanctor f_A



负载类型 Load classification

- I 均匀负载，惯性加速系数在 ≤ 0.2
Uniform load, mass acceleration factor ≤ 0.2
- II 中等冲击负载，惯性加速系数 ≤ 3
Medium Impact load, mass acceleration factor ≤ 3
- III 强烈冲击负载，惯性加速系数 ≤ 10
Heavy shock load, mass acceleration factor ≤ 10

⚠ 如果惯性加速系数 > 10，请与我公司技术部联系。
Please contact our technical supporting department in case the mass acceleration factor > 10.

$$\text{惯性加速系数} = \frac{\text{所有外部转动惯量}}{\text{驱动电机的转动惯量}}$$

Mass acceleration factor = $\frac{\text{All external mass moments of Inertia}}{\text{Mass moment of inertia on the motor end}}$

选型时必须满足下式：
Type selection should meet the following formula:

$$\text{减速机的许用输入功率} \geq \text{减速机的输入功率} \times \text{工况系数 } f_A$$

Permissible input power of reductor \geq Input power of reductor \times Operating mode factor f_A

⚠ 注 Notes

1. 减速机的许用输入功率已在后面的选型参数表中列出。
2. 输出轴端允许的径向载荷及轴向载荷资料，请与我公司技术部联系。
3. 减速机的使用与维护请参阅随机附带的《减速变速器使用说明书》。

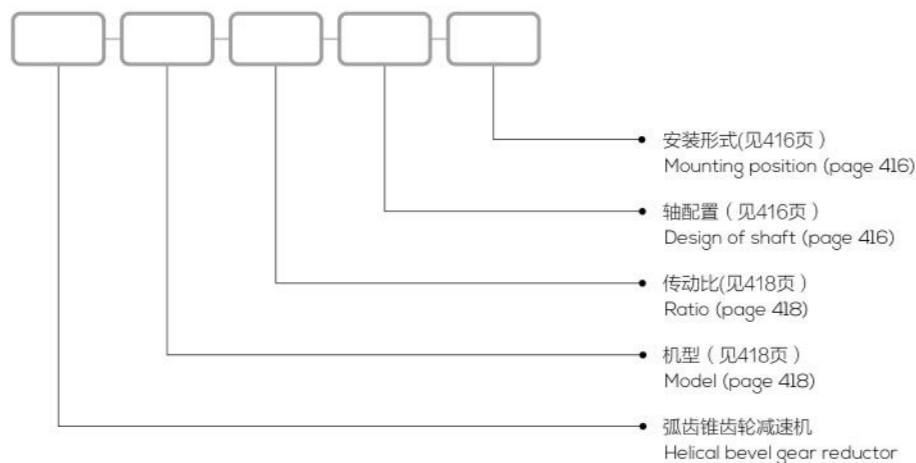
1. Permissible input power of reductor is listed in the parameter selection table.

2. Please contact our technical supporting department for the information on the permitted overhung loads and the axial forces at the end of the output shaft.

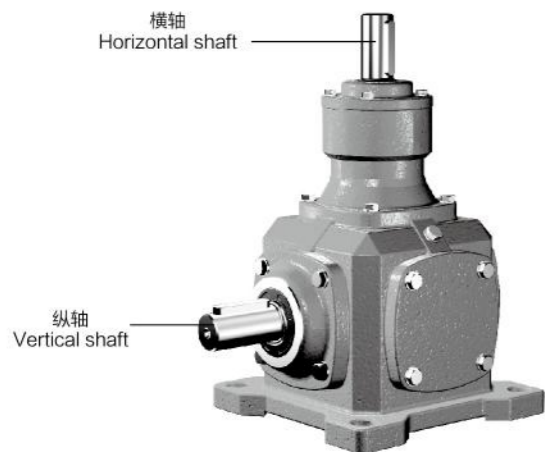
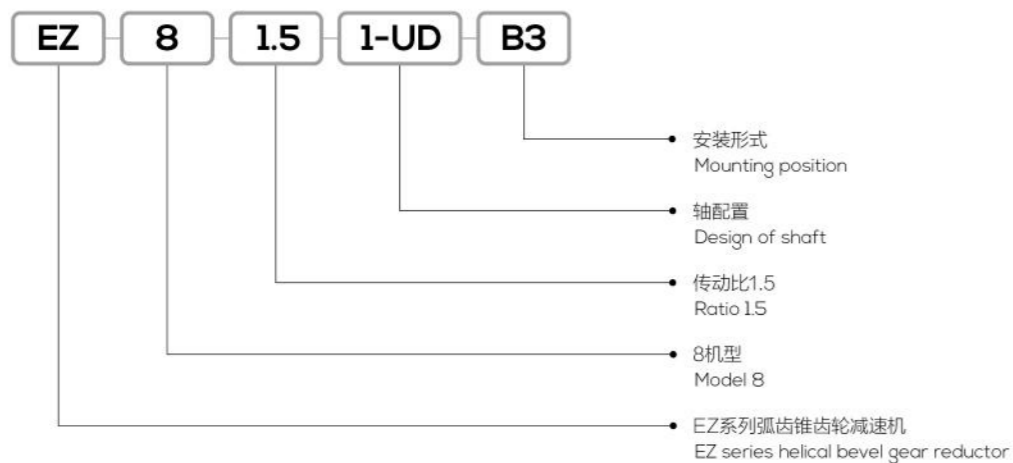
3. Regarding the use and maintenance of the reductor, please refer to the attached «Instruction Manual of the Reductor and the Variable Speed Motor» .



