

MKS系列—合理的经济选择

MKS SERIES—RATIONAL ECONOMICAL CHOICE

质为先

业为专

客为首

诚为本

与其他系列行星齿轮减速机相比，
MKS系列行星齿轮减速机更加经济适用。
它在任何领域都能提供几乎满足所有需求的最经济型解决方案。

Compared with other series of planetary gear reducers, the MKS series of planetary gear reducers are more economical and applicable. It can provide the most economical solution that meets almost all needs in any field.

技术参数* TECHNICAL PARAMETERS

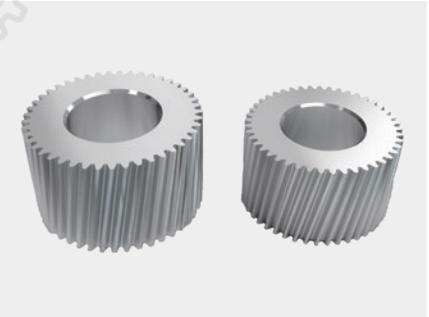
回程间隙 Return clearance	arcmin	1~7
速比 Speed ratio	i	3~100
额定输出力矩 Rated output torque	Nm	40~2000
使用温度℃ Using temperature℃	℃	-10~90
噪音 The noise	dB(A)	58~70
工作效率 The work efficiency	%	97
工作寿命 The working life	h	20000



MKS系列—合理的经济选择
MKS series-rational economical choice



输出法兰通孔设计, 容易安装
Output flange through hole design, easy to install



齿面宽, 参数做大, 实现高强度
The tooth surface is wide, the parameters are larger, and the high strength is achieved



输出轴一体化设计, 确保精度和同心度
Output shaft integrated design to ensure accuracy and concentricity



