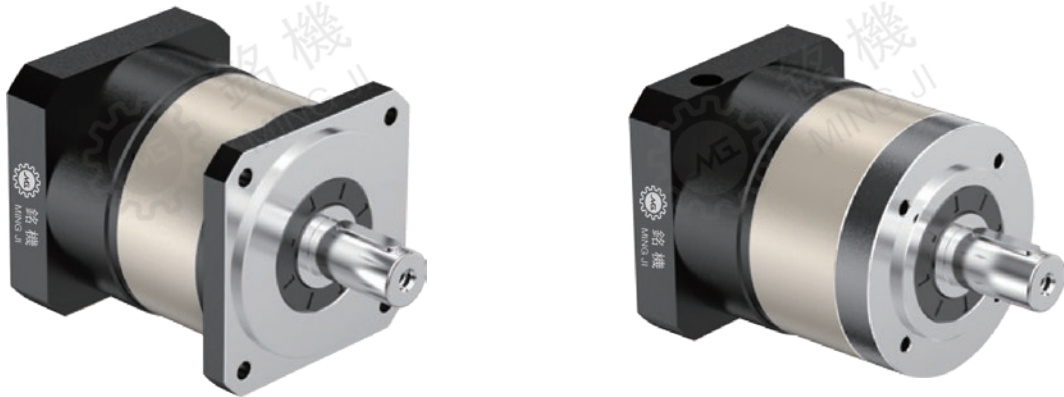


MPK/MPE直齿系列

MPK/MPE STRAIGHT TOOTH SERIES

191/192



- 低背隙

— 高效率(97%)

— 易安装

— 最大的输出扭矩

— 低噪音

— 润滑免维护
- Low backlash

• High efficiency (97%)

• Easy to install

• Maximum output torque

• low noise

• Lubrication and maintenance-free

回程间隙 Return clearance	arcmin	8~10
速比 Speed ratio	i	3~100
额定输出力矩 Rated output torque	Nm	20~250
使用温度℃ Using temperature℃	℃	-10~90
噪音 The noise	dB(A)	58~68
工作效率 The work efficiency	%	97
工作寿命 The working life	h	20000

减速机性能资料 REDUCER PERFORMANCE DATA

MPK/MPE060			单级/One-stage							双级/Two-stage									
速比 ⁽¹⁾⁽²⁾ Speed ratio	i		3	4	5	6	7	8	10	12	16	20	25	35	40	50	70	80	100
额定输出力矩 Rated output torque	T _{2N}	Nm	20	31	39	25	25	26	15	30	37	40	45	39	39	39	34	35	31
急停扭矩 Emergency stop torque	T _{2NOT} ²	Nm	3倍额定输出力矩/3 Times rated output torque																
最大加速力矩 Maximum speed up torque	T _{2B}	Nm	40	62	78	50	50	50	30	60	74	80	90	76	78	78	68	68	62
回程间隙P2 ⁽³⁾ Backlash P2	j _t	Arcmin	≤8							≤10									
扭转刚度 ⁽⁷⁾ Torsional stiffness	C _{t21}	Nm/Arcmin	37																
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 _{1B}	rpm	8000																
最大轴向力 ⁽⁴⁾ Maximum axial force	F _{2RB}	N	480																
最大径向力 ⁽⁴⁾ Maximum radial force	F _{2AB}	N	520																
工作寿命 ⁽⁶⁾ Service life	L _h	hr	20000																
使用温度 Operating temperature	℃		-20℃~+90℃																
润滑方式 Lubrication method			终身润滑																
防护等级 Protection level			IP65																
安装方向 Installation direction			任意方向																
噪音 ⁽⁵⁾⁽⁷⁾ Noise (i=10 and n1=3000rpm, no load)	L _{PA}	DB(A)	≤58							≤60									
工作效率 Work efficiency	η	%	≥97%							≥94%									
重量 Weight	m	kg	1.1							1.3									
转动惯量 Moment of inertia 按减速机输入直径(mm) Input diameter based on the reducer (mm)	J ₁	Kgcm ²	0.28	0.25	0.25	0.22	0.18	0.17	0.15	0.18	0.16	0.16	0.15	0.15	0.15	0.15	0.15	0.14	0.14

1. 减速比 (i=Nin/Nout)

