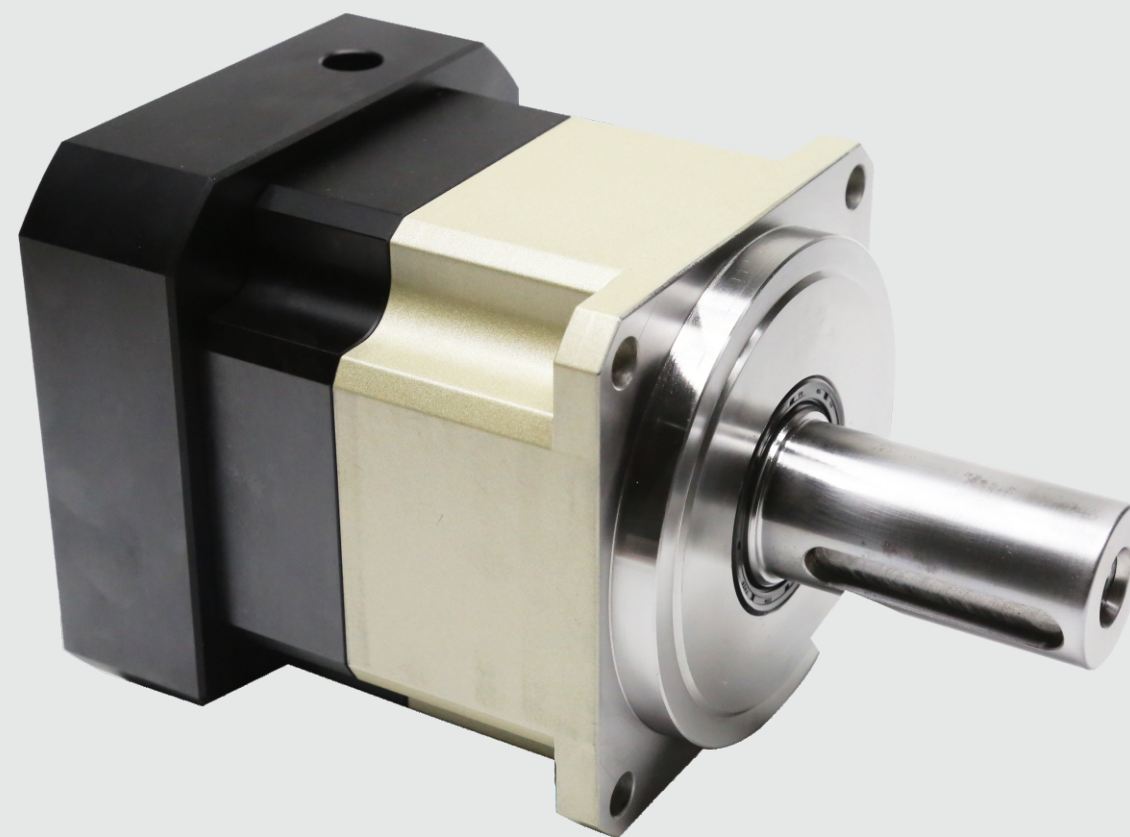


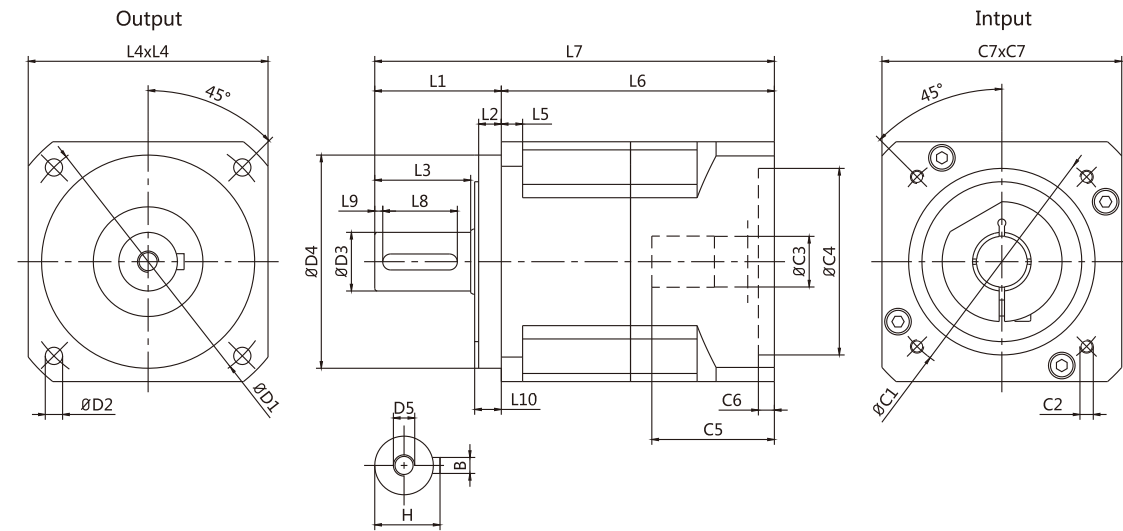
TAB Series

- **低噪音：**采用螺旋齿轮设计，实现了减速机的顺畅、安静运转。
- **高精度：**背隙可达3弧分以内，定位精确。
- **高刚性、高扭矩：**输出轴采用大尺寸、大跨距式双支撑轴承设计，大大提高了减速机刚性和扭矩。
- **高效率：**单段可达95%以上，双段可达92%以上。
- **免维护：**油脂磨耗低，可终身润滑。
- **密封效果好：**润滑油脂具有高粘度、不易分离的特性，并采用IP65防护等级，确保无润滑油脂泄漏。
- **自由安装：**可任意安装减速机。
- **适用性广：**适用于任意型式伺服电机。

- **Low Noise:** The use of helical gear design, to achieve a smooth, quiet operation of the reducer.
- **High Precision:** Backlash 3 arcmin or less, accurate positioning.
- **High Rigidity, High Torque:** The output shaft used large size, large span double support bearing design, which improves the rigidity and torque of the reducer.
- **High Efficiency:** 1-Stage up to 95% or more, 2-Stage up to 92% or more.
- **Maintenance-Free:** Low grease wear, can be lifetime lubrication.
- **Sealing Effect Is Good:** Lubricating grease with high viscosity, not easy to separate the characteristics, ip65 protection class to ensure that no grease leakage.
- **Installation Unrestrained:** Can be installed arbitrarily.
- **Wide Applicability:** Applicable to any type of servo motor.

