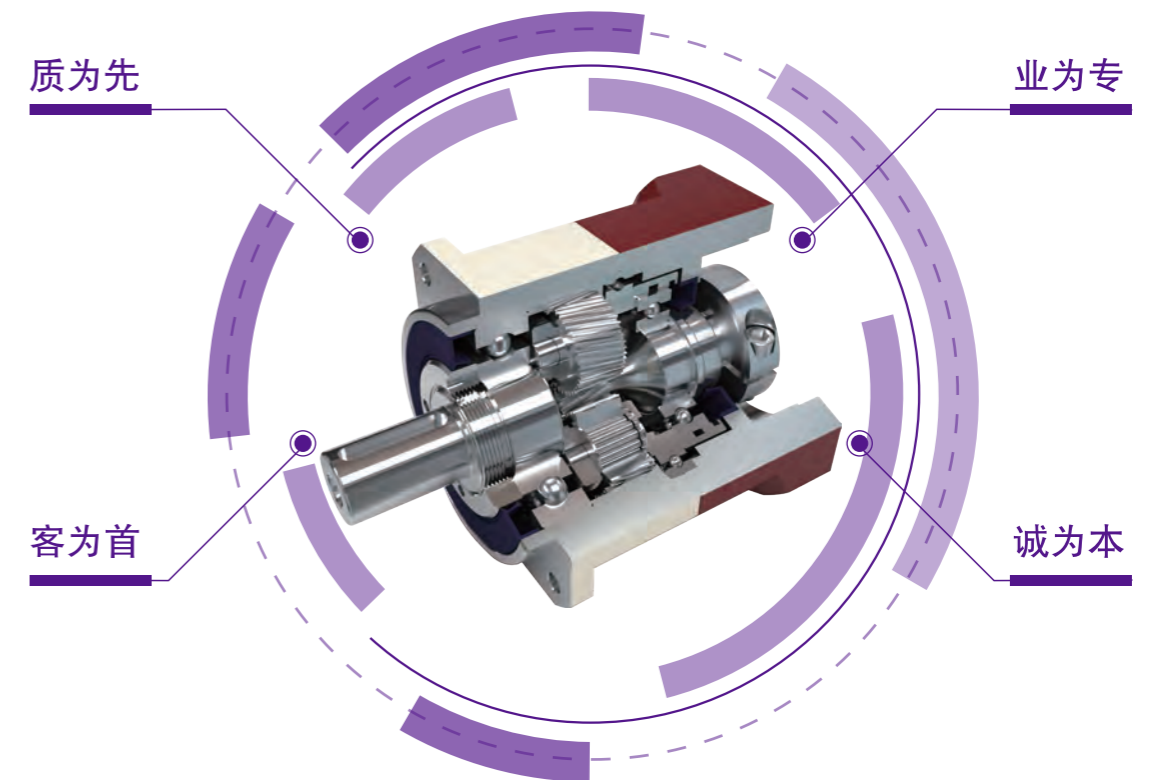


FKB系列一超高效率

FKB SERIES-SUPER HIGH EFFICIENCY



我们为客户定制高精度、高刚性、高扭矩的精密行星减速器，FKB系列在技术方面为您提供创新和先进的解决方案以达到超高效率。

We customize precise planetary reducers with high precision, high rigidity and high torque for customers. The FKB series provides you with innovative and advanced solutions in technology to maximize efficiency.

技术参数* TECHNICAL PARAMETERS

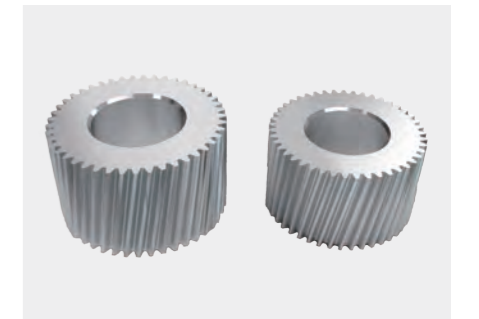
回程间隙 Return clearance	arcmin	1~7
速比 Speed ratio	i	3~100
额定输出力矩 Rated output torque	Nm	14~2000
使用温度°C Using temperature°C	°C	-10~90
噪音 The noise	dB(A)	56~70
工作效率 The work efficiency	%	97
工作寿命 The working life	h	20000



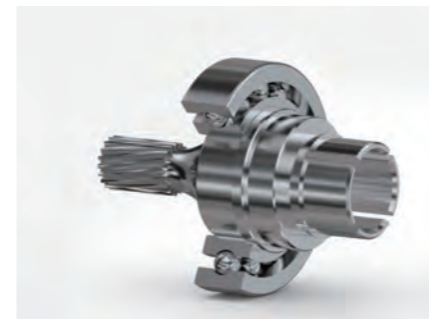
FKB系列一超高效率
FKB serice-super high efficiency



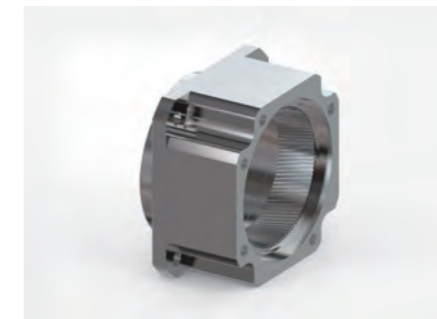
输出双支撑, 大跨距, 高稳定性
Output double support, large span, high stability



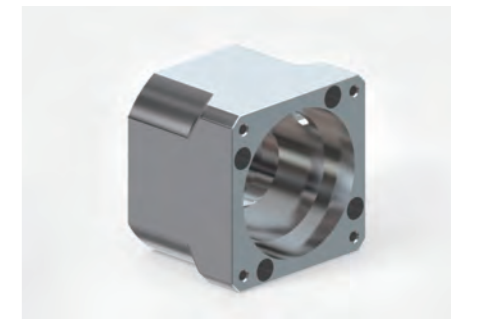
齿面宽, 参数做大, 实现高强度
The tooth surface is wide, the parameters are larger, and the high strength is achieved



斜齿设计, 高咬合率, 连转平滑, 低噪音, 低背隙
Oblique tooth design, high occlusion rate, even rotation, low noise, low back clearance



内齿环与壳体一体化设计, 精密, 耐磨
Internal gear ring and shell integrated design, precision, wear-resistant



一体化连接板设计, 与各种伺服, 马达完美配合
Integrated connection board design, perfect coordination with various servo and motors

减速机性能资料 REDUCER PERFORMANCE DATA

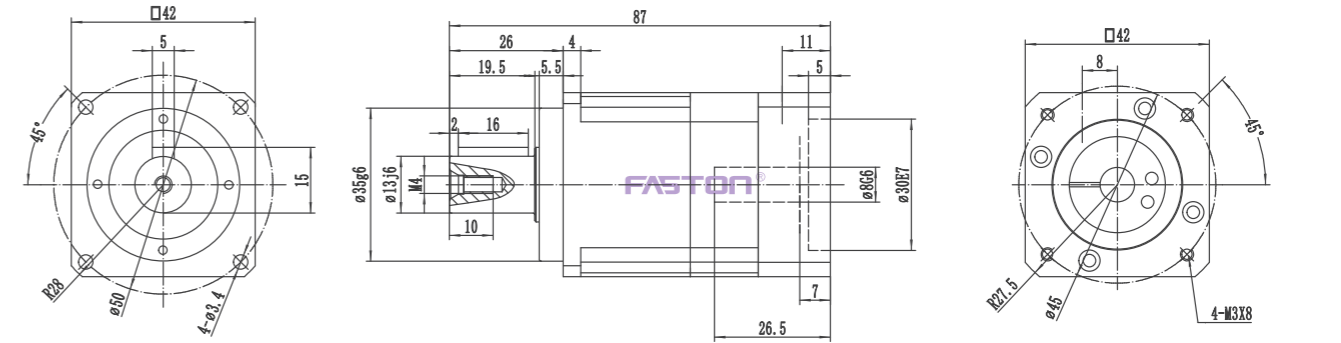
FKB042				单级/One-stage							双级/Two-stage									
速比 ⁽¹⁾ Speed ratio	i			3	4	5	6	7	8	9	10	12	16	20	25	35	40	50	70	100
额定输出力矩(n_{1N}) Rated output torque	T_{2N}	Nm		20	19	22	20	19	17	14	14	20	19	19	22	19	17	22	19	14
紧急制动力矩 (在减速机使用寿命内允许1000次) Emergency braking torque (1000 times during the working life 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°C环境温度) Rated input speed (T_{2n} , 20 °C ambient temperature)	n_{1N}	rpm	5000																	
最大输入转速 Maximum input speed	n_{1max}	rpm	10000																	
空载力矩($n_1=3000rpm$, 20°C环境温度) No-load torque ($n_1=3000 RPM$, 20°C ambient temperature)	T_{012}	Nm	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1
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_{121}	Nm/Arcmin	3																	
最大轴向力 ⁽²⁾ Maximum axial force	F_{2AMax}	N	390																	
最大径向力 ⁽²⁾ Maximum radial force	F_{2RMax}	N	780																	
工作效率 Work efficiency	η	%	97							94										
使用寿命 ⁽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)	≤56																	
重量 Weight	m	Kg	0.6							0.8										
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)	8	J_1	Kgcm ²	0.07	0.06	0.05	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	
	11	J_1	Kgcm ²	0.13	0.13	0.12	0.12	0.12	0.11	0.07	0.06	0.1	0.1	0.08	0.08	0.07	0.07	0.06	0.06	0.05
	14	J_1	Kgcm ²	0.16	0.16	0.15	0.14	0.13	0.12	0.09	0.08	0.12	0.12	0.11	0.1	0.1	0.09	0.09	0.07	0.06