宽齿面宽, 结构最优化设计
Wide tooth surface width, structural optimization design



优美的一体化输入连接法兰, 强度高
Elegant integrated input flange with high strength

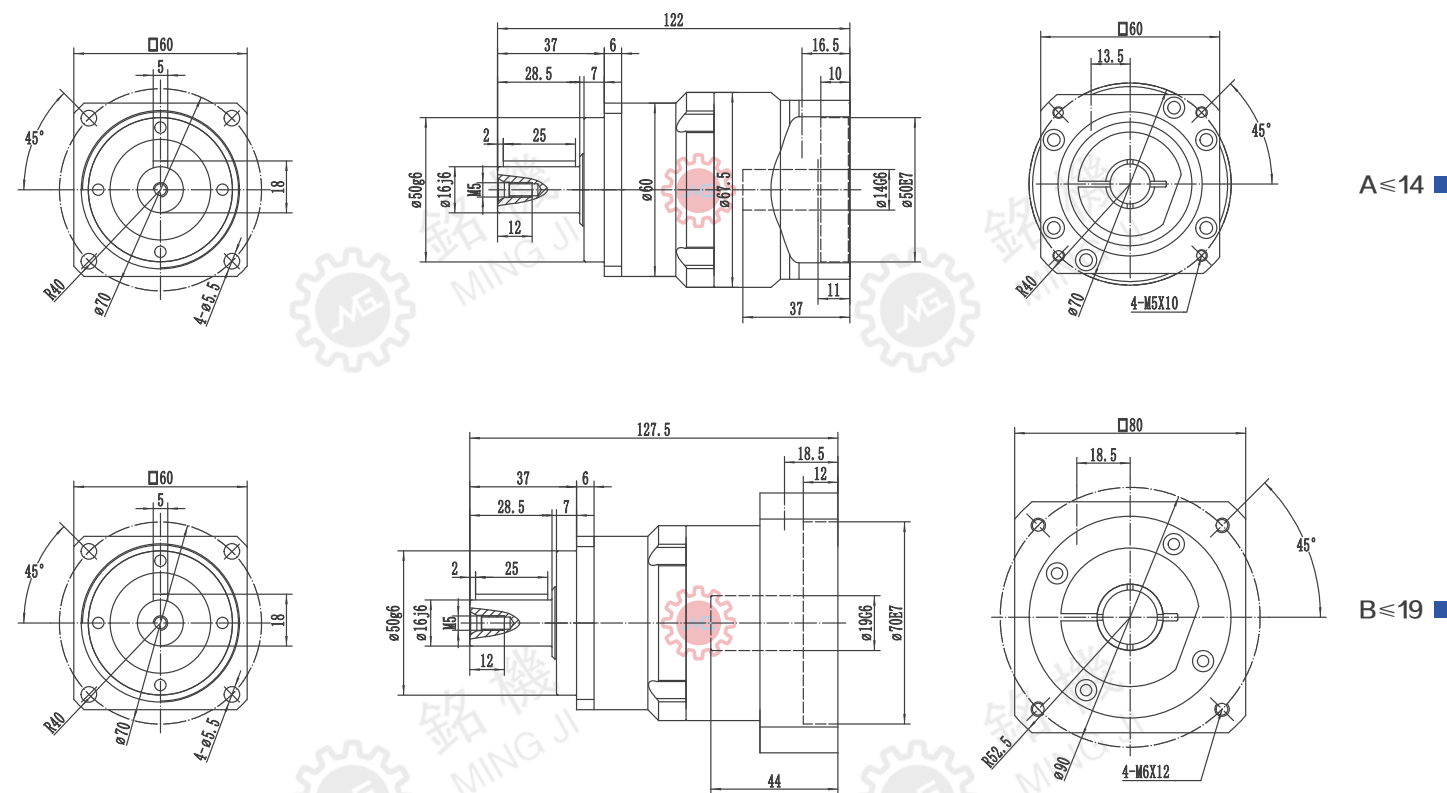
減速機性能資料 REDUCER PERFORMANCE DATA

MKS060				单级/One-stage								双级/Two-stage									
速比 ⁽¹⁾ Speed ratio		i		3	4	5	6	7	8	9	10	12	16	20	25	35	40	50	70	100	
额定输出力矩(n _{1N}) Rated output torque		T _{2N}	Nm	55	50	50	55	50	45	40	40	55	50	50	60	50	50	55	50	40	
紧急制动力矩 (在减速机工作寿命内允许1000次) (1000 times during the working life of the reducer)		T _{2NOT}	Nm	3倍额定输出力矩/3 Times rated output torque																	
额定输入转速 (T2n, 20℃环境温度) Rated input speed (T2n,20 °C ambient temperature)		n _{1N}	rpm	4000																	
最大输入转速 Maximum input speed		n _{1max}	rpm	8000																	
空载力矩 (n1=3000rpm, 20℃环境温度) No-load torque (n1=3000 RPM,20°Cambient temperature)		T ₀₁₂	Nm	0.9	0.8	0.8	0.7	0.6	0.5	0.5	0.4	0.6	0.6	0.55	0.5	0.5	0.4	0.4	0.35	0.3	
回程间隙PS Backslash PS		j _t	Arcmin	≤1								≤2									
回程间隙P0 Backslash P0		j _t	Arcmin	≤2								≤3									
回程间隙P1 Backslash P1		j _t	Arcmin	≤3								≤5									
回程间隙P2 Backslash P2		j _t	Arcmin	≤5								≤7									
扭转刚度 Torsional stiffness		C ₁₂₁	Nm/Arcmin	3.5																	
最大轴向力 ⁽²⁾ Maximum axial force		F _{2AMax}	N	630																	
最大径向力 ⁽²⁾ Maximum radial force		F _{2RMax}	N	1100																	
工作效率 Work efficiency		η	%	97								94									
工作寿命 ⁽³⁾ Service life		L _h	h	20000																	
噪音 (i=10和n1=3000rpm, 空载) Noise (i=10 and n1=3000rpm, no load)		L _{PA}	DB(A)	≤58																	
重量 Weight		m	Kg	1.3								1.8									
安装方向 Installation direction					任意方向/Any direction																
使用温度 ⁽⁴⁾ Operating temperature		℃			-10~90																
润滑方式 Lubrication method					终生润滑/Lifetime lubrication																
防护等级 Protection level					IP65																
转动惯量 Moment of inertia 按减速机输入直径(mm) Input diameter based on the reducer(mm)	11	J ₁	Kgcm ²	0.25	0.2	0.2	0.15	0.13	0.12	0.1	0.1	0.1	0.1	0.09	0.08	0.08	0.08	0.08	0.08	0.08	
	14	J ₁	Kgcm ²	0.28	0.25	0.25	0.22	0.18	0.17	0.15	0.14	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.15	
	19	J ₁	Kgcm ²	0.65	0.6	0.55	0.55	0.52	0.5	0.5	0.48	0.18	0.18	0.16	0.15	0.15	0.15	0.15	0.14	0.14	