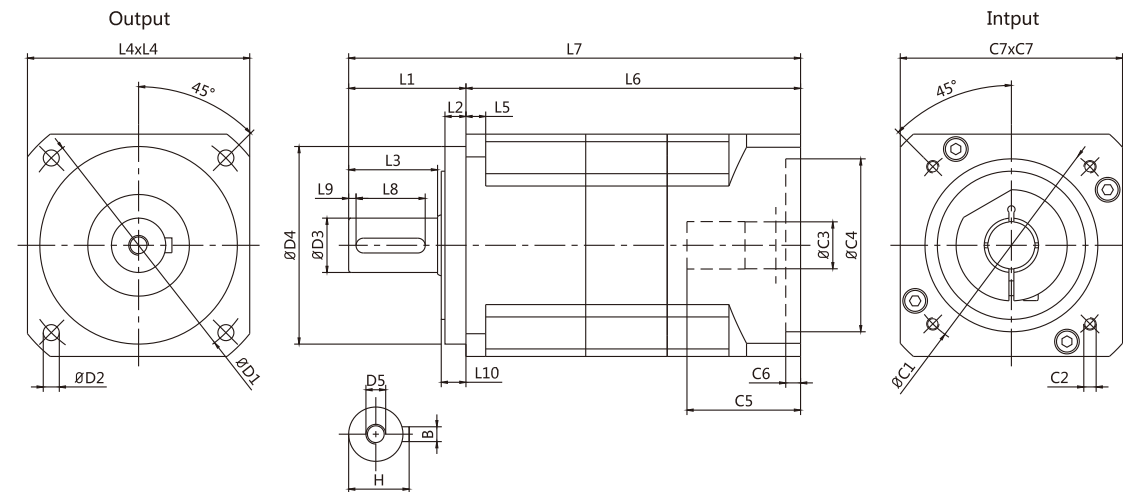


TAB040-L1



TAB040-L1																								
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	50	3.5	13	35	M4	26	5	20	45	5	63	89	16	0	6	46	M4	8	30	28	5	45	5	15

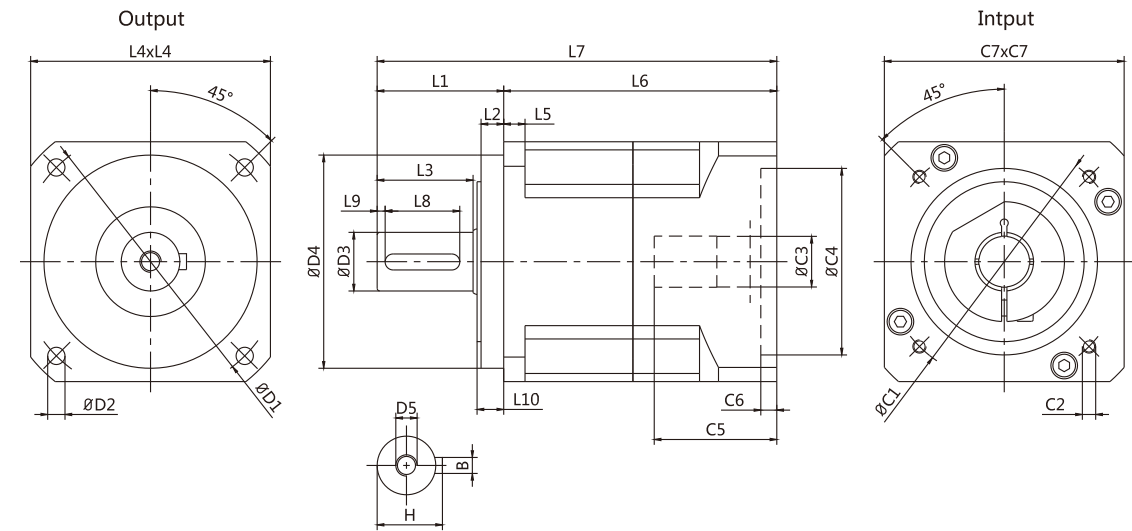
TAB040-L2



TAB040-L2																								
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	50	3.5	13	35	M4	26	5	20	45	5	82	108	16	0	6	46	M4	8	30	28	5	45	5	15

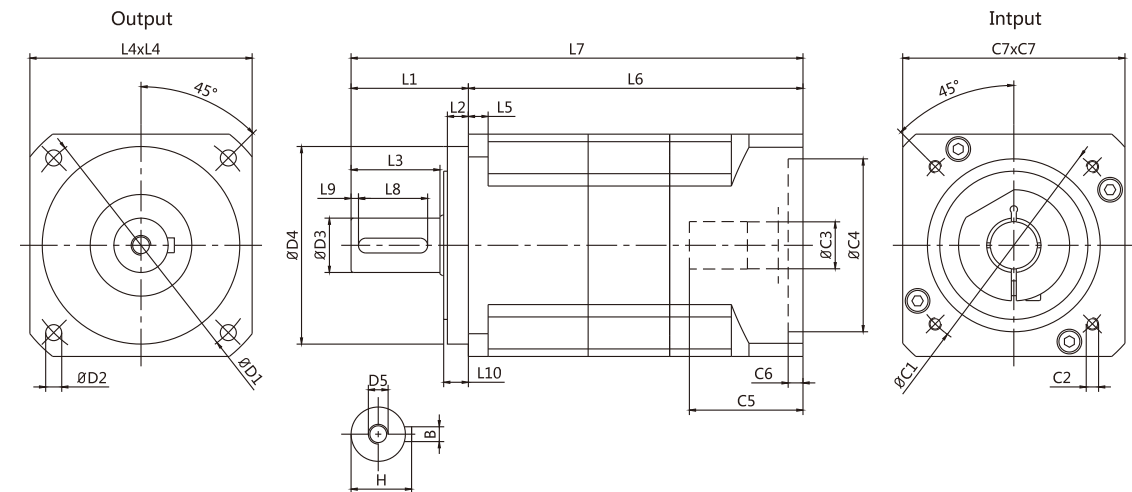
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAB060-L1



TAB060-L1																								
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	70	5.5	16	50	M5	37	7	28.5	60	8	76	113	20	3	7.5	70	M5	14	50	32.5	6	60	5	18
TypeⅡ	70	5.5	16	50	M5	37	7	28.5	60	8	92.5	113	20	3	7.5	70	M5	11	50	32.5	6	80	5	

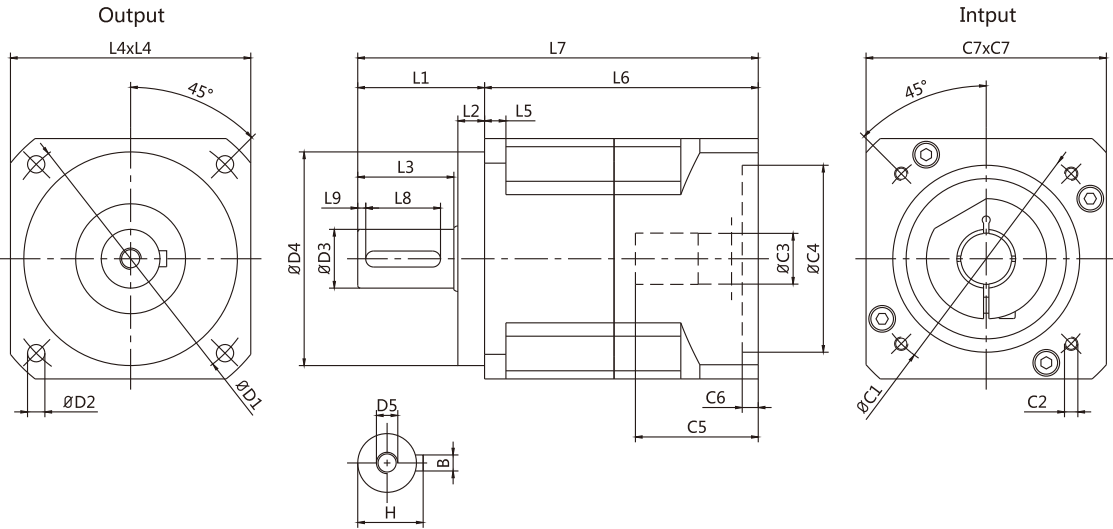
TAB060-L2



TAB060-L2																								
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	70	5.5	16	50	M5	37	7	28.5	60	8	96	135	20	3	7.5	70	M4	14	50	32.5	6	60	5	18
TypeⅡ	70	5.5	16	50	M5	37	7	28.5	60	8	96	133	20	3	7.5	70	M4	11	50	32.5	6	60	5	18