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法斯頓联系

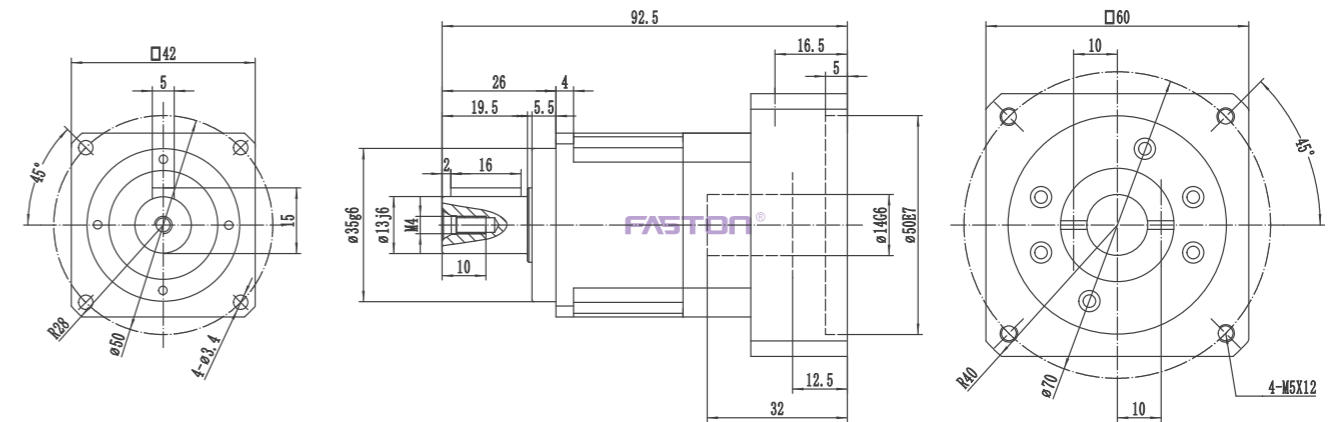
1. Optional other ratio
2. Output shaft center point
3. Service life of 10000h in continuous operation
4. For special requirements on temperature, please contact FASTON

减速机性能资料 REDUCER PERFORMANCE DATA

单级/One-stage

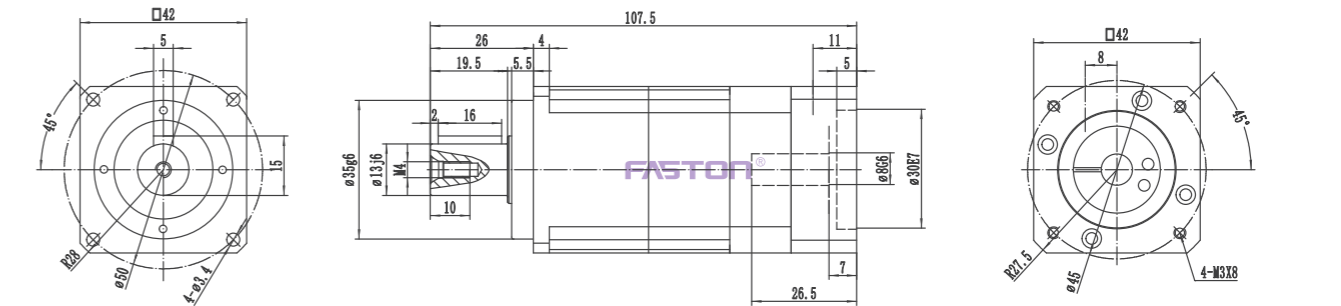


A ≤ 8

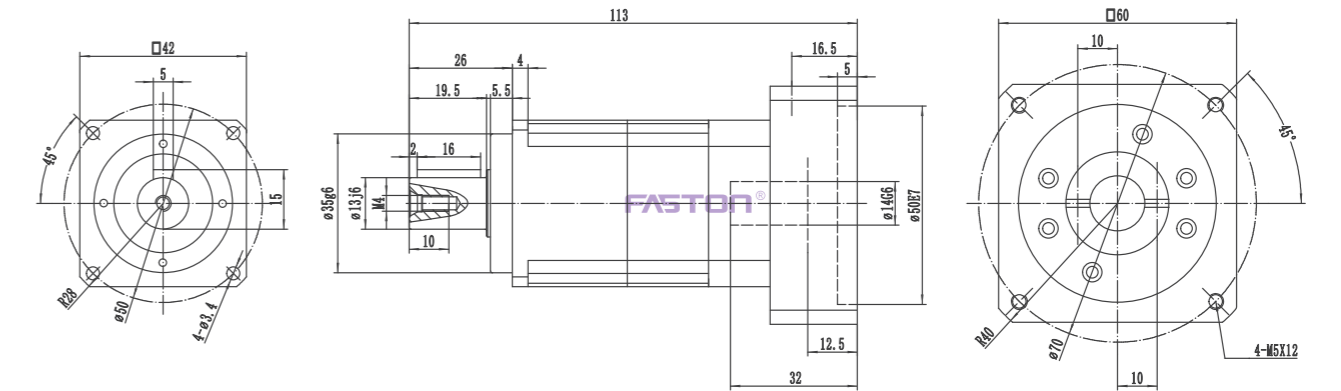


B ≤ 14

双级/Two-stage



C ≤ 8



D ≤ 14

(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, 请与法斯頓联系
(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, 请与法斯頓联系

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

减速机性能资料 REDUCER PERFORMANCE DATA

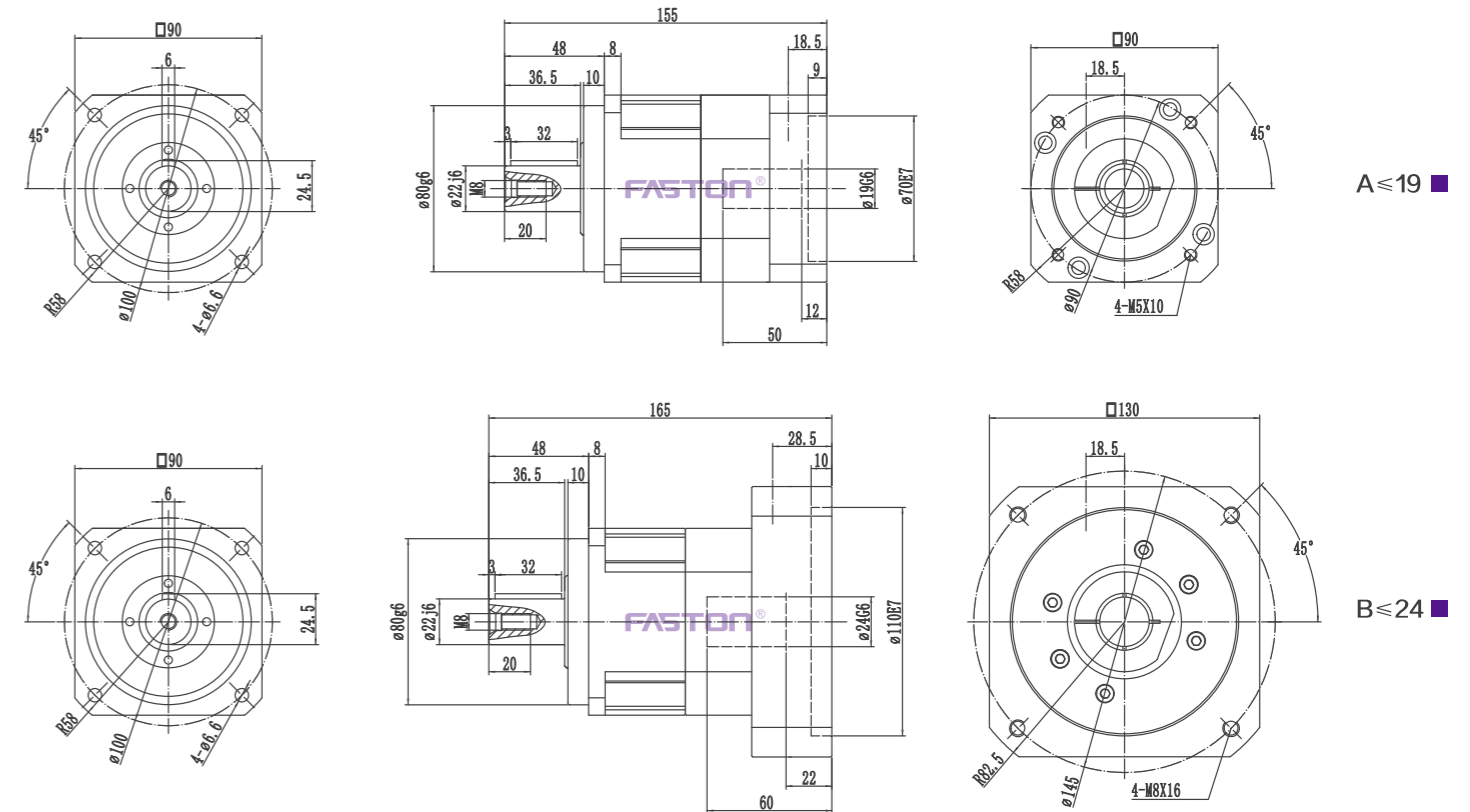
FKB090				单级/One-stage								双级/Two-stage								
速比 ⁽¹⁾ Speed ratio	i			3	4	5	6	7	8	9	10	12	16	20	25	35	40	50	70	100
额定输出力矩(n_{1N}) Rated output torque	T_{2N}	Nm		130	140	160	140	140	120	100	100	130	140	140	160	140	140	160	120	100
紧急制动力矩 (在减速机工作寿命内允许1000次) Emergency braking torque (1000 times during 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°C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°C环境温度) No-load torque ($n_l=3000 RPM$, 20°C ambient temperature)	T_{012}	Nm	1.8	1.7	1.6	1.5	1.4	1.1	0.8	0.7	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.3	0.3	
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_{121}	Nm/Arcmin	14																	
最大轴向力 ⁽²⁾ Maximum axial force	F_{2AMax}	N	1630																	
最大径向力 ⁽²⁾ Maximum radial force	F_{2RMax}	N	3250																	
工作效率 Work efficiency	η	%	97								94									
使用寿命 ⁽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)	≤ 60																	
重量 Weight	m	Kg	3.9								4.6									
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	1.3	1.3	1.2	1.1	0.9	0.8	0.7	0.6	0.25	0.23	0.21	0.2	0.18	0.18	0.18	0.16	0.16
	22	J_1	Kgcm ²	2.2	2.1	2	2	1.8	1.7	1.5	1.5	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.5	0.5
	24	J_1	Kgcm ²	2.5	2.4	2.3	2.3	2.2	2.2	2.1	2.1	0.8	0.8	0.7	0.7	0.7	0.7	0.65	0.6	0.6