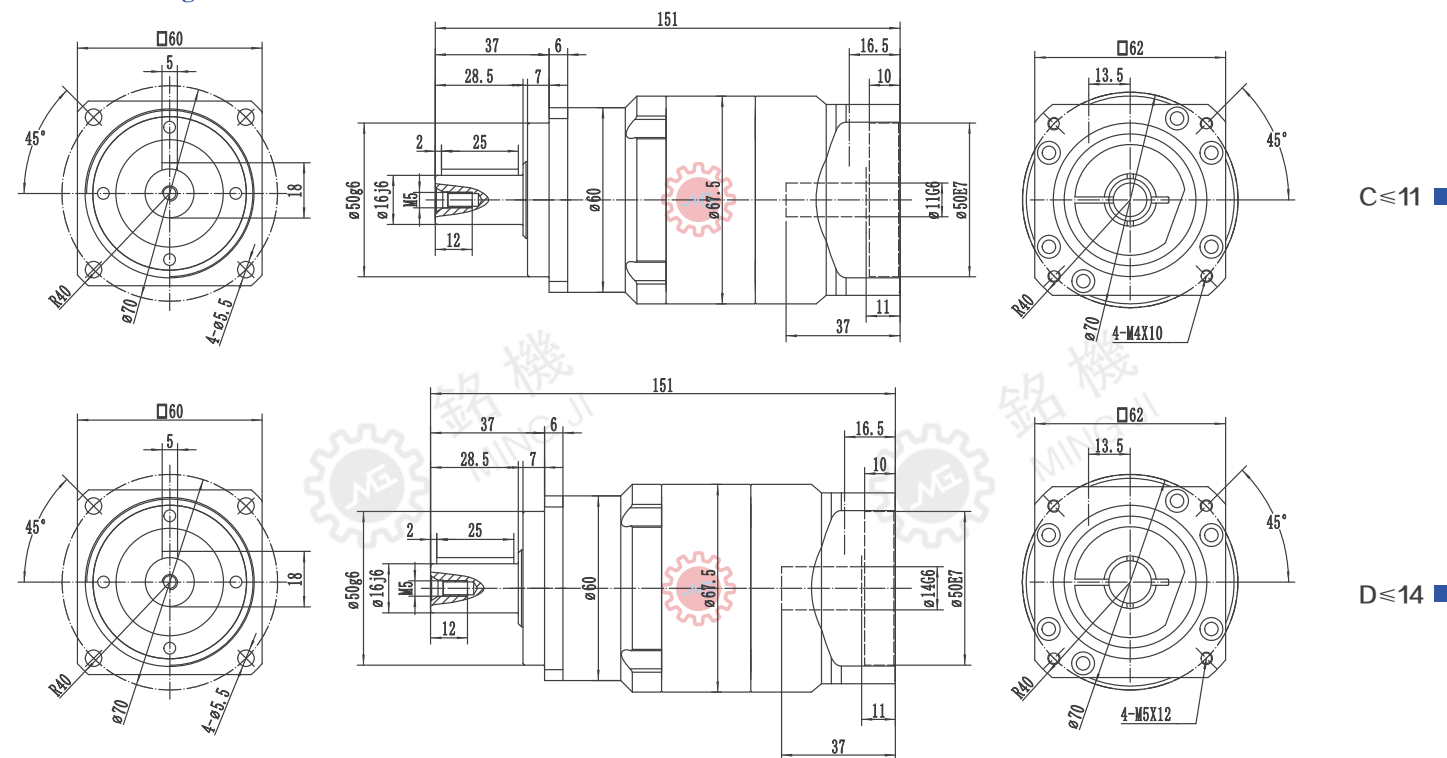
- | | |
|---------------------|---|
| 1.可选其他减速比 | 1. Optional other ratio |
| 2.输出轴中心点 | 2.Output shaft center point |
| 3.连续运转时,使用寿命为10000h | 3. Service life of 10000h in continuous operation |
| 4.对温度有特殊要求请与铭机联系 | 4. For special requirements on temperature, please contact MG |

減速機性能資料 REDUCER PERFORMANCE DATA

单级/One-stage



双级/Two-stage



- | | |
|---------------------------------|---|
| (1) 请参照马达轴径尺寸 | (1) Please refer to the motor shaft diameter |
| (2) 马达轴最长长度, 如有特殊的马达轴尺寸, 请与铭机联络 | (2) Motor shaft length, for special motor shaft size, please contact MG |
| (3) 减速机输入端尺寸, 依马达的法兰面而定 | (3) Reducer input size, depending on the flange surface of the motor |
| *如无适合的尺寸, 请与铭机联系 | *If no suitable size available, please contact MG |