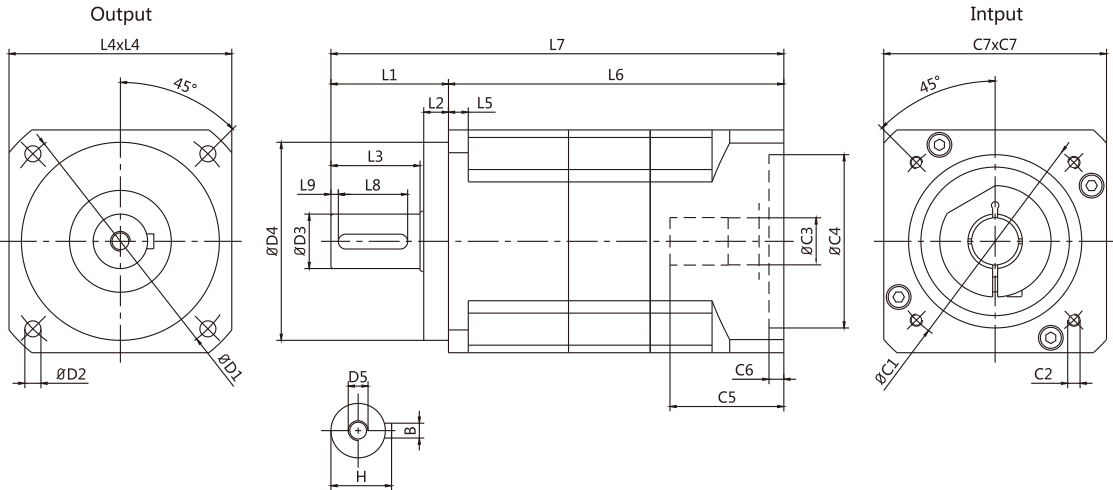
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAB090-L1



TAB090-L1																							
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	100	6.5	22	80	M8	48	9	36	90	8	98.5	146.5	30	3	90	M5	19	70	46	6	90	6	24.5
TypeⅡ	100	6.5	22	80	M8	48	9	36	90	8	116.5	164	30	3	145	M8	19	110	60	10	130	6	24.5
TypeⅢ	100	6.5	22	80	M8	48	9	36	90	8	116.5	164	30	3	145	M8	22	110	60	10	130	6	24.5
TypeⅣ	100	6.5	22	80	M8	48	9	36	90	8	116.5	164	30	3	145	M8	24	110	60	10	130	6	24.5

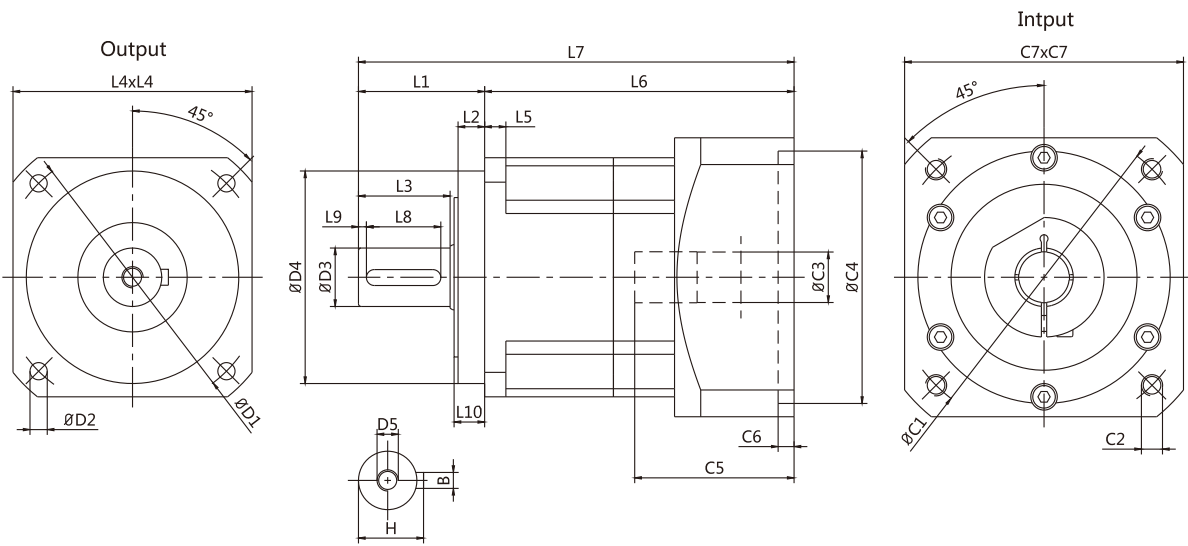
TAB090-L2



TAB090-L2																							
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	100	6.5	22	80	M8	48	9	36	90	8	135.5	183	30	3	90	M5	19	70	46	6	90	6	24.5
TypeII	100	6.5	22	80	M8	48	9	36	90	8	118.5	166	30	3	70	M4	14	50	32.5	6	60	6	24.5

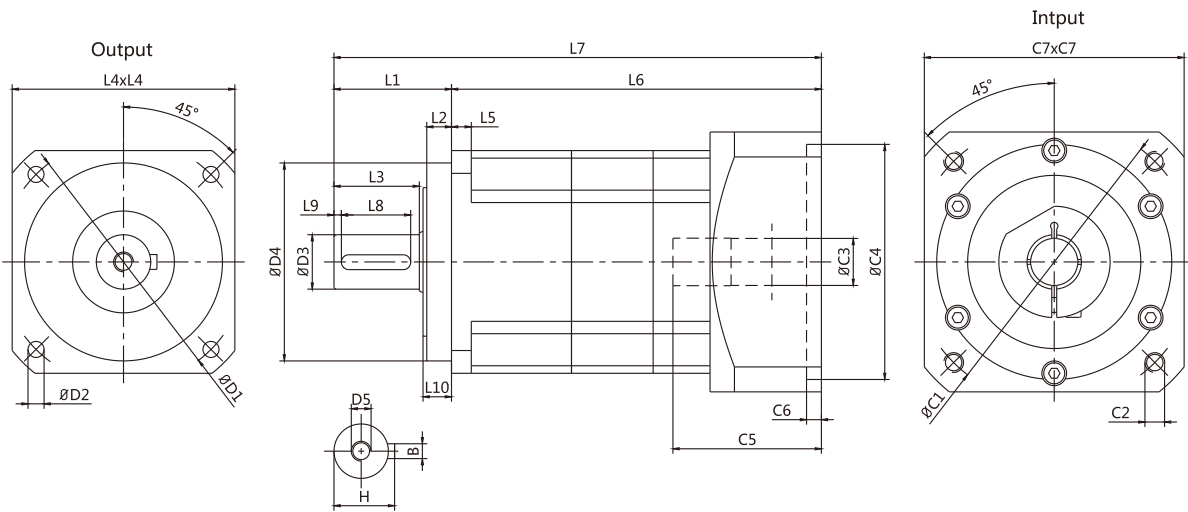
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAB120-L1



ZA120-L1																								
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	130	9	32	110	M12	65	12	49	115	10	136	201	40	5	14	145	M8	22	110	62.5	8	130	10	35
TypeII	130	9	32	110	M12	65	12	49	115	10	136	201	40	5	14	145	M8	24	110	62.5	8	130	10	35