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法斯頓联系

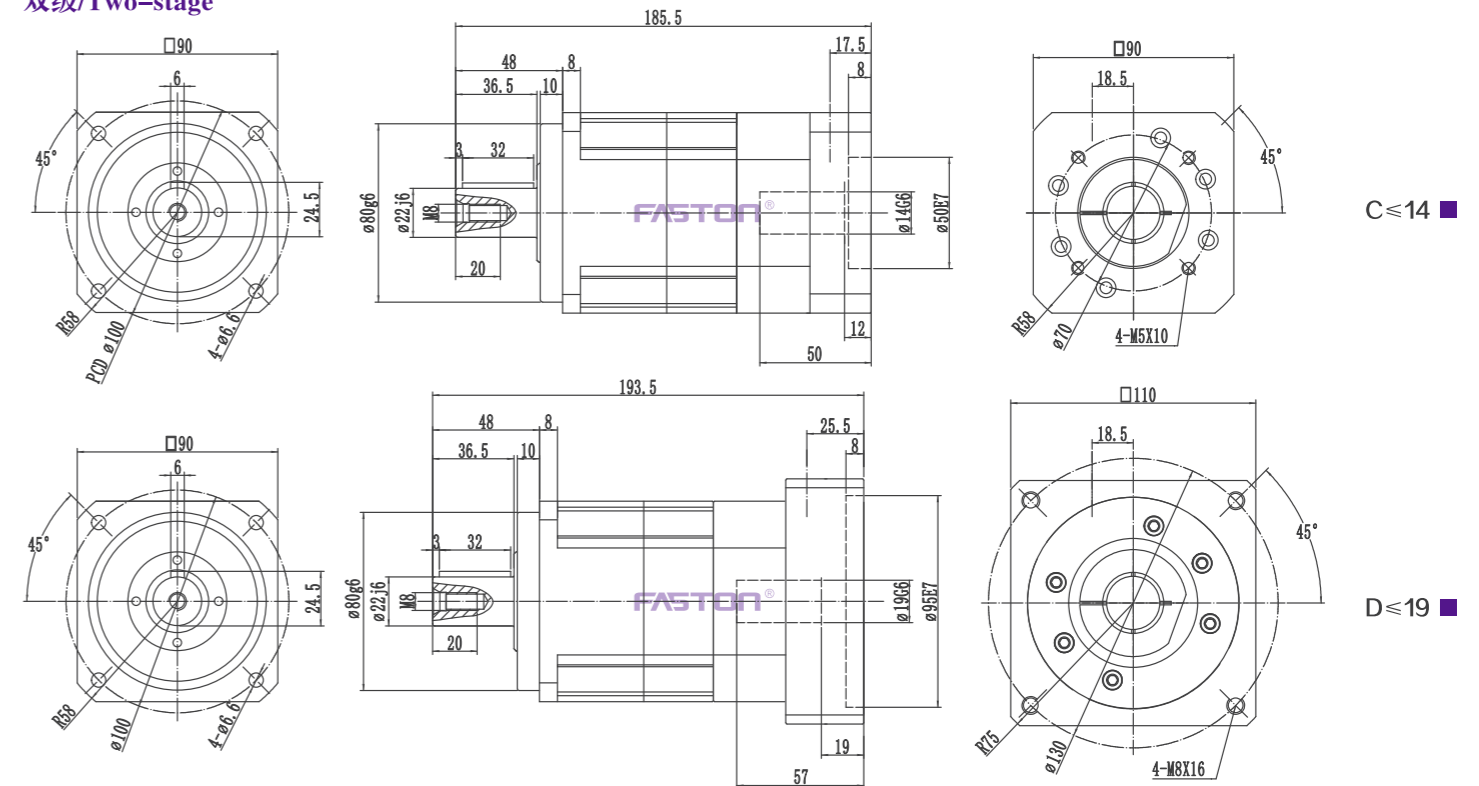
1. Optional other ratio
2. Output shaft center point
3. Service life of 10000h in continuous operation
4. For special requirements on temperature, please contact FASTON

减速机性能资料 REDUCER PERFORMANCE DATA

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, 请与法斯頓联系
(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, 请与法斯頓联系

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

减速机性能资料 REDUCER PERFORMANCE DATA

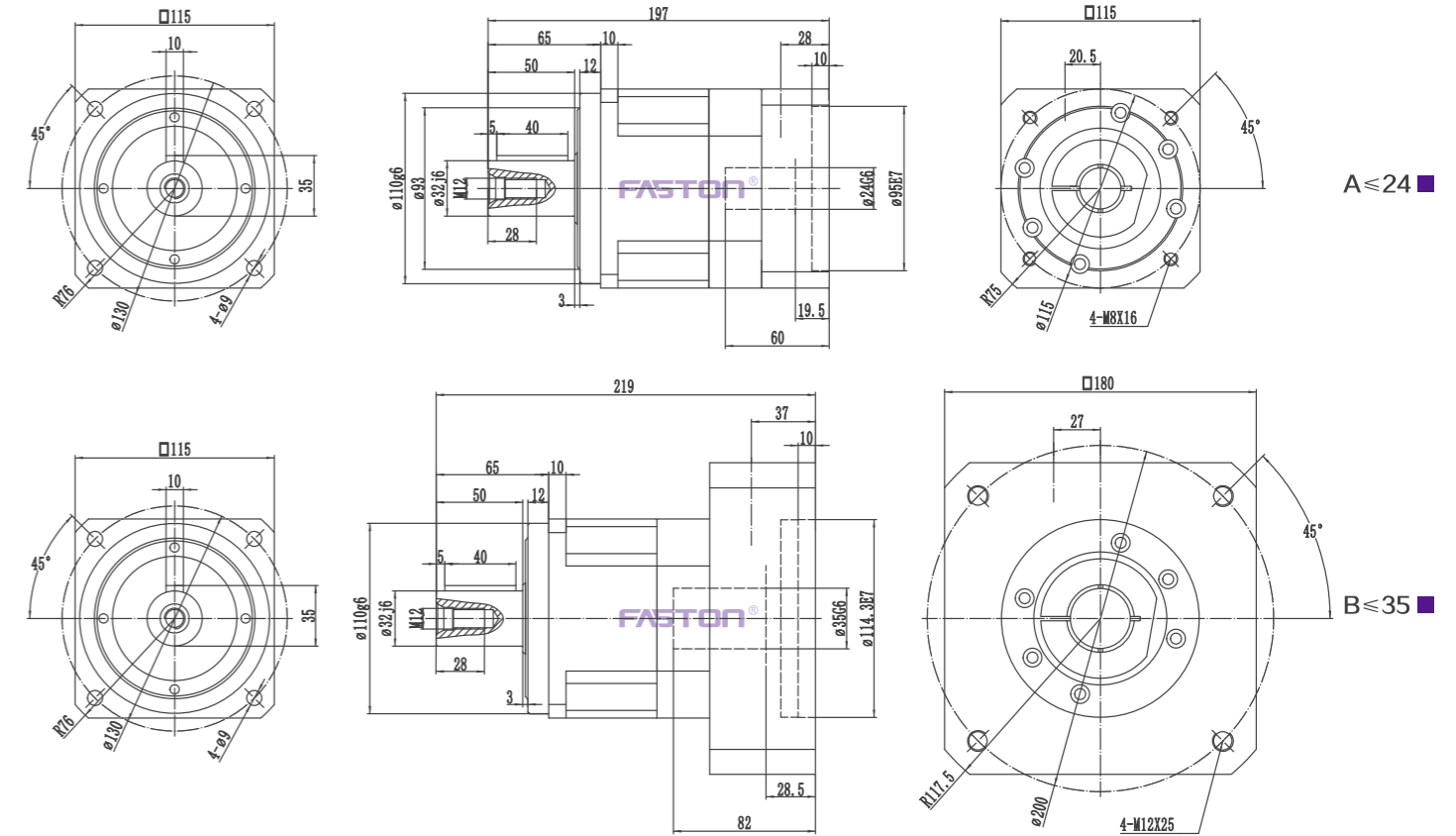
FKB115				单级/One-stage								双级/Two-stage								
速比 ⁽¹⁾ Speed ratio	i			3	4	5	6	7	8	9	10	12	16	20	25	35	40	50	70	100
额定输出力矩(n_{1N}) Rated output torque	T_{2N}	Nm		208	290	330	300	300	260	230	230	208	290	290	330	300	330	330	300	230
紧急制动力矩 (在减速机使用寿命内允许1000次) Emergency braking torque (1000 times during 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°C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($n_1=3000$ rpm, 20°C环境温度) No-load torque ($n_1=3000$ RPM, 20°C ambient temperature)	T_{012}	Nm	3.6	3	2.7	2.5	2	1.8	1.6	1.5	1.5	1.8	1.6	1.6	1.5	1.2	1	0.8	0.7	0.6
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_{121}	Nm/Arcmin	25																	
最大轴向力 ⁽²⁾ Maximum axial force	F_{2AMax}	N	3350																	
最大径向力 ⁽²⁾ Maximum radial force	F_{2RMax}	N	6700																	
工作效率 Work efficiency	η	%	97								94									
使用寿命 ⁽³⁾ Service life	L_h	h	20000																	
噪音($i=10$ 和 $n_1=3000$ rpm, 空载) Noise($i=10$ and $n_1=3000$ rpm, 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	0.5	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	1.6	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	1.7	