減速機性能資料 REDUCER PERFORMANCE DATA

单级/One-stage

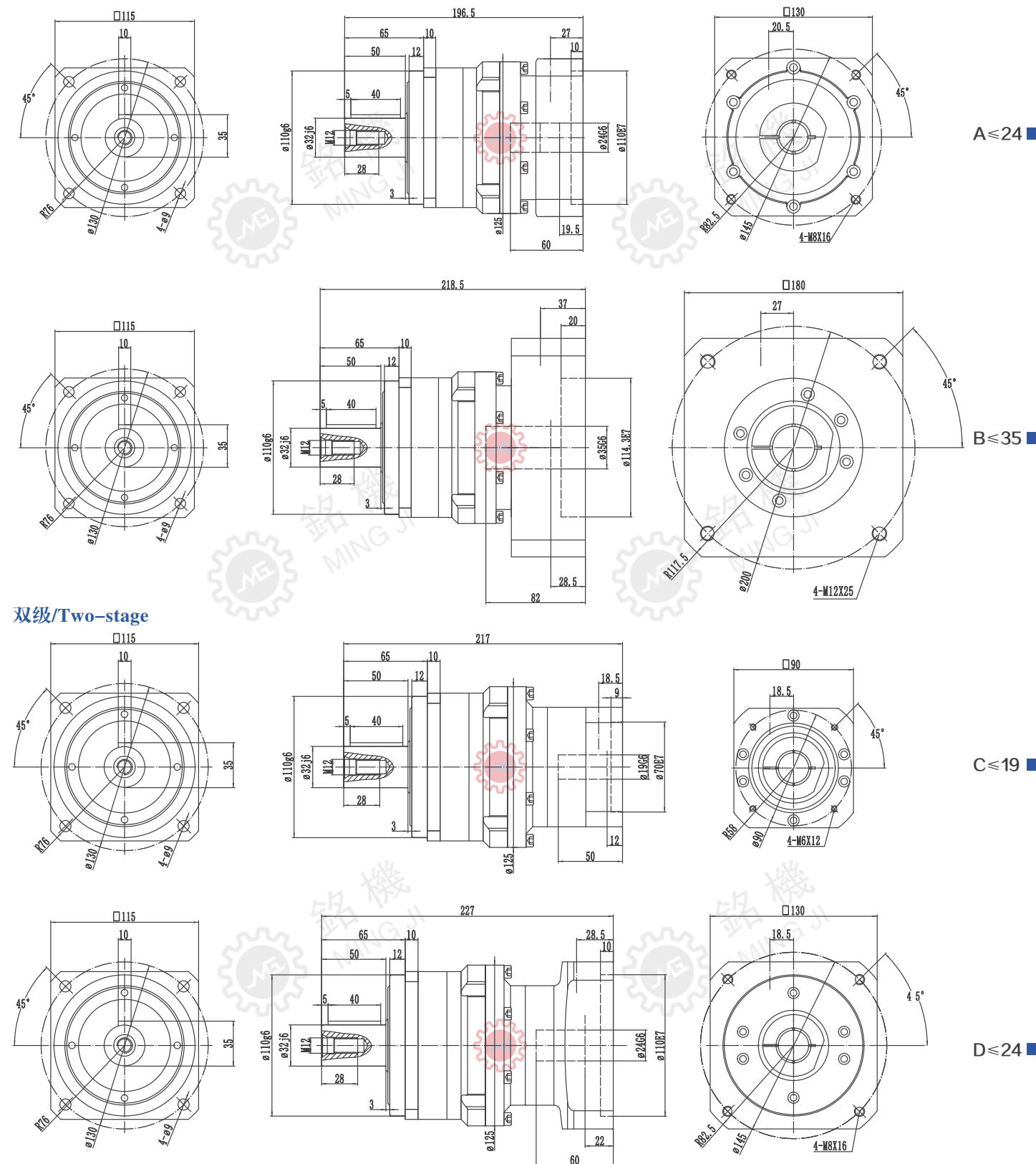


- | | |
|---------------------------------|---|
| (1) 请参照马达轴径尺寸 | (1) Please refer to the motor shaft diameter |
| (2) 马达轴最长长度, 如有特殊的马达轴尺寸, 请与铭机联络 | (2) Motor shaft length, for special motor shaft size, please contact MG |
| (3) 减速机输入端尺寸, 依马达的法兰面而定 | (3) Reducer input size, depending on the flange surface of the motor |
| *如无适合的尺寸, 请与铭机联系 | *If no suitable size available, please contact MG |