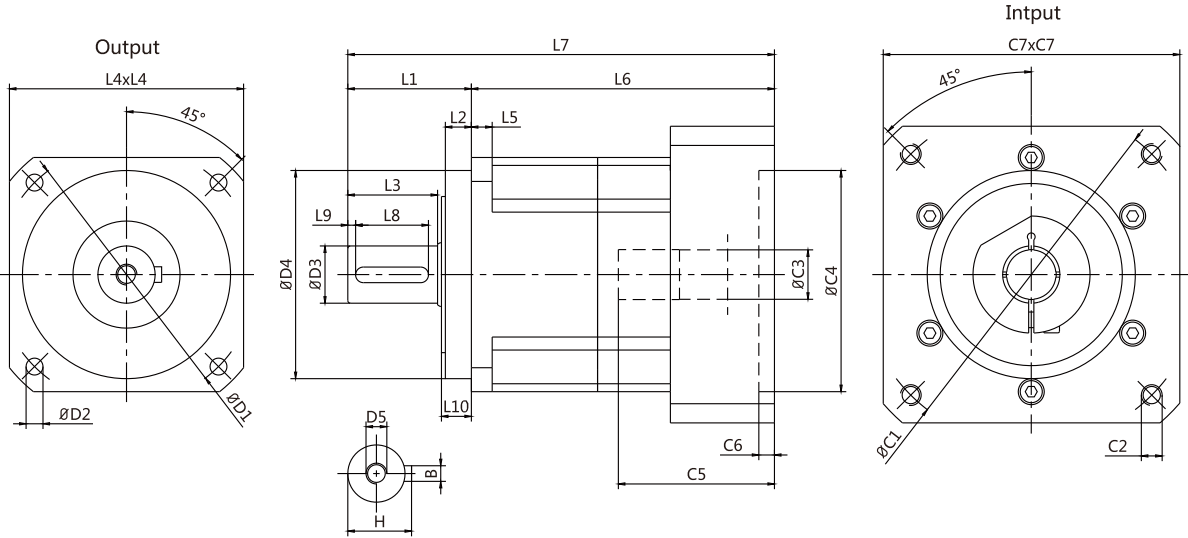
TAB120-L2



TAB120-L2																								
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	130	9	32	110	M12	65	12	49	115	10	173	238	40	5	14	145	M8	22	110	62.5	8	130	10	35
TypeⅡ	130	9	32	110	M12	65	12	49	115	10	173	238	40	5	14	145	M8	24	110	62.5	8	130	10	35
TypeⅢ	130	9	32	110	M12	65	12	49	115	10	154.5	219.5	40	5	14	90	M5	19	70	47.5	6	90	10	35

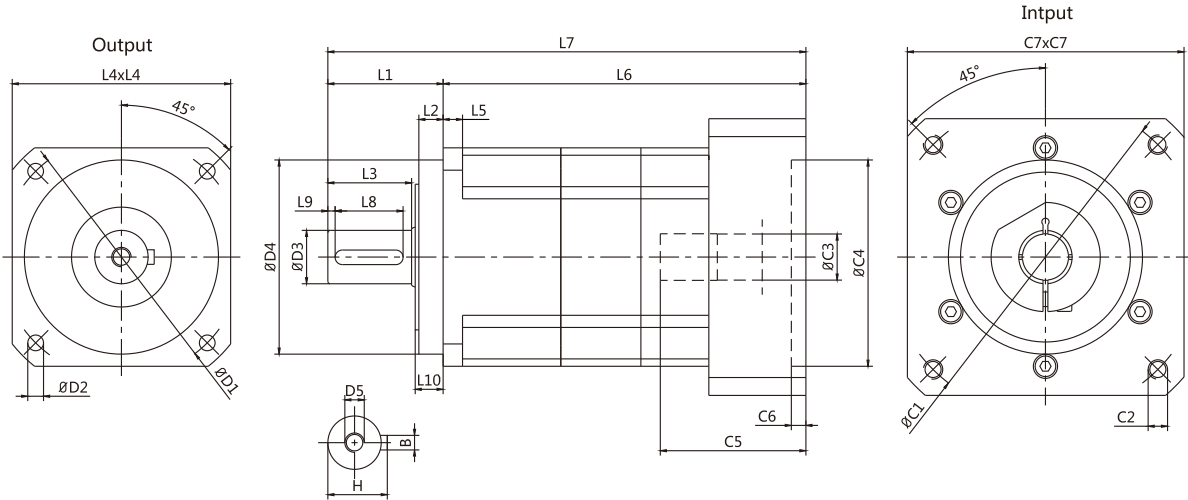
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAB140-L1



TAB140-L1																				
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5
Type I	165	11	40	130	M16	97	12	82	140	12	162	259	65	5	13.5	200	M12	35	114.3	81.5

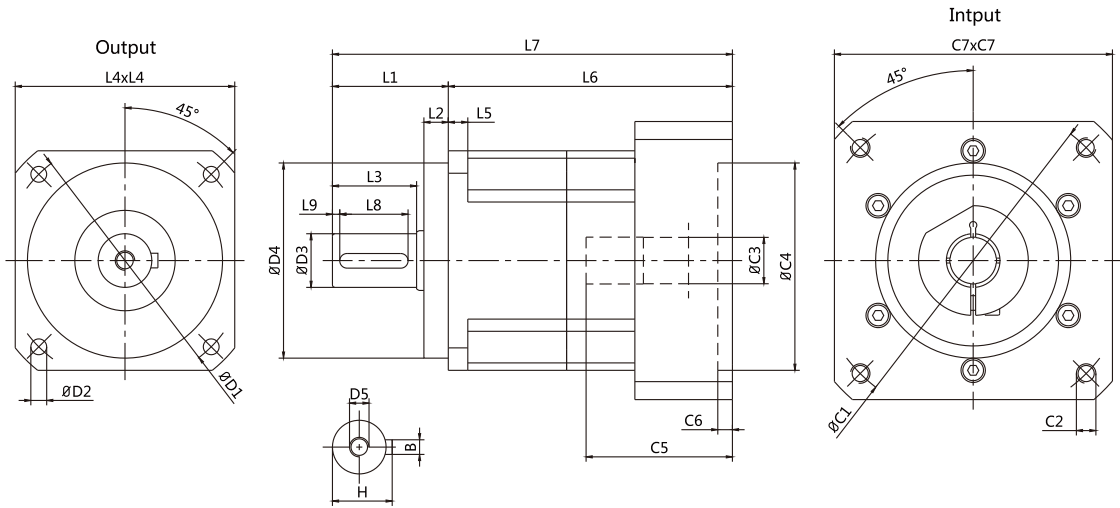
TAB140-L2



TAB140-L2																				
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5
Type I	165	11	40	130	M16	97	12	82	140	12	203.5	300.5	65	5	13.5	200	M12	35	114.3	81.5
Type II	165	11	40	130	M16	97	12	82	140	12	196	293	65	5	13.5	145	M8	24	110	74
Type III	165	11	40	130	M16	97	12	82	140	12	196	293	65	5	13.5	145	M8	22	110	74