2. 如有其它特殊减速比的要求, 请与MG联络

3. 背隙是在受百分之二的额定输出力矩T2N下测得

4. 输出转速100rpm时, 且作用于输出轴的中心位置

5. 在额定输入转速N1N=3000rpm且无负载的情况下测得

6. 连续运转时, 使用寿命为10000h

7. 以减速机减速比i=10与i=100转速为3000rpm为基准测得

1. Reduction ratio (i=Nin/Nout)

2. If you have other special reduction ratio requirements, please contact MG

3. Backlash is measured under 2% of rated output torque T2N

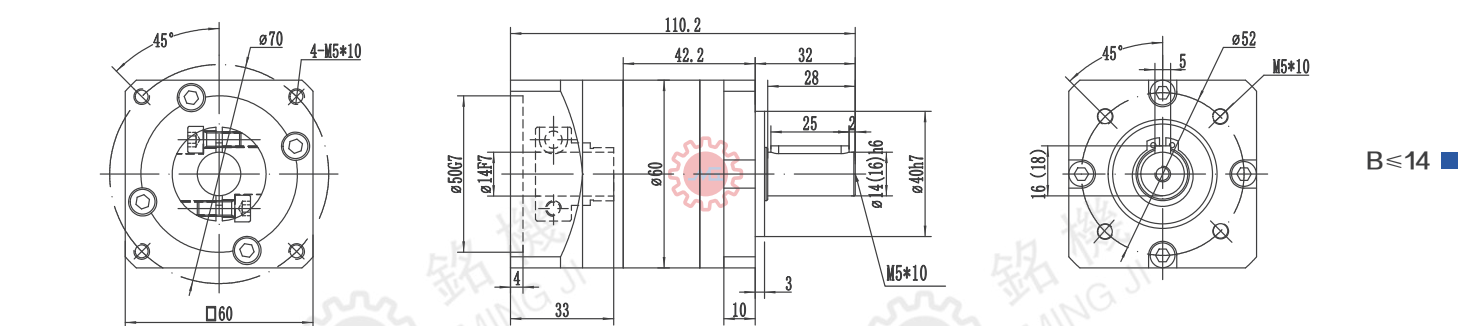
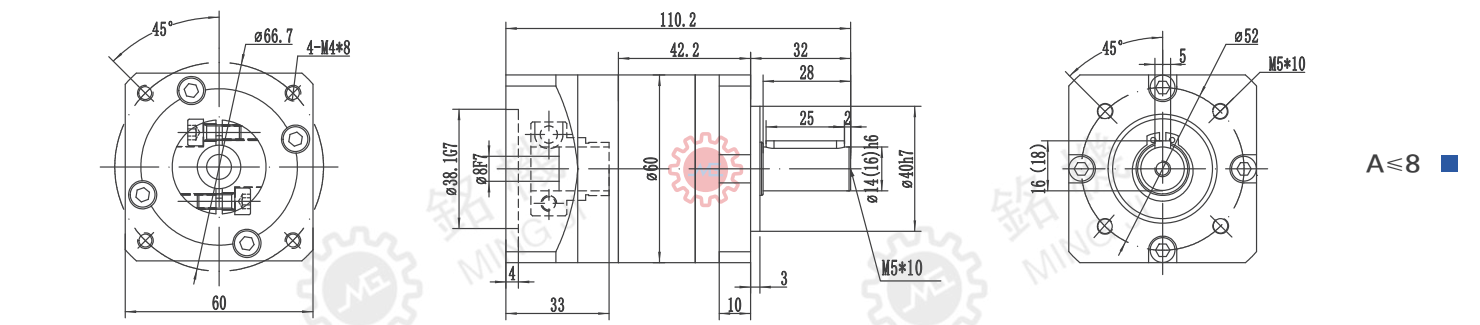
4. When the output speed is 100rpm, and it acts on the center position of the output shaft