MKS115				单级/One-stage								双级/Two-stage								
速比 ⁽¹⁾ Speed ratio		i		3	4	5	6	7	8	9	10	12	16	20	25	35	40	50	70	100
额定输出力矩(n_{1N}) Rated output torque		T_{2N}	Nm	208	290	330	300	300	260	230	230	208	290	290	330	300	330	330	300	230
紧急制动力矩 (在减速机工作寿命内允许1000次) (1000 times during the working life of the reducer) Emergency braking torque		T_{2NOT}	Nm	3倍额定输出力矩/3 Times rated output torque																
额定输入转速(T_{2n} , 20℃环境温度) Rated input speed (T_{2n} , 20 °C ambient temperature)		n_{1N}	rpm	3000																
最大输入转速 Maximum input speed		n_{1max}	rpm	6000																
空载力矩($n_l=3000rpm$, 20℃环境温度) No-load torque ($n_l=3000$ RPM, 20°C ambient temperature)		T_{012}	Nm	3.6	3	2.7	2.5	2	1.8	1.6	1.5	1.8	1.6	1.6	1.5	1.2	1	0.8	0.7	0.6
回程间隙PS Backslash PS		j_t	Arcmin	≤1								≤2								
回程间隙P0 Backslash P0		j_t	Arcmin	≤2								≤3								
回程间隙P1 Backslash P1		j_t	Arcmin	≤3								≤5								
回程间隙P2 Backslash P2		j_t	Arcmin	≤5								≤7								
扭转刚度 Torsional stiffness		C_{121}	Nm/Arcmin	20																
最大轴向力 ⁽²⁾ Maximum axial force		F_{2AMax}	N	2550																
最大径向力 ⁽²⁾ Maximum radial force		F_{2RMax}	N	5025																
工作效率 Work efficiency		η	%	97								94								
工作寿命 ⁽³⁾ Service life		L_h	h	20000																
噪音 ($i=10$ 和 $n_1=3000rpm$, 空载) Noise ($i=10$ and $n_1=3000rpm$, no load)		L_{PA}	DB(A)	≤63																
重量 Weight		m	Kg	8.7								10								
安装方向 Installation direction				任意方向/Any direction																
使用温度 ⁽⁴⁾ Operating temperature		℃		-10~90																
润滑方式 Lubrication method				终生润滑/Lifetime lubrication																
防护等级 Protection level				IP65																
转动惯量 Moment of inertia 按减速机输入直径(mm) Input diameter based on the reducer(mm)	19	J_1	Kgcm ²	3.5	3	2.6	2.2	2	1.8	1.6	1.5	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.5
	24	J_1	Kgcm ²	4.8	4.6	4.5	4	3.5	3	2.7	2.5	2	1.8	1.8	1.7	1.7	1.6	1.4	1.4	1.4
	35	J_1	Kgcm ²	11.5	10.5	10	10	9.9	9.9	9.6	9.5	2.2	2.1	2.1	2	2	1.9	1.8	1.8	1.7

减速机性能资料 REDUCER PERFORMANCE DATA

单级/One-stage



(1) 请参照马达轴径尺寸
(2) 马达轴最长长度, 如有特殊的马达轴尺寸, 请与铭机联络
(3) 减速机输入端尺寸, 依马达的法兰面而定
*如无适合的尺寸, 请与铭机联系

(1)Please refer to the motor shaft diameter
(2)Motor shaft length,for special motor shaft size,please contact MG
(3)Reducer input size,depending on the flange surface of the motor
*If no suitable size available,please contact MG

MKS142				单级/One-stage								双级/Two-stage									
速比 ⁽¹⁾ Speed ratio		i		3	4	5	6	7	8	9	10	12	16	20	25	35	40	50	70	100	
额定输出力矩(n _{1N}) Rated output torque		T _{2N}	Nm	342	542	650	550	550	500	450	450	342	543	542	650	550	542	650	550	450	
紧急制动力矩 Emergency braking torque (在减速机工作寿命内允许1000次) (1000 times during the working life of the reducer)		T _{2NOT}	Nm	3倍额定输出力矩/3 Times rated output torque																	
额定输入转速(T _{2n} , 20℃环境温度) Rated input speed (T _{2n} , 20℃ ambient temperature)		n _{1N}	rpm	3000																	
最大输入转速 Maximum input speed		n _{1max}	rpm	6000																	
空载力矩 (nl=3000rpm, 20℃环境温度) No-load torque (nl=3000 RPM, 20℃ ambient temperature)		T ₀₁₂	Nm	8	6	4.7	4.5	3.5	2.5	2.5	2.5	3.5	2.8	2.6	2.2	2.0	1.9	1.8	1.6	1.5	
回程间隙PS Backlash PS		j _t	Arcmin	≤1								≤2									
回程间隙P0 Backlash P0		j _t	Arcmin	≤2								≤3									
回程间隙P1 Backlash P1		j _t	Arcmin	≤3								≤5									
回程间隙P2 Backlash P2		j _t	Arcmin	≤5								≤7									
扭转刚度 Torsional stiffness		C _{t21}	Nm/Arcmin	39																	
最大轴向力 ⁽²⁾ Maximum axial force		F _{2AMax}	N	3780																	
最大径向力 ⁽²⁾ Maximum radial force		F _{2RMax}	N	7610																	
工作效率 Work efficiency		η	%	97								94									
工作寿命 ⁽³⁾ Service life		L _h	h	20000																	
噪音 (i=10和n1=3000rpm, 空载) Noise (i=10 and nl=3000rpm, no load)		L _{PA}	DB(A)	≤65																	
重量 Weight		m	Kg	16								20									
安装方向 Installation direction					任意方向/Any direction																
使用温度 ⁽⁴⁾ Operating temperature		℃			-10~90																
润滑方式 Lubrication method					终生润滑/Lifetime lubrication																
防护等级 Protection level					IP65																
转动惯量 Moment of inertia 按减速机输入直径(mm) Input diameter based on the reducer(mm)	24	J ₁	Kgcm ²	10.5	8	8	7.2	7	6.5	5.8	5.5	2.6	2.2	2	1.7	1.7	1.6	1.4	1.4	1.4	
	35	J ₁	Kgcm ²	14.5	12	11	10	10	9.5	9.5	9	3.3	3.2	3	2.9	2.7	2.5	2.3	2.2	2	
	42	J ₁	Kgcm ²	26	25	24.5	24.1	23.5	23	22.5	22	14.5	12	11	10	10	9.5	9.5	9	9	