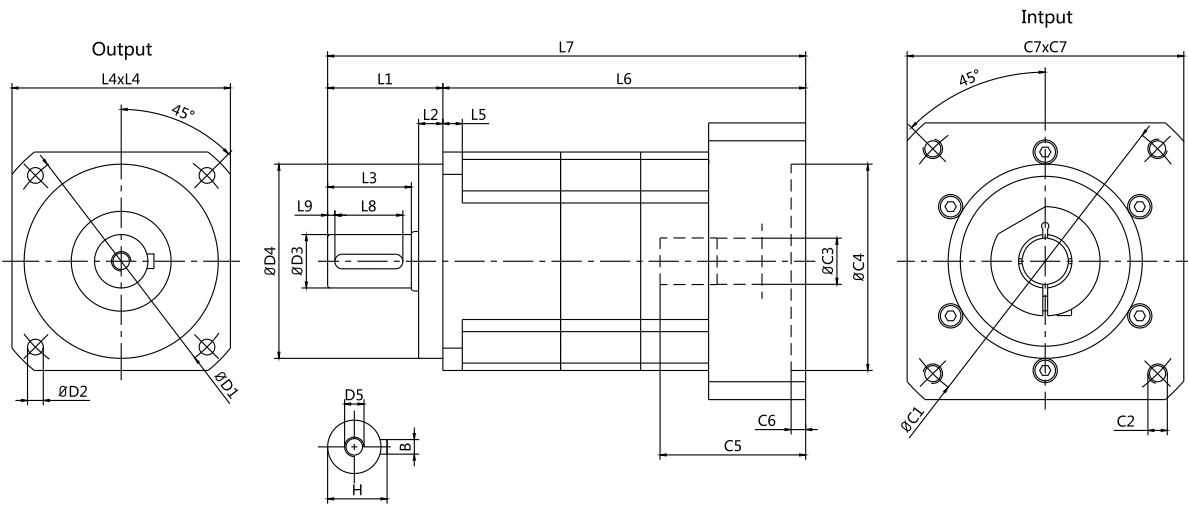
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAB180-L1



TAB180-L1																				
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	※C1	※C2	※C3	※C4	※C5	※C6
Type I	215	13.5	55	160	M20	105	20	82	180	15	176.5	281.5	70	6	200	M12	42	114.3	82.5	10

TAB180-L2



TAB180-L2																				
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	※C1	※C2	※C3	※C4	※C5	※C6
Type I	215	13.5	55	160	M20	105	20	82	180	15	228.5	333.5	70	6	200	M12	42	114.3	82.5	10
Type II	215	13.5	55	160	M20	105	20	82	180	15	228.5	333.5	70	6	200	M12	35	114.3	82.5	10

※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAB040																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	19	16	16	15	14	20	19	22	20	19	17	22	19	14	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	1.8倍额定输出扭矩 1.8times of Nominal Output Torque														
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	3000														
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	6000														
扭转刚性	Torsional Rigidity	Nm/arcmin	3														
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	380														
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	190														
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)														
噪音值	Noise	dB	≤60 (输入转速=3000rpm、空载、距离1M②)														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils														
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
精密背隙 P1	Precision Backlash P1	arcmin	≤3						≤5								
标准背隙 P2	Standard Backlash P2	arcmin	≤5						≤8								
效率 η	Efficiency η	%	≥97%						≥92%								

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TAB060																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	55	50	60	50	40	55	50	60	55	50	60	50	40		
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	5000														
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	10000														
扭转刚性	Torsional Rigidity	Nm/arcmin	7														
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	1530														
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	630														
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)														
噪音值	Noise	dB	≤60 (输入转速=3000rpm、空载、距离1M②)														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils														
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	0.16	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	
精密背隙 P1	Precision Backlash P1	arcmin	≤3							≤5							
标准背隙 P2	Standard Backlash P2	arcmin	≤5							≤8							
效率 η	Efficiency η	%	≥95%							≥92%							

- ② Reducer under no-load mode, input speed is 3000, the value which Noise Measurement machine get at one meter away position.

TAB090																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T_{2N}	Nominal Output Torque T_{2N}	Nm	130	140	160	140	100	130	140	160	150	140	140	160	140	100	
急停扭矩 T_{2NOT}	Emergency Stop Torque T_{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n_{1N}	Nominal Input Speed n_{1N}	rpm	4000														
最大输入转速 n_{1B}	Max. Input Speed n_{1B}	rpm	8000														
扭转刚性	Torsional Rigidity	Nm/arcmin	14														
容许径向力 F_{2rB}	Max. Radial Load F_{2rB}	N	3250														
容许轴向力 F_{2aB}	Max. Axial Load F_{2aB}	N	1300														
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)														
噪音值	Noise	dB	≤60 (输入转速=3000rpm、空载、距离1M②)														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils														
转动惯量 J_1	Mass Moments of Inertia J_1	kg·cm ²	0.61	0.48	0.47	0.45	0.44	0.47	0.47	0.47	0.44	0.45	0.44	0.44	0.13	0.13	
精密背隙 P1	Precision Backlash P1	arcmin	≤3							≤5							
标准背隙 P2	Standard Backlash P2	arcmin	≤5							≤8							
效率 η	Efficiency η	%	≥95%							≥92%							

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TAB120																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	208	290	330	300	230	208	290	330	310	300	290	330	300	230	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	4000														
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	8000														
扭转刚性	Torsional Rigidity	Nm/arcmin	25														
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	6700														
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	3000														
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)														
噪音值	Noise	dB	≤65 (输入转速=3000rpm、空载、距离1M②)														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils														
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	3.25	2.74	2.71	2.62	2.57	2.71	2.71	2.71	2.57	2.62	2.57	2.57	0.44	0.44	
精密背隙 P1	Precision Backlash P1	arcmin	≤3						≤5								
标准背隙 P2	Standard Backlash P2	arcmin	≤5						≤8								
效率 η	Efficiency η	%	≥95%						≥92%								

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TAB

TVB

TAE

TAD

TVD

TABR

TVBR

TAER

TADR

TAB140																		
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100		
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	342	542	650	550	450	342	542	650	600	550	542	650	550	450	342	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque															
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	3000															
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	6000															
扭转刚性	Torsional Rigidity	Nm/arcmin	50															
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	9400															
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	4700															
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)															
噪音值	Noise	dB	≤67 (输入转速=3000rpm、空载、距离1M②)															
使用温度	Operating Temp	℃	-10 ~ +90															
防护等级	Degree of Reducer Protection		IP65															
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils															
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	9.21	7.54	7.42	7.14	7.03	7.42	7.42	7.42	7.03	7.14	7.03	7.03	2.57	2.57		
精密背隙 P1	Precision Backlash P1	arcmin	≤3						≤5									
标准背隙 P2	Standard Backlash P2	arcmin	≤5						≤8									
效率 η	Efficiency η	%	≥95%						≥92%									

- ① Half-life under continuous operation mode.
- ② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TAB180																		
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100		
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	588	1050	1200	1100	900	588	1050	1200	1100	1100	1050	1200	1100	900		
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque															
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	3000															
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	6000															
扭转刚性	Torsional Rigidity	Nm/arcmin	145															
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	14500															
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	7250															
使用寿命	Service Life	hr	20000 (连续运转寿命减半㉑)															
噪音值	Noise	dB	≤70 (输入转速=3000rpm、空载、距离1M㉒)															
使用温度	Operating Temp	℃	-10 ~ +90															
防护等级	Degree of Reducer Protection		IP65															
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils															
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	29	23.7	23.3	22.5	22.5	23.3	23.3	23.3	22.5	22.5	22.5	22.5	7.03	7.03		
精密背隙 P1	Precision Backlash P1	arcmin	≤3					≤5										
标准背隙 P2	Standard Backlash P2	arcmin	≤5					≤8										
效率 η	Efficiency η	%	≥95%					≥92%										

- ① Half-life under continuous operation mode.
- ② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