5. Measured under the condition of rated input speed N1N=3000rpm and no load

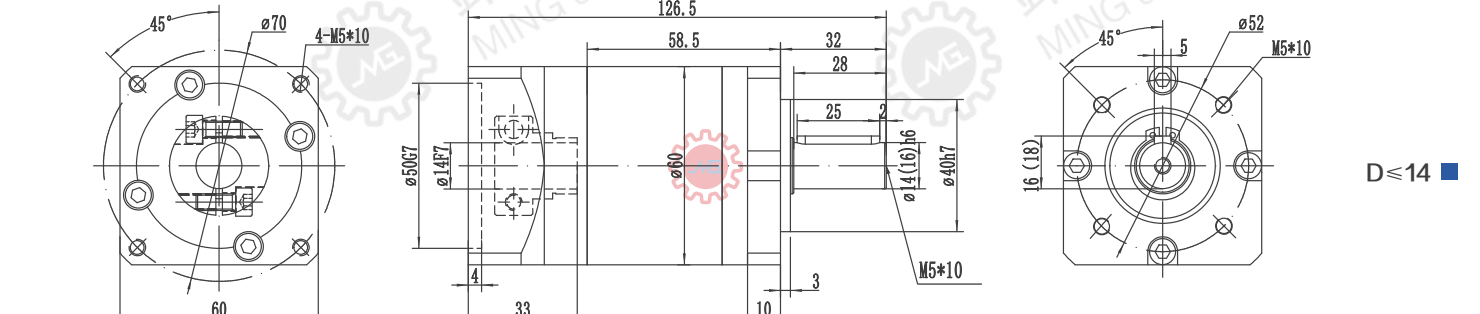
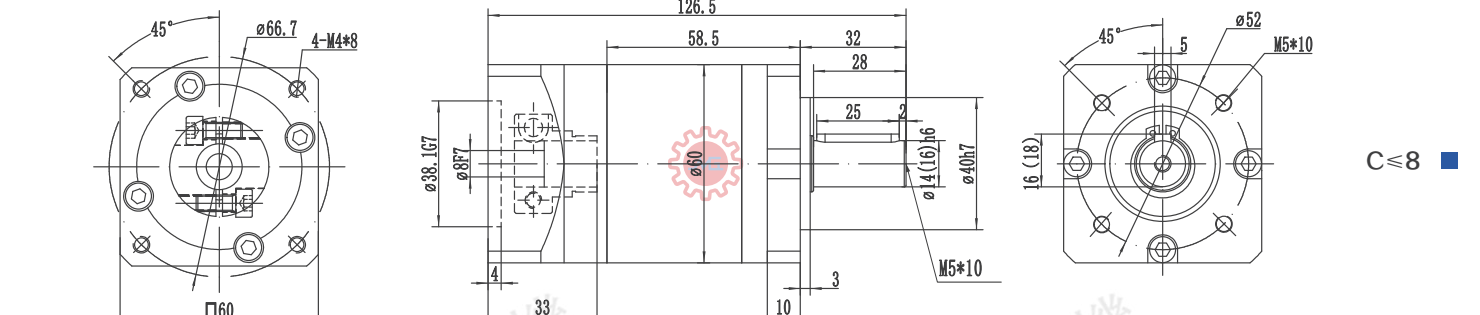
6. In continuous operation, the service life is 10000h

7. Measured based on the speed reduction ratio of the reducer i=10 and i=100 at 3000rpm

MPE减速机性能资料 MPE REDUCER PERFORMANCE DATA



双级/Two-stage



- (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

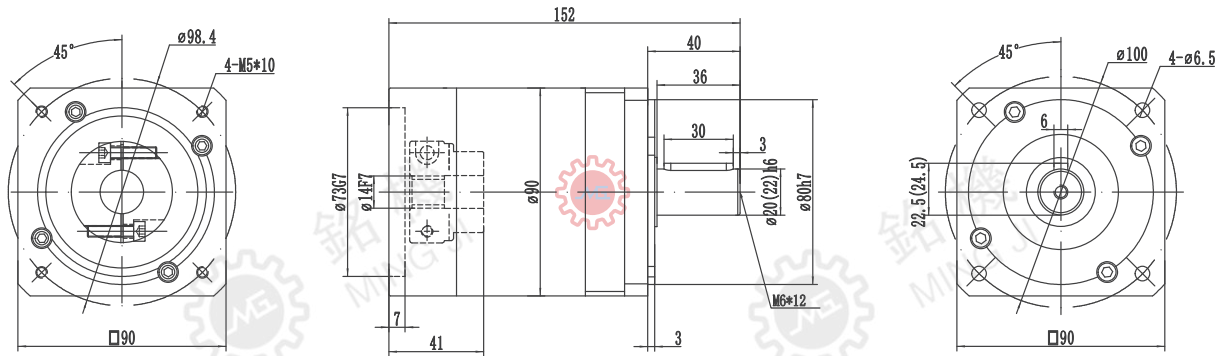
*If no suitable size available, please contact MG