4 型号说明
Instructions for Models:



示例
Sample

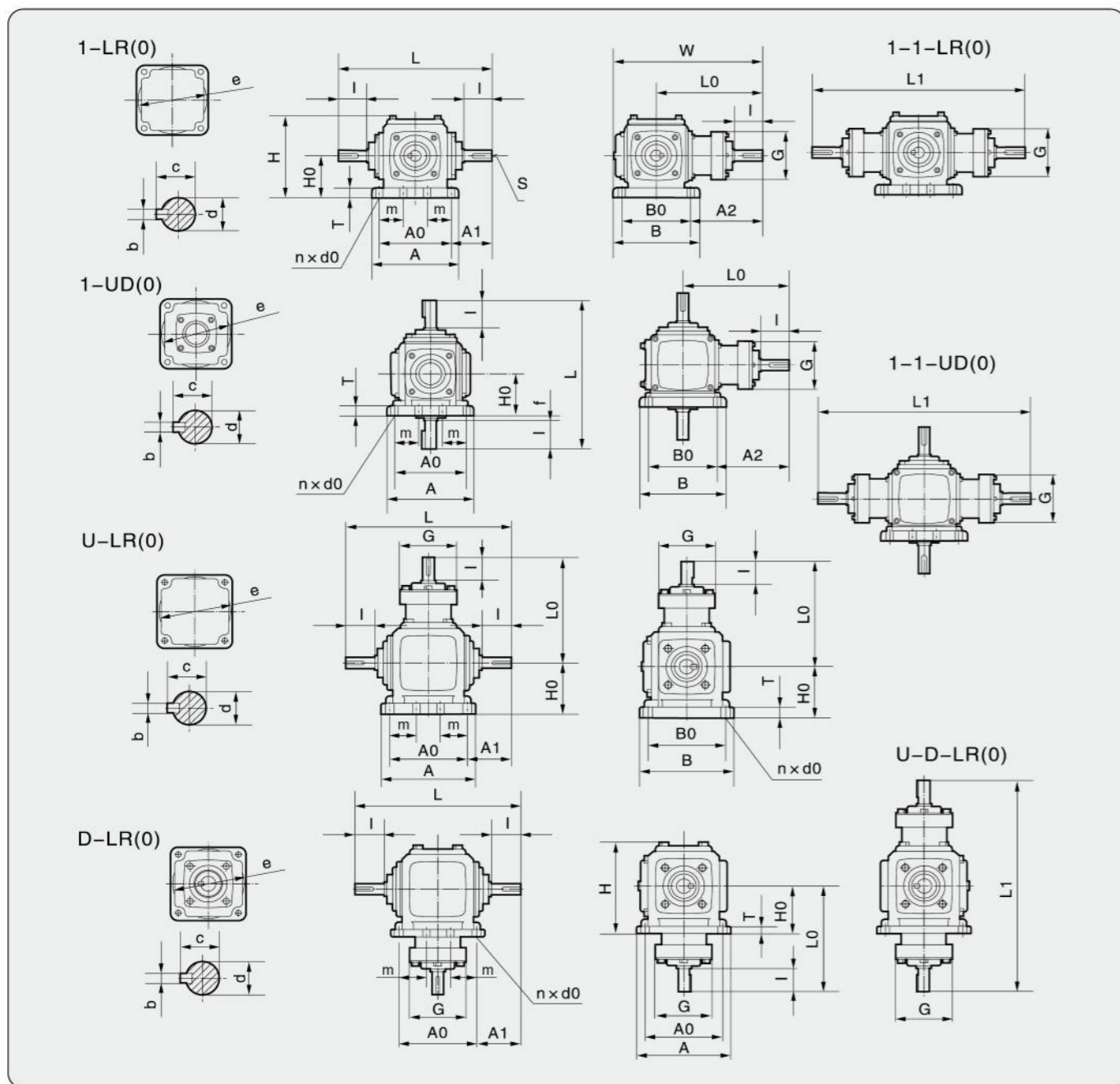


注: 当横轴输入时, EZ系列螺旋锥齿轮减速机为减速。
当纵轴输入时, EZ系列螺旋锥齿轮减速机为增速。

Note: EZ series bevel helical gear reductor is deceleration when inputting horizontal shaft.
EZ series bevel helical gear reductor is acceleration, when inputting vetical shaft.

安装形式图 Mounting Position Example

轴配置轴旋转方向关系 The relationship between design of shaft and direction of shaft			安装形式 Mounting position		
1-LR 	1-R 	1-L 			
1-LR-O 	1-R-O 	1-L-O 			
1-UD 	1-U 	1-D 			
1-UD-O 	1-U-O 	1-D-O 			
U-LR 	U-R 	U-L 			
U-LR-O 	U-R-O 	U-L-O 			
D-LR 	D-R 	D-L 			
D-LR-O 	D-R-O 	D-L-O 			
1-1-LR 	1-1-R 	1-1-L 			
1-1-LR-O 	1-1-R-O 	1-1-L-O 			
1-1-UD 	1-1-U 	1-1-D 			
1-1-UD-O 	1-1-U-O 	1-1-D-O 			
U-D-LR 	U-D-R 	U-D-L 			
U-D-LR-O 	U-D-R-O 	U-D-L-O 			



型号 Model	安装尺寸 Installation dimensions					轴伸尺寸 Shaft dimensions					外形尺寸 Overall dimensions										重量 weight Kg			
	H0	A0	B0	A1	A2	m	L0	nxd0	d	b	c	l	S	L	H	A	B	W	G	T		f	L1	ex深