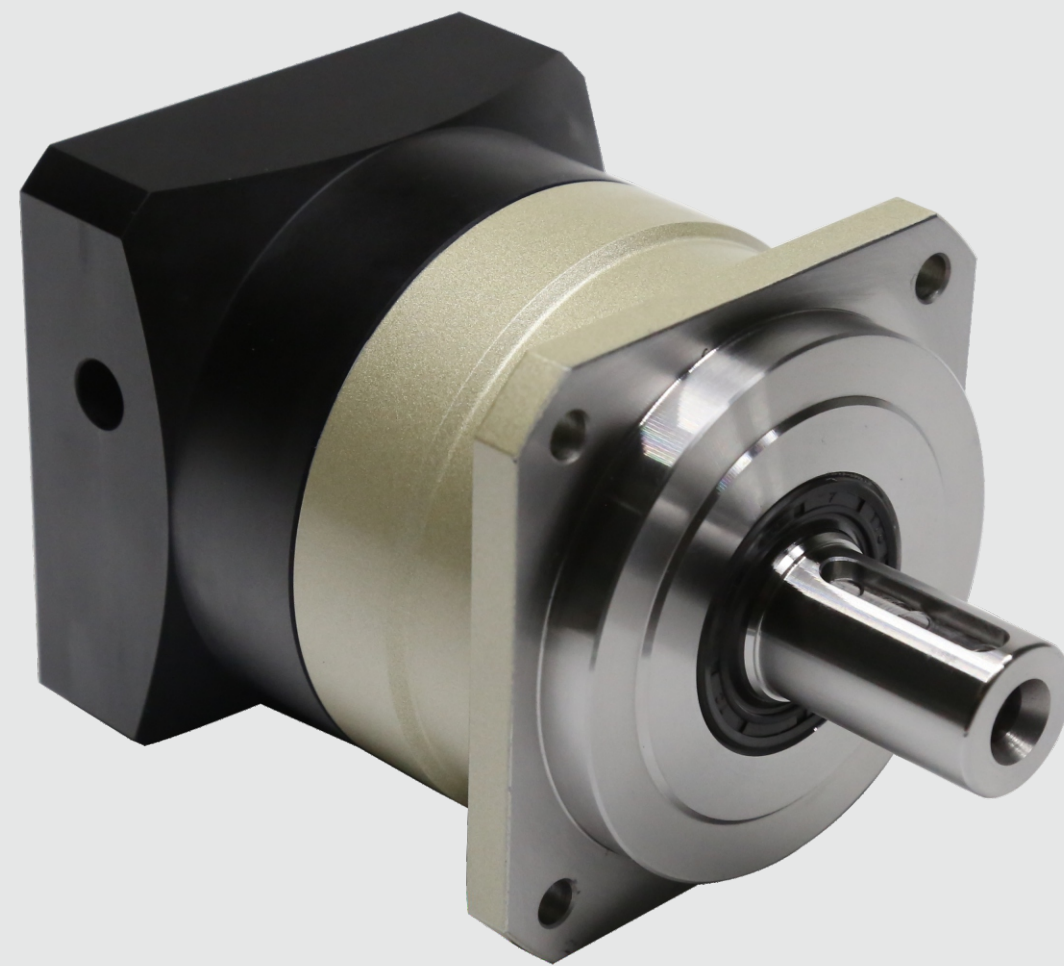
TAB220																	
速比	Ratio		15	20	25	30	35	40	50	60	70	80	90	100			
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	2030	1804	2010	1911	1870	1824	2010	1911	1870	1824	1694	1779			
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	1.8倍额定输出扭矩 1.8 times of Nominal Output Torque														
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	2000														
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	3000														
扭转刚性	Torsional Rigidity	Nm/arcmin	240														
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	5100														
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	25500														
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)														
噪音值	Noise	dB	≤72 (输入转速=3000rpm、空载、距离1M②)														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils														
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	9.21	7.54	7.42	7.14	7.03	7.42	7.42	7.42	7.03	7.14	7.03	7.03	2.57	2.57	
精密背隙 P1	Precision Backlash P1	arcmin	≤3					≤5									
标准背隙 P2	Standard Backlash P2	arcmin	≤5					≤8									
效率 η	Efficiency η	%	≥95%					≥92%									

- ① Half-life under continuous operation mode.
- ② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TVB Series

- **低噪音**：采用螺旋齿轮设计，实现了减速机的顺畅、安静运转。
- **高精度**：背隙可达3弧分以内，定位精确。
- **高刚性、高扭矩**：输出轴采用大尺寸、大跨距式双支撑轴承设计，大大提高了减速机刚性和扭矩。
- **高效率**：单段可达95%以上，双段可达92%以上。
- **免维护**：油脂磨耗低，可终身润滑。
- **密封效果好**：润滑油脂具有高粘度、不易分离的特性，并采用IP65防护等级，确保无润滑油脂泄漏。
- **自由安装**：可任意安装减速机。
- **适用性广**：适用于任意型式伺服电机。

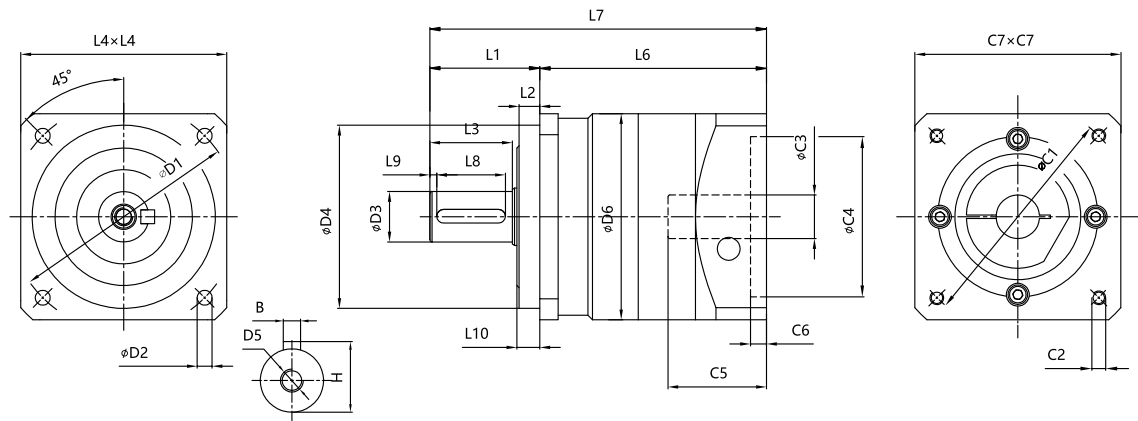
- **Low Noise**: The use of helical gear design, to achieve a smooth, quiet operation of the reducer.
- **High Precision**: Backlash 3 arcmin or less, accurate positioning.
- **High Rigidity, High Torque**: The output shaft used large size, large span double support bearing design, which improves the rigidity and torque of the reducer.
- **High Efficiency**: 1-Stage up to 95% or more, 2-Stage up to 92% or more.
- **Maintenance-Free**: Low grease wear, can be lifetime lubrication.
- **Sealing Effect Is Good**: Lubricating grease with high viscosity, not easy to separate the characteristics, ip65 protection class to ensure that no grease leakage.
- **Installation Unrestrained**: Can be installed arbitrarily.
- **Wide Applicability**: Applicable to any type of servo motor.