MPK/MPE090			单级/One-stage							双级/Two-stage									
速比 ⁽¹⁾⁽²⁾ Speed ratio	i		3	4	5	6	7	8	10	12	16	20	25	35	40	50	70	80	100
额定输出力矩 Rated output torque	T _{2N}	Nm	75	85	100	85	80	85	50	65	106	106	108	95	90	90	70	70	60
急停扭矩 Emergency stop torque	T _{2NOT} ²	Nm	3倍额定输出力矩/3 Times rated output torque																
最大加速力矩 Maximum speed up torque	T _{2B}	Nm	150	160	200	180	160	160	100	130	130	212	212	190	180	180	140	140	120
回程间隙P2 ⁽³⁾ Backslash P2	j _t	Arcmin	≤8							≤10									
扭转刚度 ⁽⁷⁾ Torsional stiffness	C _{I21}	Nm/Arcmin	14																
额定输入转速(T2n, 20℃环境温度) Rated input speed (T2n,20 °C ambient temperature)	n _{1N}	rpm	3000																
最大输入转速 Maximum input speed	n _{1B}	rpm	6000																
最大轴向力 ⁽⁴⁾ Maximum axial force	F _{2RB}	N	1500																
最大径向力 ⁽⁴⁾ Maximum radial force	F _{2AB}	N	1550																
工作寿命 ⁽⁶⁾ Service life	L _n	hr	20000																
使用温度 Operating temperature			-10℃~-+90℃																
润滑方式 Lubrication method			终身润滑																
防护等级 Protection level			IP65																
安装方向 Installation direction			任意方向																
噪音 ⁽⁵⁾⁽⁷⁾ Noise (i=10 and n1=3000rpm, no load)	L _{PA}	DB(A)	≤63							≤65									
工作效率 Work efficiency	η	%	≥97%							≥94%									
重量 Weight	m	kg	2.7							3.4									
转动惯量 Moment of inertia 按减速机输入直径(mm) Input diameter based on the reducer(mm)	J ₁	Kgcm ²	1.3	1.3	1.2	1.1	0.9	0.8	0.7	0.7	0.7	0.7	0.65	0.65	0.6	0.6	0.6	0.5	0.5

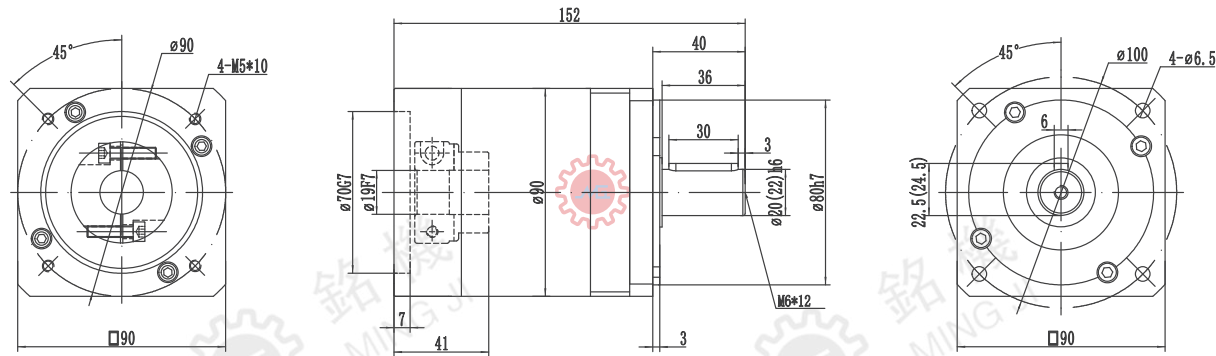
1. 减速比 (i=Nin/Nout)
2. 如有其它特殊减速比的要求, 请与MG联络
3. 背隙是在受百分之二的额定输出力矩T2N下测得
4. 输出转速100rpm时, 且作用于输出轴的中心位置
5. 在额定输入转速N1N=3000rpm且无负载的情况下测得
6. 连续运转时, 使用寿命为10000h
7. 以减速机减速比i=10与i=100转速为3000rpm为基准测得

1. Reduction ratio (i=Nin/Nout)
2. If you have other special reduction ratio requirements, please contact MG
3. Backlash is measured under 2% of rated output torque T2N
4. When the output speed is 100rpm, and it acts on the center position of the output shaft
5. Measured under the condition of rated input speed N1N=3000rpm and no load
6. In continuous operation, the service life is 10000h
7. Measured based on the speed reduction ratio of the reducer i=10 and i=100 at 3000rpm