EZ2	52	84	84	48	82	0	124	4x9	15	5	17	30	M4	180	100	100	100	174	74	10	6	—	94x3	4
EZ4	76	125	125	53.5	117.5	0	180	4x11	19	6	21.5	38	M5	232	145	155	155	257.5	79	17	2	360	145x5	10
EZ6	90	152	152	81	146	0	222	4x14	25	8	28	50	M6	314	175	190	190	317	98	17	17	444	175x5	21
EZ7	100	174	174	86	178	0	265	4x14	32	10	35	60	M8	346	198	210	210	370	116	22	13	530	205x5	32
EZ8	115	195	195	110.5	210.5	0	308	4x14	40	12	43	75	M10	416	225	235	235	425.5	136	22	18	616	240x5	49
EZ10	140	240	240	120	240	0	360	4x16	45	14	48.5	90	M12	480	270	285	285	502.5	156	25	10	720	295x5	78
EZ12	175	290	290	130	270	0	415	4x21	50	14	53.5	100	M16	550	340	340	340	585	180	32	0	830	350x5	124
EZ16	200	330	330	150	290	0	455	4x25	60	18	64	105	M20	630	410	390	390	606		40	10	910	420x5	188
EZ20	245	330	430	195	330	110	545	8x21	72	20	76.5	105	M20	720	485	410	490	800		32	10	1090	360x5	297
EZ25	290	390	520	235	400	130	660	8x24	85	22	90	130	M20	860	587	480	580	957		35	10	1320	430x5	488