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法斯頓联系

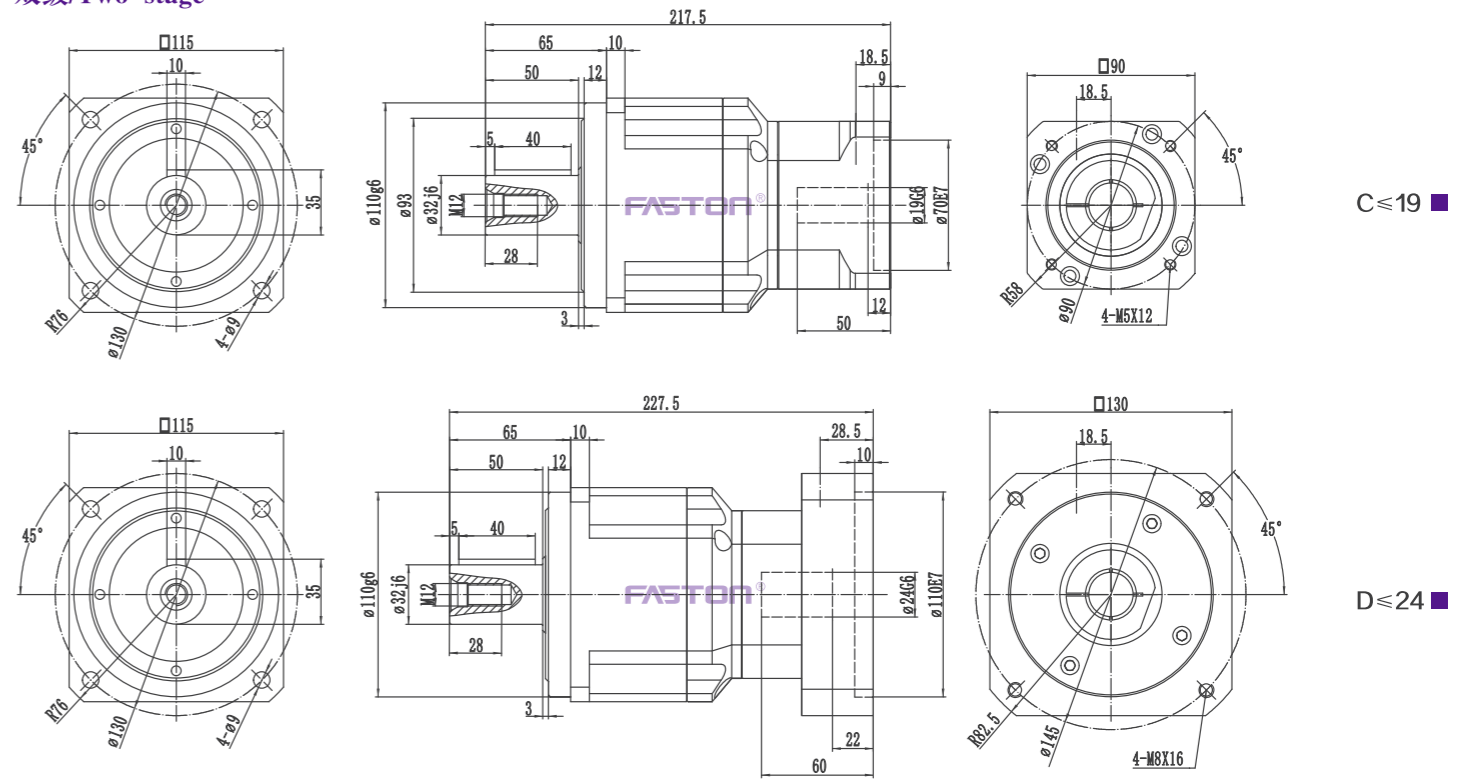
1. Optional other ratio
2. Output shaft center point
3. Service life of 10000h in continuous operation
4. For special requirements on temperature, please contact FASTON

减速机性能资料 REDUCER PERFORMANCE DATA

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, 请与法斯頓联系
(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, 请与法斯頓联系

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

A ≤ 24

B ≤ 35

C ≤ 19

D ≤ 24

减速机性能资料 REDUCER PERFORMANCE DATA

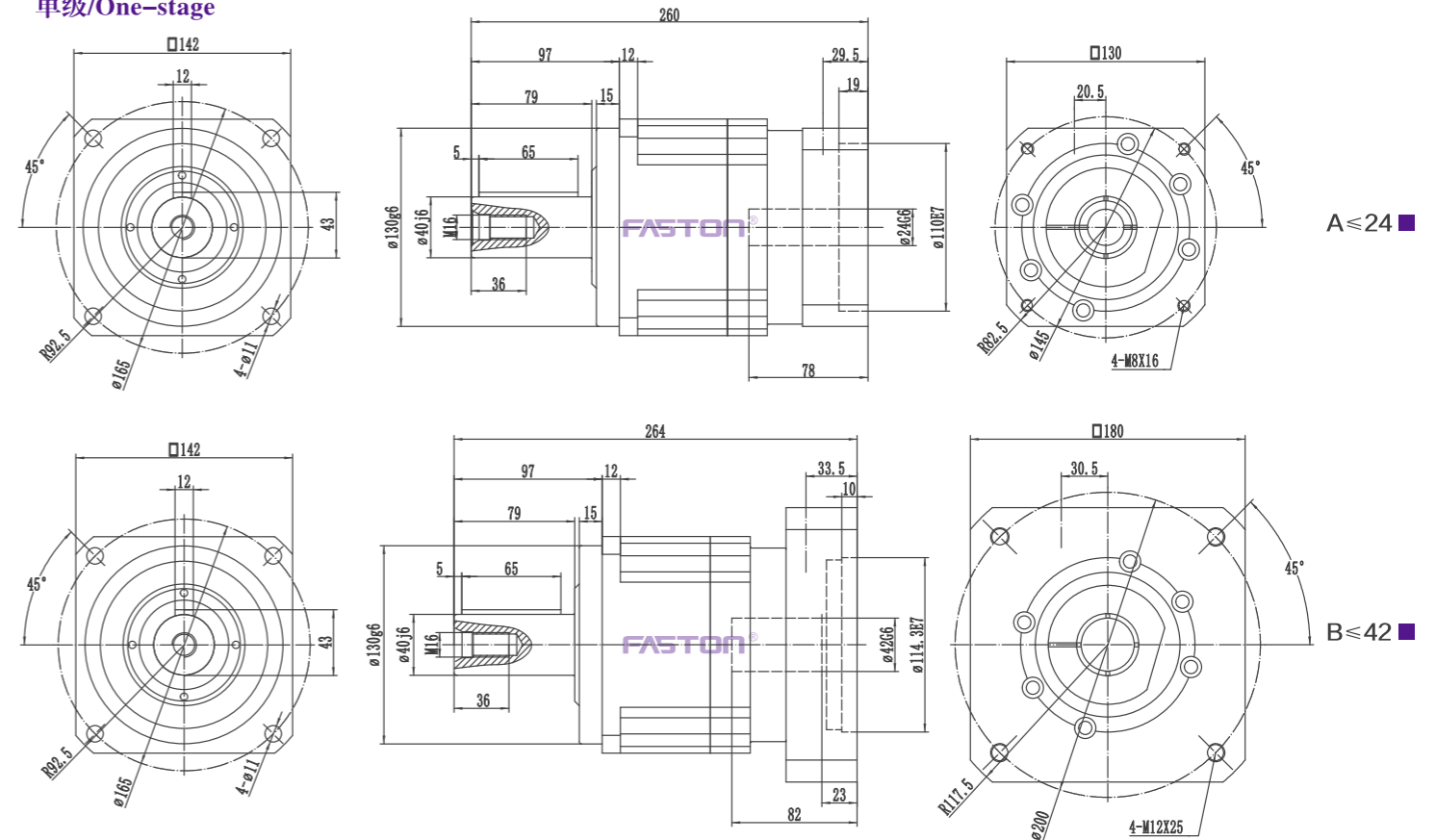
FKB142				单级/One-stage								双级/Two-stage								
速比 ⁽¹⁾ Speed ratio	i			3	4	5	6	7	8	9	10	12	16	20	25	35	40	50	70	100
额定输出力矩(n _{1N}) Rated output torque	T _{2N}	Nm		342	542	650	550	550	500	450	450	342	543	542	650	550	542	650	550	450
紧急制动力矩 (在减速机使用寿命内允许1000次) Emergency braking torque (1000 times during 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°C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(nl=3000rpm, 20°C环境温度) No-load torque (nl=3000 RPM, 20°C 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	50																	
最大轴向力 ⁽²⁾ Maximum axial force	F _{2AMax}	N	4700																	
最大径向力 ⁽²⁾ Maximum radial force	F _{2RMax}	N	9400																	
工作效率 Work efficiency	η	%	97								94									
使用寿命 ⁽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)	≤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	140	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法斯頓联系