单级/One-stage

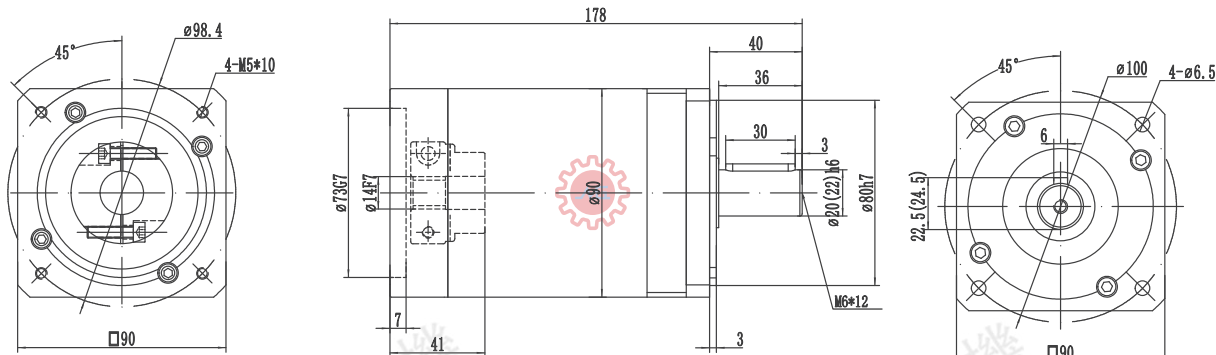


A ≤ 14

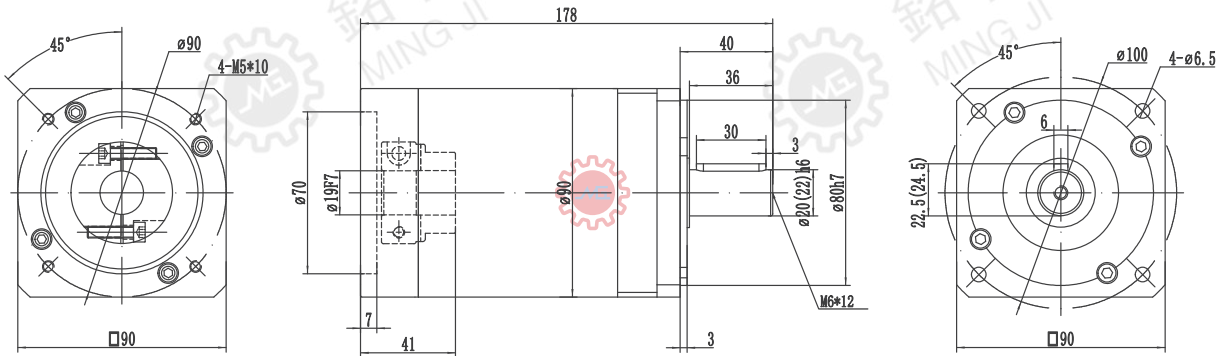


B ≤ 19

双级/Two-stage



C ≤ 14

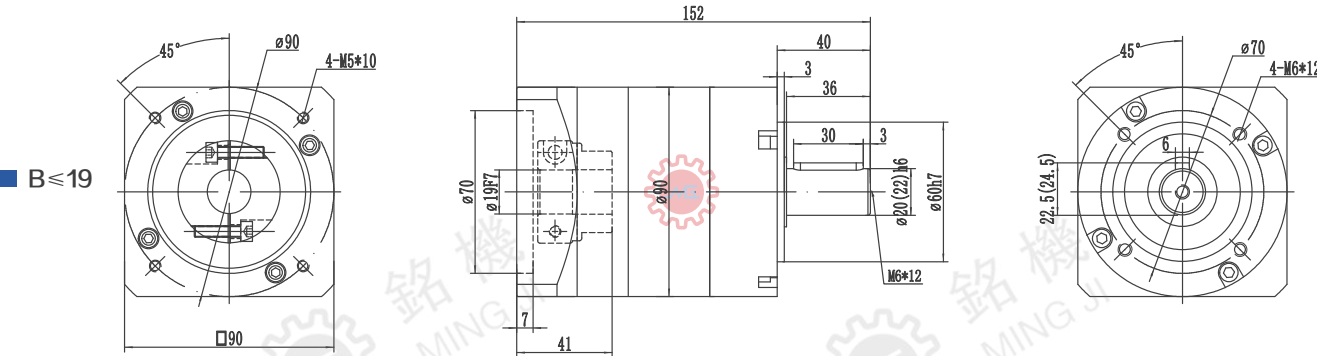