1.可选其他减速比

2.输出轴中心点

3.连续运转时,使用寿命为10000h

4.对温度有特殊要求请与铭机联系

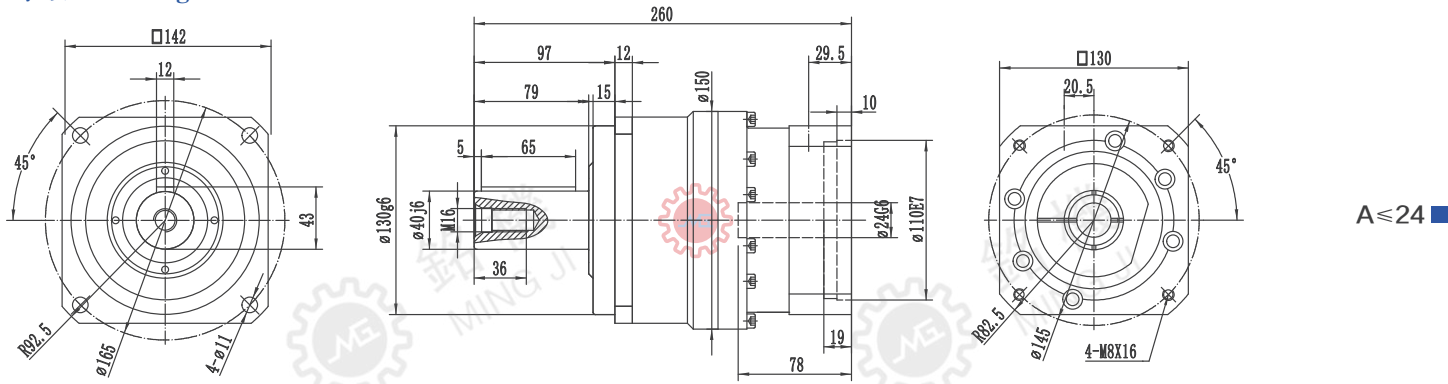
1. Optional other ratio

2.output shaft center point

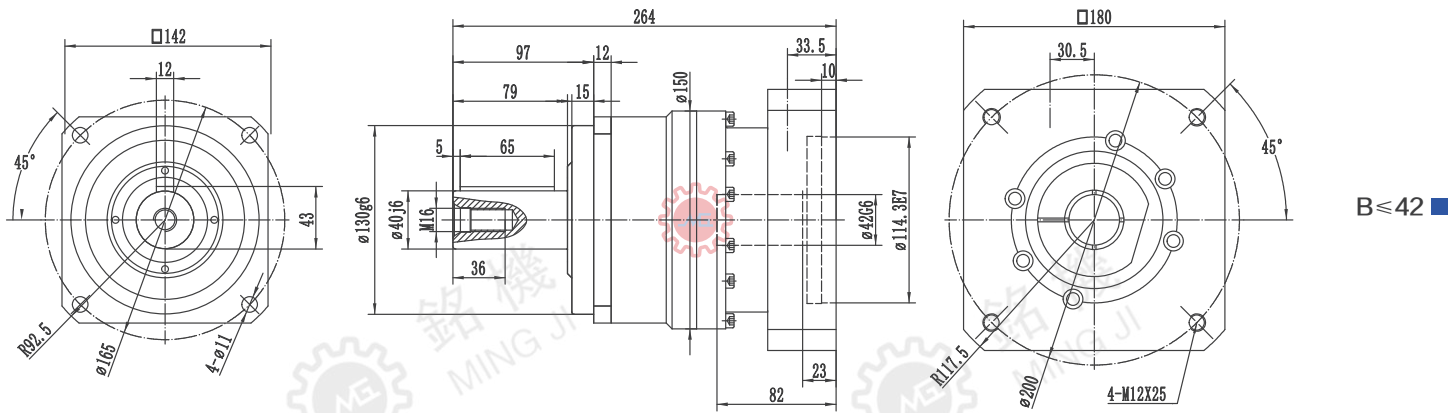
3. Service life of 10000h in continuous operation