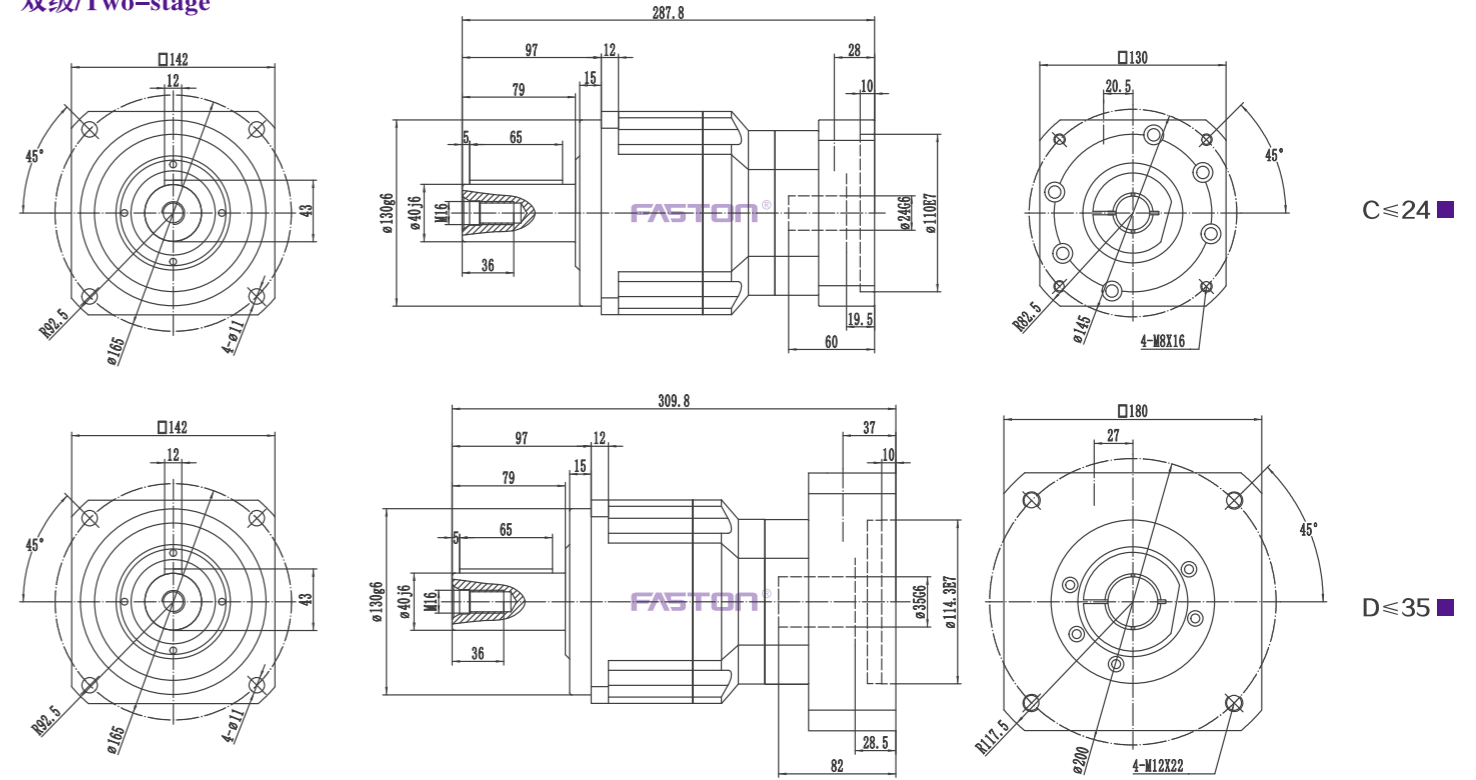
1. Optional other ratio
2. Output shaft center point
3. Service life of 10000h in continuous operation
4. For special requirements on temperature, please contact FASTON

减速机性能资料 REDUCER PERFORMANCE DATA

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, 请与法斯頓联系
(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, 请与法斯頓联系

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

减速机性能资料 REDUCER PERFORMANCE DATA

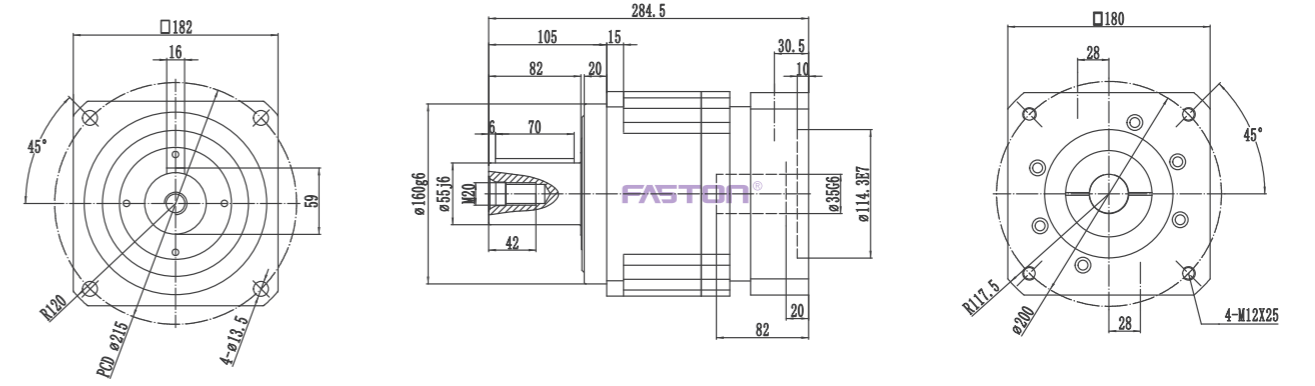
FKB180				单级/One-stage								双级/Two-stage								
速比 ⁽¹⁾ Speed ratio	i			3	4	5	6	7	8	9	10	12	16	20	25	35	40	50	70	100
额定输出力矩(n _{1N}) Rated output torque	T _{2N}	Nm		750	1050	1200	1100	1100	1000	900	900	750	1050	1050	1200	1100	1020	1200	1100	900
紧急制动力矩 (在减速机使用寿命内允许1000次) Emergency braking torque (1000 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°C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(nl=3000rpm, 20°C环境温度) No-load torque (nl=3000 RPM, 20°C ambient temperature)	T ₀₁₂	Nm	15	13	12	11	9	7.5	6.5	5.5	14	11	11	9	9	8	7	6.8	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	145																	
最大轴向力 ⁽²⁾ Maximum axial force	F _{2AMax}	N	7250																	
最大径向力 ⁽²⁾ Maximum radial force	F _{2RMax}	N	14500																	
工作效率 Work efficiency	η	%	97								94									
使用寿命 ⁽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)	≤ 67																	
重量 Weight	m	Kg	31								39									
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)	35	J ₁	Kgcm ²	49	35	30	25	23	22	20	19	9.5	9	8.8	8.2	7.9	7.5	6.8	6.2	5.5
	42	J ₁	Kgcm ²	52	41	37	36	55	32	32	28	12	11.4	10.9	10.2	9.8	9.7	9.3	9.0	8.5
	55	J ₁	Kgcm ²	66	50	44	42	40	38	38	36	13	12.1	11	10.5	10.2	10	9.9	9.8	9.5

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法斯頓联系

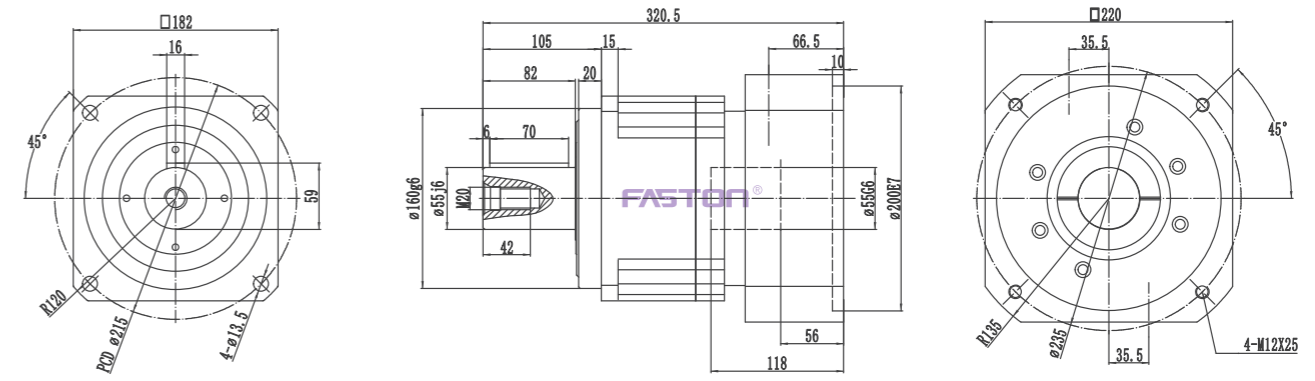
1. Optional other ratio
2. Output shaft center point
3. Service life of 10000h in continuous operation
4. For special requirements on temperature, please contact FASTON