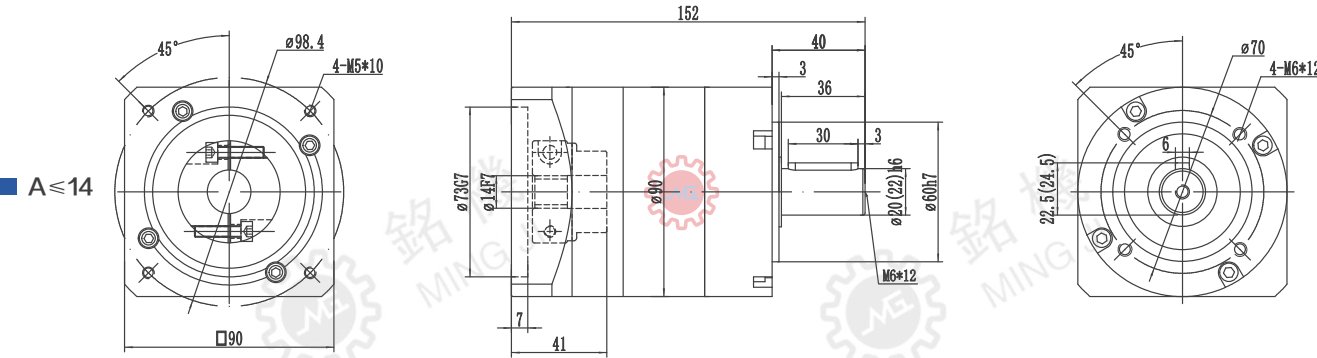


D ≤ 19

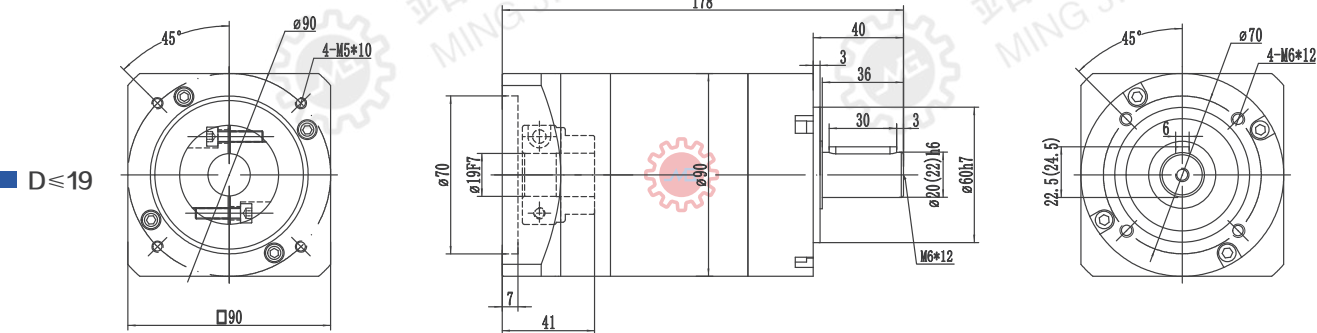
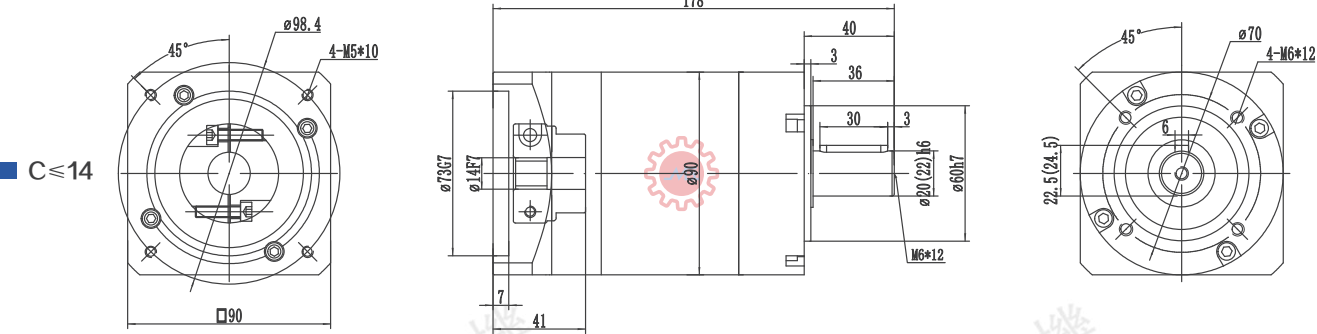
(1) 请参照马达轴径尺寸
(2) 马达轴最长长度, 如有特殊的马达轴尺寸, 请与铭机联络
(3) 减速机输入端尺寸, 依马达的法兰面而定
*如无适合的尺寸, 请与铭机联系