4. For special requirements on temperature, please contact MG

单级/One-stage

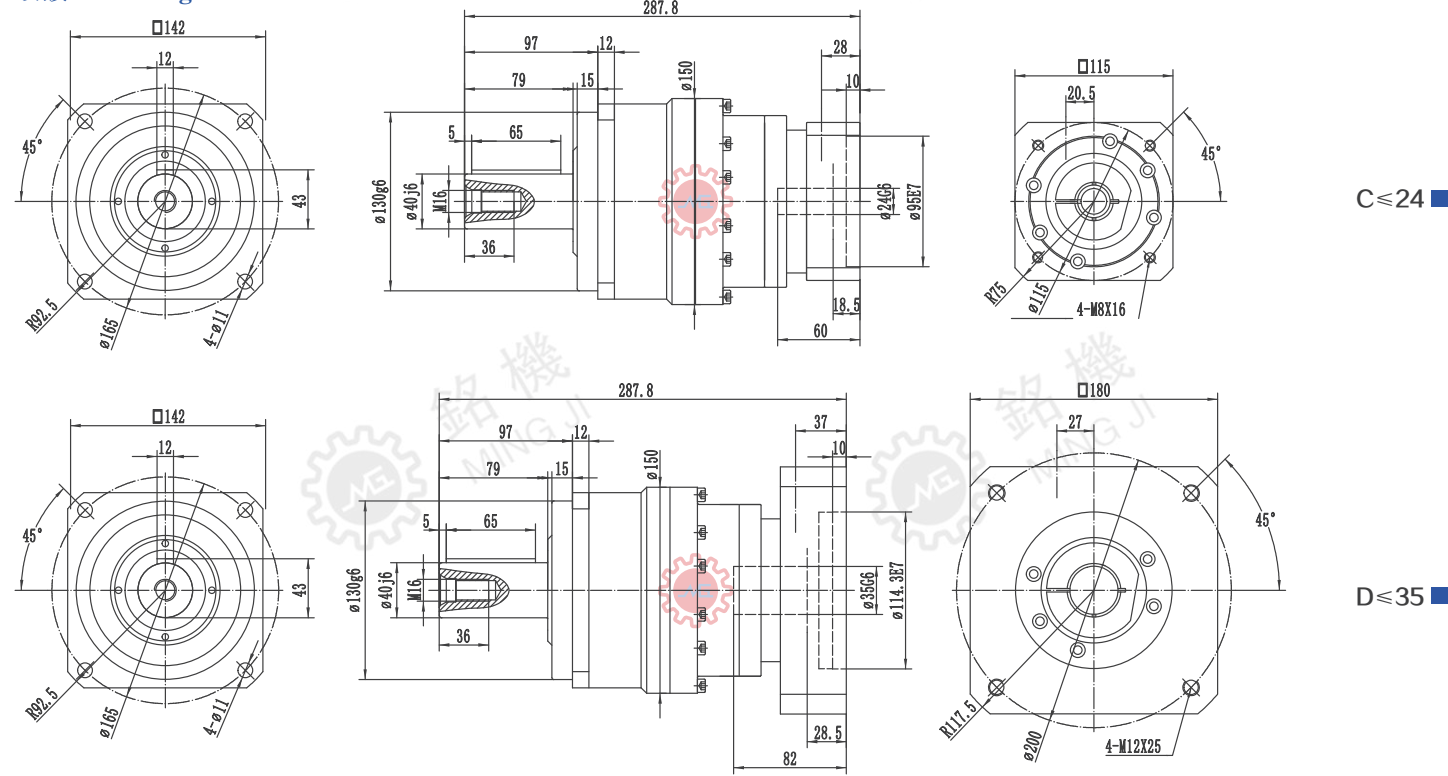


A≤24

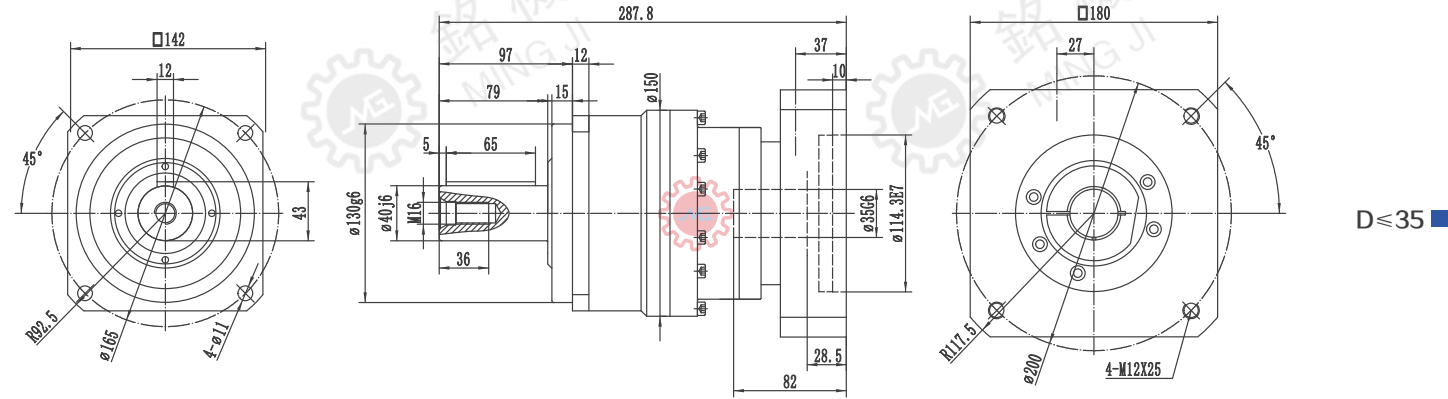


B≤42

双级/Two-stage



C≤24



D≤35

(1) 请参照马达轴径尺寸

(2) 马达轴最长长度, 如有特殊的马达轴尺寸, 请与铭机联络

(3) 减速机输入端尺寸, 依马达的法兰面而定

*如无适合的尺寸, 请与铭机联系

(1)Please refer to the motor shaft diameter

(2)Motor shaft length,for special motor shaft size,please contact MG

(3)Reducer input size,depending on the flange surface of the motor

*If no suitable size available,please contact MG

减速机性能资料 REDUCER PERFORMANCE DATA

1.可选其他减速比	1. Optional other ratio
2.输出轴中心点	2. Output shaft center point
3.连续运转时,使用寿命为10000h	3. Service life of 10000h in continuous operation
4.对温度有特殊要求请与铭机联系	4. For special requirements on temperature, please contact MG

Technical drawings of two pump models, C and D, showing front, side, and top views with dimensions.

Model C (C ≤ 24):

- Front View:** Square flange with outer dimension 180, inner dimension 16, and 4 mounting holes with diameter 13.5. Dimensions include 59, 16, 45°, R20, PCD 115, and 4-13.5.
- Side View:** Shows the pump body with dimensions 105, 15, 82, 20, 150g6, 55.16, 20, 70, 42, 29.5, 19, 200, 24G6, 110G7, 78, and 6.