减速机性能资料 REDUCER PERFORMANCE DATA

单级/One-stage

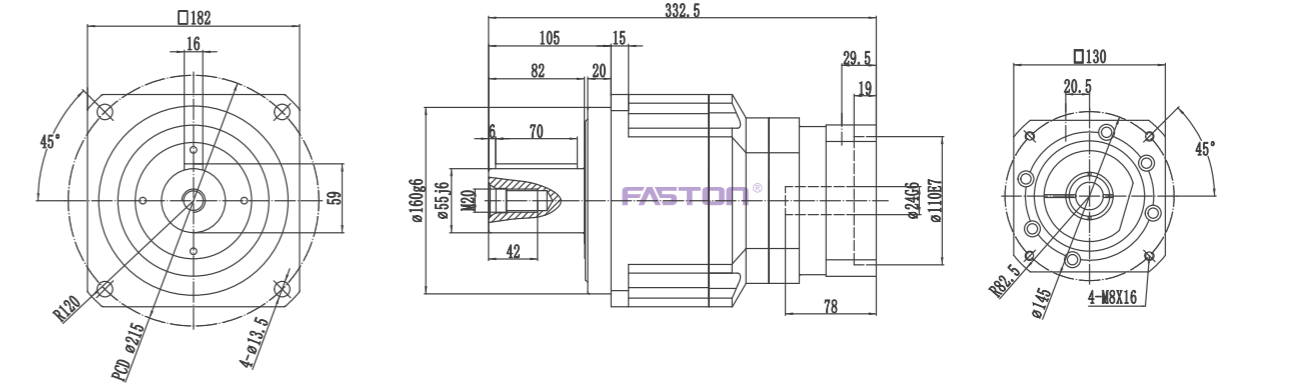


A ≤ 35 ■

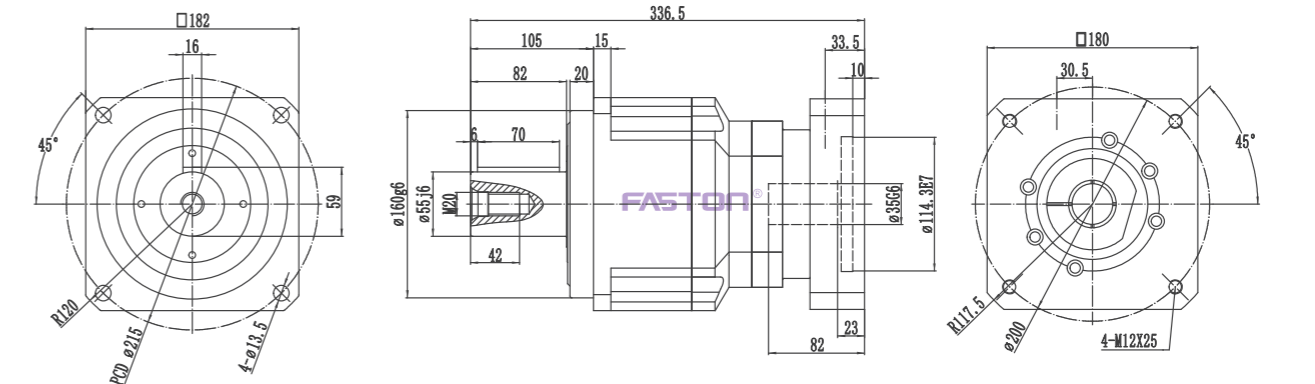


B ≤ 55 ■

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, 请与法斯頓联络
(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, 请与法斯頓联系

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

减速机性能资料 REDUCER PERFORMANCE DATA

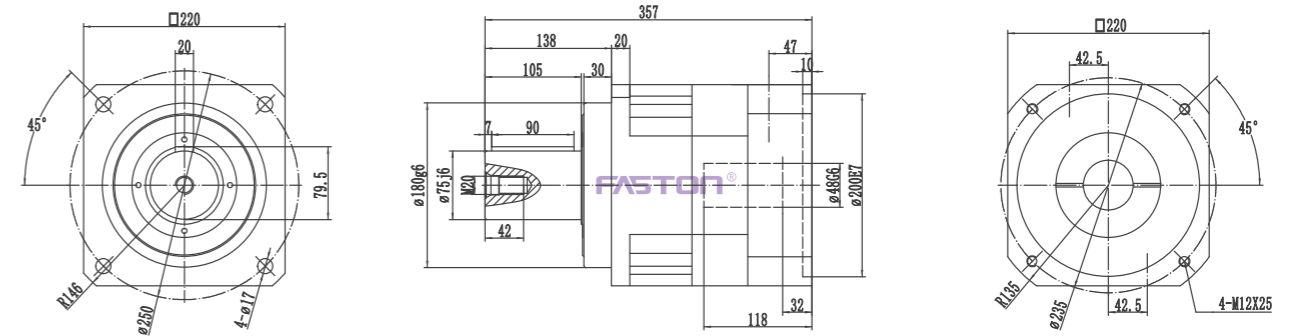
FKB220				单级/One-stage							双级/Two-stage									
速比 ⁽¹⁾ Speed ratio	i			3	4	5	6	7	8	9	10	12	16	20	25	35	40	50	70	100
额定输出力矩(n _{1N}) Rated output torque	T _{2N}	Nm		1140	1700	2000	1800	1800	1600	1500	1500	1140	1700	1700	2000	1800	1700	2000	1800	1500
紧急制动力矩 (在减速机使用寿命内允许1000次) Emergency braking torque (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°C环境温度) Rated input speed (T2n, 20°C ambient temperature)	n _{1N}	rpm	2000																	
最大输入转速 Maximum input speed	n _{1max}	rpm	4000																	
空载力矩(nl=3000rpm, 20°C环境温度) No-load torque (nl=3000 RPM, 20°C ambient temperature)	T ₀₁₂	Nm	33	22	17	8	6	5	4.5	3.5	14	11	11	9	9	8	7	6.8	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	225																	
最大轴向力 ⁽²⁾ Maximum axial force	F _{2AMax}	N	14000																	
最大径向力 ⁽²⁾ Maximum radial force	F _{2RMax}	N	30000																	
工作效率 Work efficiency	η	%	97							94										
使用寿命 ⁽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)	≤ 70																	
重量 Weight	m	Kg	48							62										
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)	42	J ₁	Kgcm ²	80	70	68	65	55	52	45	40	18	16	15.5	14	14	13	12	10.8	9.5
	55	J ₁	Kgcm ²	130	95	77	75	68	65	60	55	30	28	27	26.5	25.5	24	23	21	19.5

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法斯頓联系

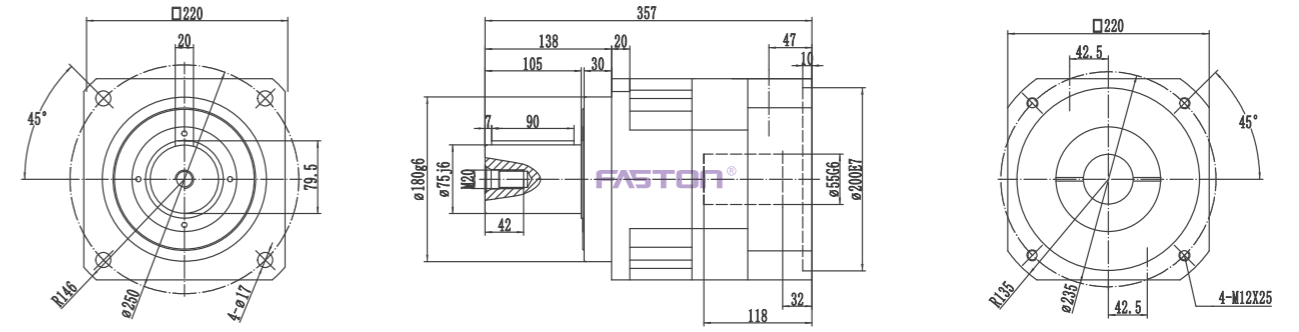
1. Optional other ratio
2. Output shaft center point
3. Service life of 10000h in continuous operation
4. For special requirements on temperature, please contact FASTON