(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

单级/One-stage



双级/Two-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

MPK/MPE120			单级/One-stage								双级/Two-stage									
速比 ⁽¹⁾⁽²⁾ Speed ratio	i		3	4	5	6	7	8	10	12	16	20	25	35	40	50	70	80		
额定输出力矩 Rated output torque	T _{2N}	Nm	120	215	230	230	160	160	110	170	240	240	250	240	230	230	210	210		
急停扭矩 Emergency stop torque	T _{2NOT} ²	Nm	3倍额定输出力矩/3 Times rated output torque																	
最大加速力矩 Maximum speed up torque	T _{2B}	Nm	240	430	460	460	320	320	220	340	480	480	500	480	460	460	420	420		
回程间隙P2 ⁽³⁾ Backlash P2	j _t	Arcmin	≤8								≤10									
扭转刚度 ⁽⁷⁾ Torsional stiffness	C _{t21}	Nm/Arcmin	25																	
额定输入转速 (T2n, 20℃环境温度) Rated input speed (T2n, 20℃ ambient temperature)	n _{1N}	rpm	3000																	
最大输入转速 Maximum input speed	n _{1B}	rpm	6000																	
最大轴向力 ⁽⁴⁾ Maximum axial force	F _{2RB}	N	2350																	
最大径向力 ⁽⁴⁾ Maximum radial force	F _{2AB}	N	2600																	
工作寿命 ⁽⁶⁾ Service life	L _h	hr	20000																	
使用温度 Operating temperature	℃		-10℃~+90℃																	
润滑方式 Lubrication method			终身润滑																	
防护等级 Protection level			IP65																	
安装方向 Installation direction			任意方向																	
噪音 ⁽⁵⁾⁽⁷⁾ Noise(i=10 and n1=3000rpm, no load)	L _{PA}	DB(A)	≤66								≤68									
工作效率 Work efficiency	η	%	≥97%								≥94%									
重量 Weight	m	kg	6.4								8.1									
转动惯量 Moment of inertia 按减速机输入直径(mm) Input diameter based on the reducer (mm)	J ₁	Kgcm ²	4.8	4.6	4.5	4	3.5	2.7	2.5	2.2	2.1	2.1	2	2	1.9	1.8	1.8	1.7		

1. 减速机(i=Nin/Nout)
2. 如有其它特殊减速比的要求, 请与MG联络
3. 背隙是在受百分之二的额定输出力矩T2N下测得
4. 输出转速100rpm时, 且作用于输出轴的中心位置
5. 在额定输入转速N1N=3000rpm且无负载的情况下测得
6. 连续运转时, 使用寿命为10000h
7. 以减速机减速比i=10与i=100转速为3000rpm为基准测得

1. Reduction ratio (i=Nin/Nout)
2. If you have other special reduction ratio requirements, please contact MG
3. Backlash is measured under 2% of rated output torque T2N
4. When the output speed is 100rpm, and it acts on the center position of the output shaft
5. Measured under the condition of rated input speed N1N=3000rpm and no load
6. In continuous operation, the service life is 10000h
7. Measured based on the speed reduction ratio of the reducer i=10 and i=100 at 3000rpm

[illegible]

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

Model C (C ≤ 19):

- Front View:** Square base, 130 mm side. 4 mounting holes (4-M8*16) at 45° angles. Central shaft diameter is $\phi 115$.
- Side View:** Total length 244 mm. Mounting flange diameter $\phi 95/7$. Main body diameter $\phi 120$. End flange diameter $\phi 110/7$. Mounting hole diameter $\phi 25(32)/6$. Base thickness 15 mm.
- End View:** Circular base, 120 mm diameter. 8 mounting holes (8(10)) at 45° angles. Central shaft diameter is $\phi 130$.