TVB040-L1

Output

Input

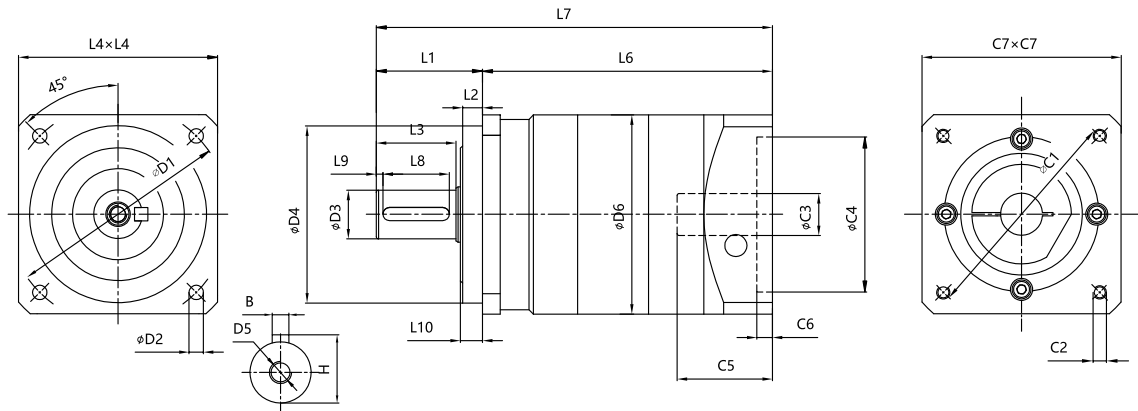


TVB040-L1																									
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	50	3.5	13	35	M4	43	26	5	20	43	5	62.5	88.5	16	0	6	46	M4	8	30	28	5	40	5	15

TVB040-L2

Output

Input



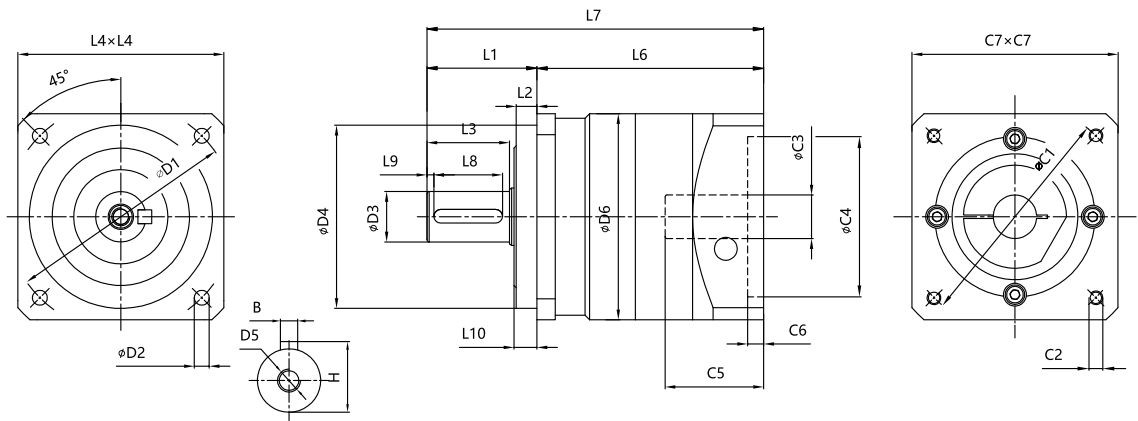
TVB040-L2																										
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H	
Type I	50	3.5	13	35	M4	43	26	5	20	43	5	82	108	16	0	7.5	46	M4	30	30	28	5	40	5	15	

※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TVB060-L1

Output

Input

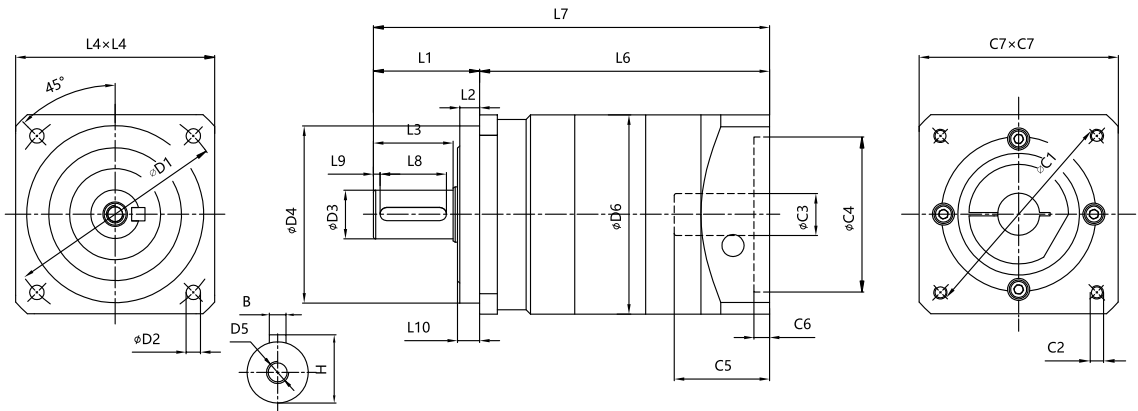


TVB060-L1																									
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	70	5.5	16	50	M5	60	37	7	28.5	60	8	76	113	20	3	7.5	70	M4	14	50	32.5	5.5	60	5	18
TypeII	70	5.5	16	50	M5	60	37	7	28.5	60	8	92.5	129.5	20	3	7.5	90	M5	19	70	43	6	80	5	18

TVB060-L2

Output

Input

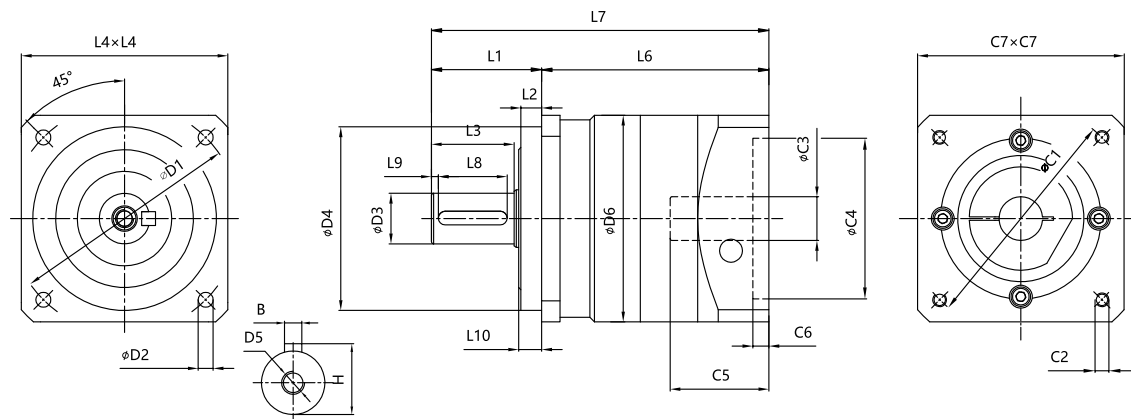


TVB060-L2																									
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	70	5.5	16	50	M5	60	37	7	28.5	60	8	96	133	20	3	7.5	70	M4	14	50	32.5	5.5	60	5	18
TypeII	70	5.5	16	50	M5	60	37	7	28.5	60	8	96	133	20	3	7.5	70	M4	11	50	32.5	5.5	60	5	18