传动比 Ratio	输入转速 (r/min) Input speed	输出转速 (r/min) output speed	EZ2	EZ4	EZ6	EZ7	EZ8	EZ10	EZ12	EZ16	EZ20	EZ25
			输入功率(kW) Input power									
1	1450	1450	1.79	4.19	14.9	22	45.6	65.3	96	163		
	1150	1150	1.43	3.46	12.7	18.4	37.5	55.7	81.1	139	234	
	870	870	1.12	2.45	10.5	15.2	29	44.6	67.5	114	193	335
	580	580	0.747	1.72	7.35	11.4	19.8	30.6	49.7	85.9	145	252
	400	400	0.524	1.3	5.2	8.34	14	21.5	35.1	66.1	112	195
	300	300	0.396	0.88	3.93	6.35	10.6	16.4	26.8	54.1	90.8	159
	200	200	0.266	0.448	2.66	4.3	7.23	11.1	18.2	39.3	69.0	119
	100	100	0.136	0.046	1.36	2.2	3.7	5.72	9.36	20.3	35.3	60.0
10	10	0.014		0.141	0.228	0.386	0.599	0.983	2.14	3.53	6.30	
1.5	1450	967			12.1	15	19.1	38.7	58.3			
	1150	767			9.96	12	15.4	31.2	49.2			
	870	580			7.66	9.3	11.8	24.1	40.7			
	580	387			5.23	6.32	8.14	16.4	28.9			
	400	267			3.66	4.41	5.7	11.6	20.3			
	300	200			2.77	3.35	4.34	8.78	15.5			
	200	133			1.87	2.28	2.91	5.95	10.5			
	100	37			0.957	1.16	1.49	3.04	5.37			
10	7			0.099	0.12	0.155	0.316	0.56				
2	1450	725	0.94	3.32	7.9	10.6	14	23.6	40	73.7	126	
	1150	575	0.74	2.67	6.39	8.55	11.3	19	31.7	59.5	102	119
	870	435	0.56	2.04	4.88	6.56	8.7	14.6	24	46.0	79.0	155
	580	290	0.37	1.38	3.34	4.47	5.92	10	16.3	31.3	54.2	107
	400	200	0.26	0.96	2.33	3.12	4.15	7.02	11.5	22.0	38.0	75.4
	300	150	0.19	0.73	1.76	2.37	3.14	5.33	8.71	16.7	29.0	57.4
	200	100	0.13	0.49	1.18	1.59	2.12	3.61	5.89	11.3	19.7	39.2
	100	50	0.06	0.3	0.608	0.812	1.08	1.84	3.01	5.84	10.1	20.1
10	5	0.015	0.026	0.062	0.084	0.112	0.191	0.313	0.605	1.06	2.11	
2.5	1450	580			5.97	6.99	11.4	18.2	31.4			
	1150	460			4.78	5.64	9.11	14.7	25.3			
	870	348			3.68	5.3	7	11.2	19.5			
	580	232			2.48	2.92	4.76	7.68	13.3			
	400	160			1.73	2.05	3.34	5.38	9.32			
	300	120			1.32	1.55	2.53	4.06	7.08			
	200	80			0.888	1.05	1.71	2.75	4.79			
	100	40			0.448	0.528	0.867	1.4	2.43			
10	4			0.046	0.054	0.089	0.144	0.251				
3	1450	483			4.84	5.42	8.2	14	23.6	48.2	82.3	158
	1150	383			3.88	4.34	6.55	11.3	19	38.9	66.6	130
	870	290			2.97	3.34	5.04	8.66	14.6	30.1	51.6	101
	580	193			2.02	2.25	3.42	5.89	9.92	20.4	35.4	69.9
	400	133			1.41	1.58	2.39	4.11	6.98	14.4	24.8	49.3
	300	100			1.07	1.18	1.8	3.11	5.29	10.9	18.9	37.6
	200	67			0.712	0.803	1.22	2.1	3.57	7.38	12.9	25.6
	100	33			0.363	0.409	0.618	1.07	1.82	3.82	6.60	13.1
10	3			0.037	0.042	0.064	0.11	0.188	0.40	0.69	1.4	

注：1.表中没有的转速值按插入法计算。
 2.横轴转速超过1450r/min时，向我公司咨询。
 3.横轴转速未达到10r/min时，请使用10r/min的数据。
 4.本表使用系数一律为1.0。
 5.本表全部为减速(除1以外)传动的输入功率，当需要增速时，输入功率的数据应除以减速比。

Note: 1.If speed is not list in table, please calculated with inserting method.
 2.Please consult us, when the speed of horizontal shaft is more than 1450r/min.
 3.Please refer to the parameter of 10r/min in the table when the speed of horizontal shaft is less than 10r/min.
 4.The service factor of table is 1.0.
 5.All input power of table (except for 1) is for deceleration transmission. It's essential that the parameter of input power should divide ratio.