Model D (D ≤ 24):

- Front View:** Square base, 130 mm side. 4 mounting holes (4-M8*16) at 45° angles. Central shaft diameter is $\phi 145$.
- Side View:** Total length 244 mm. Mounting flange diameter $\phi 106/7$. Main body diameter $\phi 120$. End flange diameter $\phi 110/7$. Mounting hole diameter $\phi 25(32)/6$. Base thickness 15 mm.
- End View:** Circular base, 120 mm diameter. 8 mounting holes (8(10)) at 45° angles. Central shaft diameter is $\phi 130$.

- (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

MPE减速机性能资料 MPE REDUCER PERFORMANCE DATA

Technical drawings of the 2000 series gear pump, showing front and side views for two models: A ≤ 19 and B ≤ 24.

Model A ≤ 19:

- Front View (Left):** Square flange with width 130 mm. 4-M8×16 mounting holes. 45° chamfers. Central bore diameter $\phi 130$.
- Side View (Right):** Shows the pump profile. Key dimensions include: total width 212 mm, mounting flange width 22 mm, gear housing width 86.2 mm, output shaft diameter $\phi 120$, and mounting flange thickness 4 mm. The gear housing has a width of 54.8 mm and a height of 50 mm. The output shaft has a diameter of $\phi 25$ (32) h6 and a length of 40 mm. The mounting flange has a diameter of $\phi 80$ h7 and a thickness of 5 mm. The gear housing has a diameter of $\phi 95$ h7 and a height of 19 f7. The output shaft has a diameter of $\phi 25$ (32) h6 and a length of 40 mm. The mounting flange has a diameter of $\phi 80$ h7 and a thickness of 5 mm. The gear housing has a diameter of $\phi 95$ h7 and a height of 19 f7. The output shaft has a diameter of $\phi 25$ (32) h6 and a length of 40 mm. The mounting flange has a diameter of $\phi 80$ h7 and a thickness of 5 mm.

Model B ≤ 24:

- Front View (Left):** Square flange with width 130 mm. 4-M8×16 mounting holes. 45° chamfers. Central bore diameter $\phi 145$.
- Side View (Right):** Shows the pump profile. Key dimensions include: total width 212 mm, mounting flange width 22 mm, gear housing width 86.2 mm, output shaft diameter $\phi 120$, and mounting flange thickness 4 mm. The gear housing has a width of 54.8 mm and a height of 50 mm. The output shaft has a diameter of $\phi 25$ (32) h6 and a length of 40 mm. The mounting flange has a diameter of $\phi 80$ h7 and a thickness of 5 mm. The gear housing has a diameter of $\phi 110$ f7 and a height of 24 f7. The output shaft has a diameter of $\phi 25$ (32) h6 and a length of 40 mm. The mounting flange has a diameter of $\phi 80$ h7 and a thickness of 5 mm. The gear housing has a diameter of $\phi 110$ f7 and a height of 24 f7. The output shaft has a diameter of $\phi 25$ (32) h6 and a length of 40 mm. The mounting flange has a diameter of $\phi 80$ h7 and a thickness of 5 mm.

The image displays technical drawings for two types of gear pumps, C and D, showing front, side, and top views with dimensions.

Type C (C ≤ 19):

- Front View:** Shows a square flange with a 45° chamfer, 4-M8×16 mounting holes, and a central shaft hole of $\varnothing 115$. The overall width is 130.
- Side View:** Shows the gear pump assembly with a total width of 244. Key dimensions include 22, 118.2, 54.8, 50, 40, 4, 15, 60, 20, $\varnothing 95$, $\varnothing 19$, $\varnothing 120$, $\varnothing 45$, $\varnothing 80$, and $\varnothing 10 \times 15$.
- Top View:** Shows a square flange with a 45° chamfer, 4-M10×20 mounting holes, and a central shaft hole of $\varnothing 100$. The overall width is 130.

Type D (D ≤ 24):

- Front View:** Shows a square flange with a 45° chamfer, 4-M8×16 mounting holes, and a central shaft hole of $\varnothing 145$. The overall width is 130.
- Side View:** Shows the gear pump assembly with a total width of 244. Key dimensions include 22, 118.2, 54.8, 50, 40, 4, 15, 60, 20, $\varnothing 110$, $\varnothing 24$, $\varnothing 120$, $\varnothing 45$, $\varnothing 80$, and $\varnothing 10 \times 15$.
- Top View:** Shows a square flange with a 45° chamfer, 4-M10×20 mounting holes, and a central shaft hole of $\varnothing 100$. The overall width is 130.

- (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