- Top View:** Square flange with outer dimension 130, inner dimension 20.5, and 4 mounting holes with diameter 16. Dimensions include 45°, 130, 20.5, 45°, 16, 4-M8X16, and R2.5.

Model D (D ≤ 35):

- Front View:** Square flange with outer dimension 180, inner dimension 16, and 4 mounting holes with diameter 13.5. Dimensions include 59, 16, 45°, R20, PCD 115, and 4-13.5.
- Side View:** Shows the pump body with dimensions 105, 15, 82, 20, 160g6, 55.16, 20, 70, 42, 33.5, 10, 200, 35G6, 114.3E7, 23, 82, and 6.
- Top View:** Square flange with outer dimension 180, inner dimension 30.5, and 4 mounting holes with diameter 20. Dimensions include 45°, 180, 30.5, 45°, 20, 4-M12X25, and R17.5.

(1) Please refer to the motor shaft diameter
(2) Motor shaft length, for special motor shaft size, please contact MG
(3) Reducer input size, depending on the flange surface of the motor
*If no suitable size available, please contact MG

減速機性能資料 REDUCER PERFORMANCE DATA

单级/One-stage



$C \leq 35$



1. Optional other ratio
2. Output shaft center point
3. Service life of 10000h in continuous operation
4. For special requirements on temperature, please contact MG

- *如无适合的尺寸,请与铭机联系

- *If no suitable size available, please contact MG