减速机性能资料 REDUCER PERFORMANCE DATA

单级/One-stage

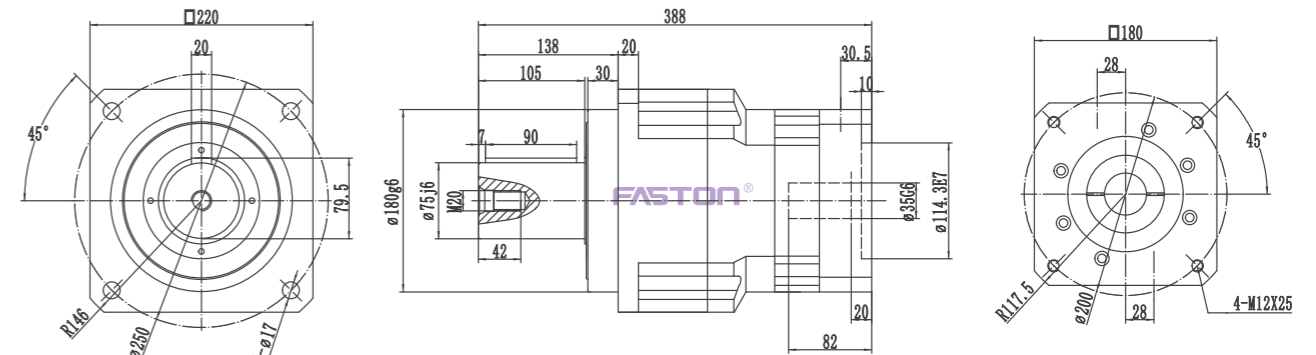


A ≤ 48

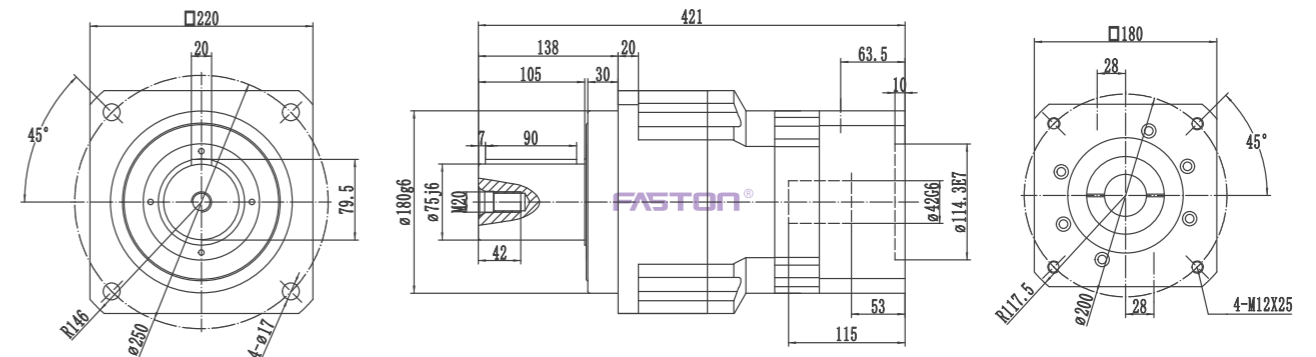


B ≤ 55

双级/Two-stage



C ≤ 35



D ≤ 42

(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, 请与法斯頓联系
(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, 请与法斯頓联系

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

减速机性能资料 REDUCER PERFORMANCE DATA

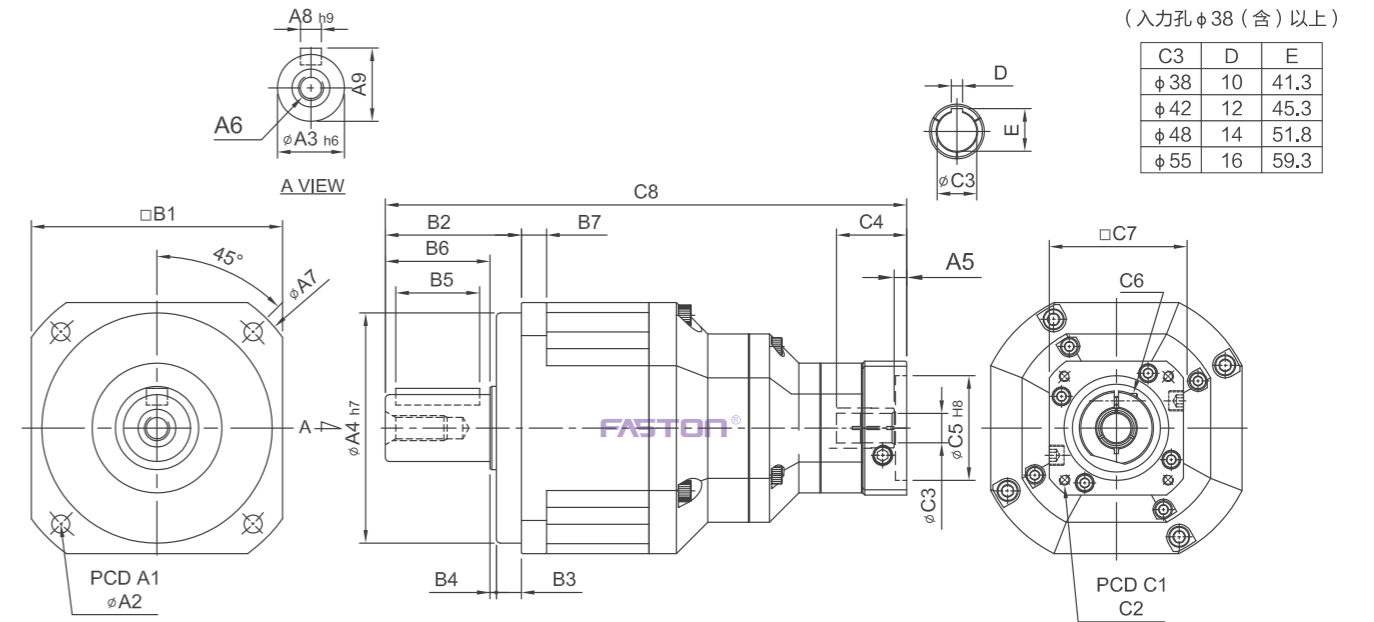
规格 Model No.	代号 Code	单位 Unit	速比 Ratio	FKB090	FKB115	FKB142	FKB180	FKB220
额定输出力矩 Rated output torque (Nominal output torque)	T _{2N}	Nm	125	160	333	618	1,189	2,010
			150	165	335	625	1,206	2,030
			175	149	309	573	1,108	1,870
			200	146	300	555	1,069	1,804
			250	160	333	618	1,189	2,010
			300	151	311	583	1,118	1,911
			350	149	309	573	1,108	1,870
			400	143	298	553	1,070	1,824
			450	145	278	516	993	1,694
			500	160	333	618	1,189	2,010
			600	151	311	583	1,118	1,911
			700	149	309	573	1,108	1,870
800	143	298	553	1,070	1,824			
900	145	278	516	993	1,694			
1000	141	294	549	1,059	1,779			
最大加速扭矩 Max. Acceleration Torque	T _{2B}	Nm	125~1000	1.8 倍额定输出力矩 1.8 Times of Rated Output Torque				
最大输出扭矩 Max. Output Torque 急停扭矩 Emergency Stop Torque	T _{2NOT}	Nm	125~1000	3 倍额定输出力矩 3 Times of Rated Output Torque				
额定输入转速 Rated Input Speed	n _{1N}	rpm	125~1000	3,000	3,000	3,000	3,000	2,000
最大输入转速 Max. Input Speed	n _{1B}	rpm	125~1000	6,000	5,000	5,000	4,000	3,000
背隙 Backlash Ps		arcmin	125~1000	≤5	≤5	≤5	≤5	≤5
背隙 Backlash P0		arcmin	125~1000	≤7	≤7	≤7	≤7	≤7
背隙 Backlash P1		arcmin	125~1000	≤9	≤9	≤9	≤9	≤9
背隙 Backlash P2		arcmin	125~1000	≤11	≤11	≤11	≤11	≤11
扭转刚性 Torsional Rigidity		Nm/arcmin	125~1000	14	27	60	140	240
容许径向力 Max. Radial Force	F _{2rB}	N	125~1000	3,200	6,800	9,300	15,600	51,000
容许轴向力 Max. Axial Force	F _{2aB}	N	125~1000	1,600	3,400	4,650	7,800	25,500
使用寿命 Service Life	L _H	hr	125~1000	S5 周期运转 : >20,000 (S1 连续运转 : >10,000 hrs) S5 Cycle Operation : >20,000 (S1 Continuous Operation : >10,000 hrs)				
效率 Efficiency	η	%	125~1000	≥90				
使用温度 Operating Temperature		℃	125~1000	-10° C~+90° C				
润滑 Lubrication			125~1000	全合成润滑油脂 Synthetic Grease				
防护等级 Protection Class			125~1000	IP65				
安装方向 Mounting Position			125~1000	任意方向 Any				
噪音值 Noise Level		dB	125~1000	≤60	≤63	≤65	≤67	≤70
重量 Weight ±3%		Kg	125~1000	5.3	10.5	21	41	66

转动惯量 Mass Moments of Inertia (kg.cm²)

Ratio	FKB090	FKB115	FKB142	FKB180	FKB220
125	0.01	0.04	0.71	1.42	3.29
150	0.01	0.04	0.51	0.92	2.15
175	0.01	0.04	0.40	0.83	1.26
200	0.01	0.04	0.21	0.65	0.98
250	0.01	0.04	0.11	0.52	0.82
300	0.01	0.04	0.09	0.21	0.82
350	0.01	0.04	0.09	0.21	0.82
400	0.01	0.04	0.09	0.21	0.82
450	0.01	0.04	0.09	0.21	0.51
500	0.01	0.04	0.08	0.12	0.51
600	0.01	0.04	0.08	0.12	0.25
700	0.01	0.04	0.08	0.12	0.25
800	0.01	0.04	0.08	0.12	0.25
900	0.01	0.04	0.08	0.12	0.25
1000	0.01	0.04	0.08	0.12	0.25

减速机性能资料 REDUCER PERFORMANCE DATA

三级/Three-stage



unit: mm

Model Code	FKB090	FKB115	FKB142	FKB180	FKB220
	A				
A1	100	130	165	215	250
A2	6.8	9	11	13	17
A3	22	32	40	55	75
A4	80	110	130	160	180
A5	5	6	9、23.5	10、20	10
A6	M8×P1.25	M10×P1.5	M12×P1.75	M14×P2.0	M16×P2.0
A7	116	148	186	238	288
A8	6	10	12	16	20
A9	24.5	35	43	59	79.5
B					
B1	90	120	142	180	220
B2	48	65	92	106	139
B3	10	12	15	20	30
B4	2	3	3	4	5
B5	30	40	65	70	90
B6	36	50	74	82	104
B7	10	12	15	16	20
C					
C1	46、60、63	70、75、90	90、100、115、145	115、145、165	145、165、200
C2	M3、M4、M5	M4、M5、M6	M5、M6、M8	M6、M8、M10	M8、M10、M12
C3	8、9、11	14、19	19、22、24	24、28、32	32、35、38
C4	26	33.5、41.5	59、73.5	67、77	84.5
C5	30、40、50	50、60、70	70、80、95、110	95、110、130	110、130、180
C6	M4×P0.7	M5×P0.8	M6×P1.0	M8×P1.25	M10×P1.5
C7	46、55	64、70、80	92、110、130	122、130、150	146、150、190
C8	197	249、257	334.5、349	396.5、406.5	481.5

减速机性能资料 REDUCER PERFORMANCE DATA

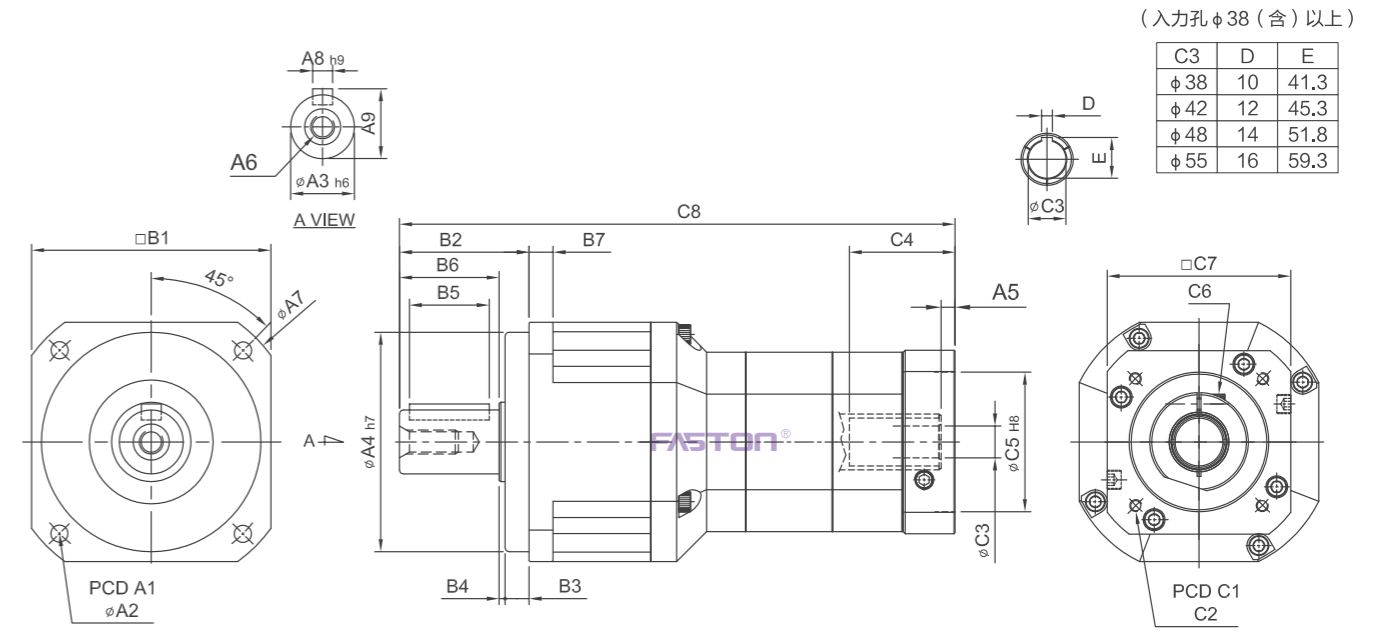
规格 Model No.	代号 Code	单位 Unit	速比 Ratio	FKB060A	FKB090A	FKB115A	FKB142A	FKB180A	FKB220A
额定输出力矩 Rated output torque (Nominal output torque)	T _{2N}	Nm	125	48	160	333	618	1,189	2,010
			150	59	165	335	625	1,206	2,030
			175	45	149	309	573	1,108	1,870
			200	51	146	300	555	1,069	1,804
			250	48	160	333	618	1,189	2,010
			300	45	151	311	583	1,118	1,911
			350	45	149	309	573	1,108	1,870
			400	43	143	298	553	1,070	1,824
			450	44	145	278	516	993	1,694
			500	48	160	333	618	1,189	2,010
			600	45	151	311	583	1,118	1,911
			700	45	149	309	573	1,108	1,870
800	43	143	298	553	1,070	1,824			
900	44	145	278	516	993	1,694			
1000	43	141	294	549	1,059	1,779			
最大加速扭矩 Max. Acceleration Torque	T _{2B}	Nm	125~1000	1.8 倍额定输出力矩 1.8 Times of Rated Output Torque					
最大输出扭矩 Max. Output Torque 急停扭矩 Emergency Stop Torque	T _{2NOT}	Nm	125~1000	3 倍额定输出力矩 3 Times of Rated Output Torque					
额定输入转速 Rated Input Speed	n _{1N}	rpm	125~1000	3,000	3,000	3,000	3,000	3,000	2,000
最大输入转速 Max. Input Speed	n _{1B}	rpm	125~1000	6,000	6,000	5,000	5,000	4,000	3,000
背隙 Backlash Ps		arcmin	125~1000	≤5	≤5	≤5	≤5	≤5	≤5
背隙 Backlash P0		arcmin	125~1000	≤7	≤7	≤7	≤7	≤7	≤7
背隙 Backlash P1		arcmin	125~1000	≤9	≤9	≤9	≤9	≤9	≤9
背隙 Backlash P2		arcmin	125~1000	≤11	≤11	≤11	≤11	≤11	≤11
扭转刚性 Torsional Rigidity		Nm/arcmin	125~1000	6	14	27	60	140	240
容许径向力 Max. Radial Force	F _{2rB}	N	125~1000	1,180	3,200	6,800	9,300	15,600	51,000
容许轴向力 Max. Axial Force	F _{2aB}	N	125~1000	590	1,600	3,400	4,650	7,800	25,500
使用寿命 Service Life	L _H	hr	125~1000	S5 周期运转 : >20,000 (S1 连续运转 : >10,000 hrs) S5 Cycle Operation: >20,000 (S1 Continuous Operation: >10,000 hrs)					
效率 Efficiency	η	%	125~1000	≥90					
使用温度 Operating Temperature		℃	125~1000	-10° C~+90° C					
润滑 Lubrication			125~1000	全合成润滑油脂 Synthetic Grease					
防护等级 Protection Class			125~1000	IP65					
安装方向 Mounting Position			125~1000	任意方向 Any					
噪音值 Noise Level		dB	125~1000	≤58	≤60	≤63	≤65	≤67	≤70
重量 Weight ±3%		Kg	125~1000	4	6.5	13	30	57	87

转动惯量 Mass Moments of Inertia (kg.cm²)

Ratio	FKB060A	FKB090A	FKB115A	FKB142A	FKB180A	FKB220A
125	0.01	0.01	0.04	0.71	1.42	3.29
150	0.01	0.01	0.04	0.51	0.92	2.15
175	0.01	0.01	0.04	0.40	0.83	1.26
200	0.01	0.01	0.04	0.21	0.65	0.98
250	0.01	0.01	0.04	0.11	0.52	0.82
300	0.01	0.01	0.04	0.09	0.21	0.82
350	0.01	0.01	0.04	0.09	0.21	0.82
400	0.01	0.01	0.04	0.09	0.21	0.82
450	0.01	0.01	0.04	0.09	0.21	0.51
500	0.01	0.01	0.04	0.08	0.12	0.51
600	0.01	0.01	0.04	0.08	0.12	0.25
700	0.01	0.01	0.04	0.08	0.12	0.25
800	0.01	0.01	0.04	0.08	0.12	0.25
900	0.01	0.01	0.04	0.08	0.12	0.25
1000	0.01	0.01	0.04	0.08	0.12	0.25

减速机性能资料 REDUCER PERFORMANCE DATA

三级/Three-stage



unit: mm

Model Code	FKB060A	FKB090A	FKB115A	FKB142A	FKB180A	FKB220A
	A1	70	100	130	165	215
A2	5.5	6.8	9	11	13	17
A3	16	22	32	40	55	75
A4	50	80	110	130	160	180
A5	5	6	9、23.5	10、20	10	11.5、13.5
A6	M5×P0.8	M8×P1.25	M10×P1.5	M12×P1.75	M14×P2.0	M16×P2.0
A7	80	116	148	186	238	288
A8	5	6	10	12	16	20
A9	18	24.5	35	43	59	79.5
B1	62	90	120	142	180	220
B2	36	48	65	92	106	139
B3	7	10	12	15	20	30
B4	1	2	3	3	4	5
B5	20	30	40	65	70	90
B6	28	36	50	74	82	104
B7	8	10	12	15	16	20
C1	46、63、60	70、75、90	90、100、115、145	115、145、165	145、165、200	200、215、265
C2	M3、M4、M5	M4、M5、M6	M5、M6、M8	M6、M8、M10	M8、M10、M12	M10、M12
C3	89、11	14、19	19、22、24	24、28、32	32、35、38	38、42、48、55
C4	26	33.5、41.5	59、73.5	67、77	84.5	114.5、116.5
C5	30、40、50	50、60、70	70、80、95、110	95、110、130	110、130、180	114.3、180、230
C6	M4×P0.7	M5×P0.8	M6×P1.0	M8×P1.25	M10×P1.5	M10×P1.5
C7	46、55	64、7080	92、110、130	122、130、150	146、150、190	182、200、250
C8	165.5	206.3、214.3	284.5、299	354.5、364.5	425	527.5