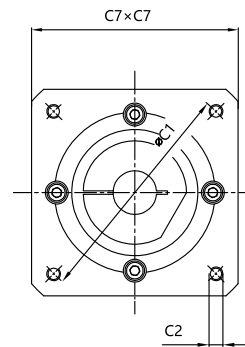
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TVB090-L1

Output



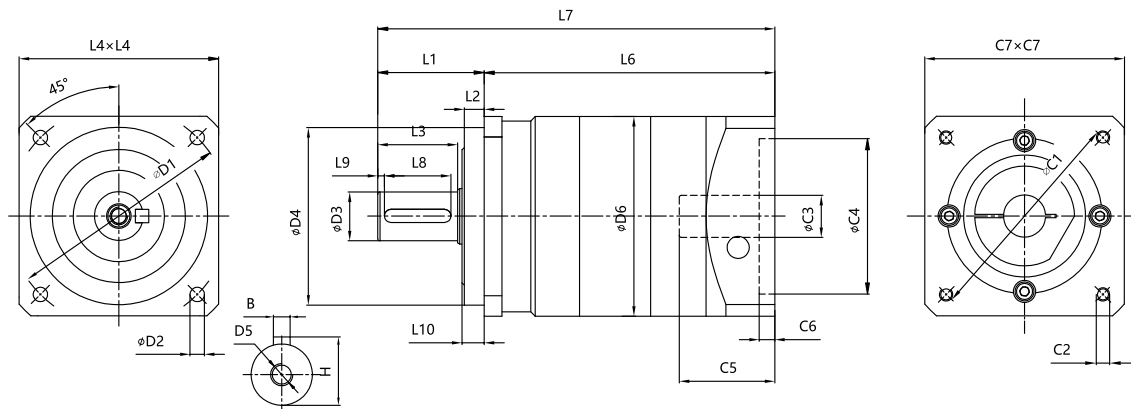
Input



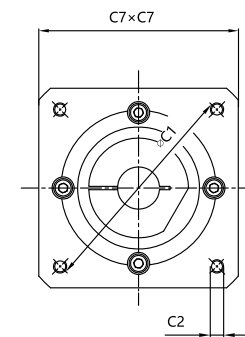
TVB090-L1																									
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	✕C1	✕C2	✕C3	✕C4	✕C5	✕C6	✕C7	B	H
Type I	100	6.5	22	80	M8	95	47.5	8.5	36	90	8	104	151.5	30	3	9	90	M5	19	70	47.5	6	90	6	24.5
TypeⅡ	100	6.5	22	80	M8	95	47.5	8.5	36	90	8	116.5	164	30	3	9	145	M8	19	110	60	10	130	6	24.5
TypeⅢ	100	6.5	22	80	M8	95	47.5	8.5	36	90	8	116.5	164	30	3	9	145	M8	22	110	60	10	130	6	24.5
TypeⅣ	100	6.5	22	80	M8	95	47.5	8.5	36	90	8	116.5	164	30	3	9	145	M8	24	110	60	10	130	6	24.5

TVB090-L2

Output



Input

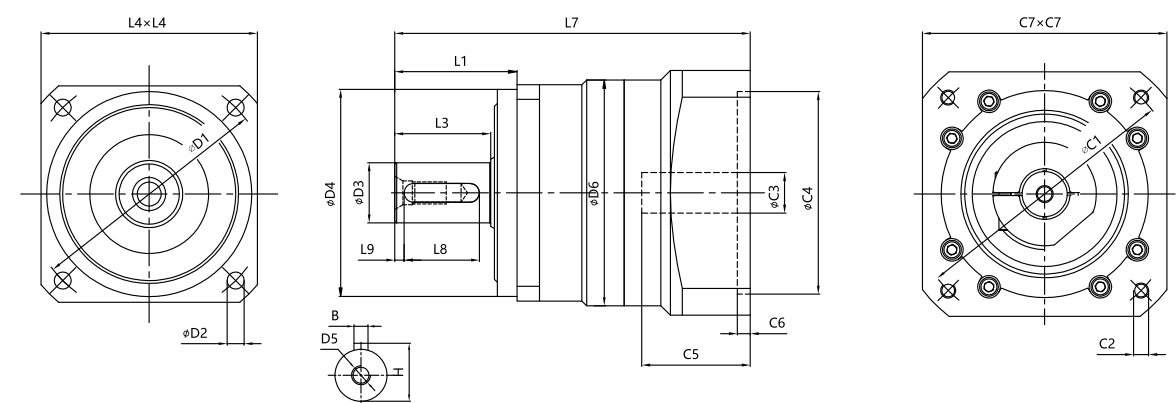


TVB090-L2																									
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	100	6.5	22	80	M8	95	47.5	8.5	36	90	8	137	184.5	30	3	9	90	M5	19	70	47.5	6	90	6	24.5
TypeⅡ	100	6.5	22	80	M8	95	47.5	8.5	36	90	8	118.5	166	30	3	9	70	M4	14	50	32.5	5.5	60	6	24.5

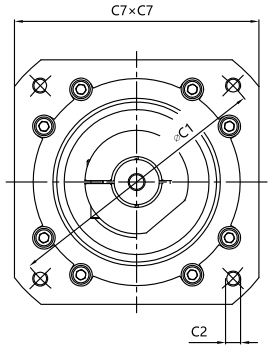
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TVB120-L1

Output



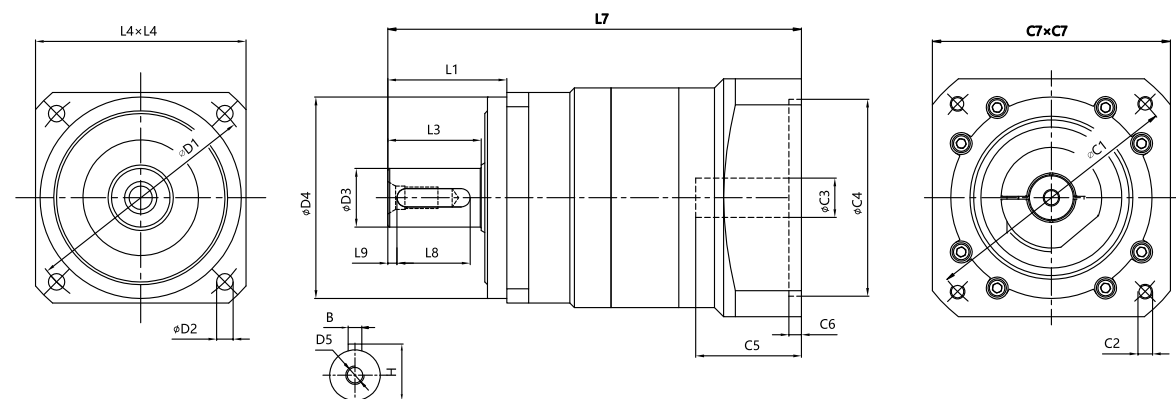
Input



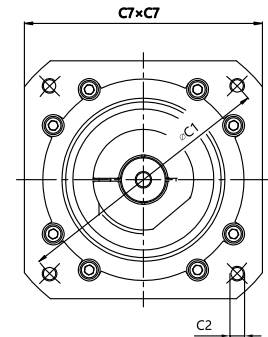
TVB120-L1																									
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	130	9	32	110	M12	125	65	12	49	115	10	136	201	40	5	14	145	M8	22	110	62.5	8	130	10	35
TypeII	130	9	32	110	M12	125	65	12	49	115	10	136	201	40	5	14	145	M8	24	110	62.5	8	130	10	35

TVB120-L2

Output



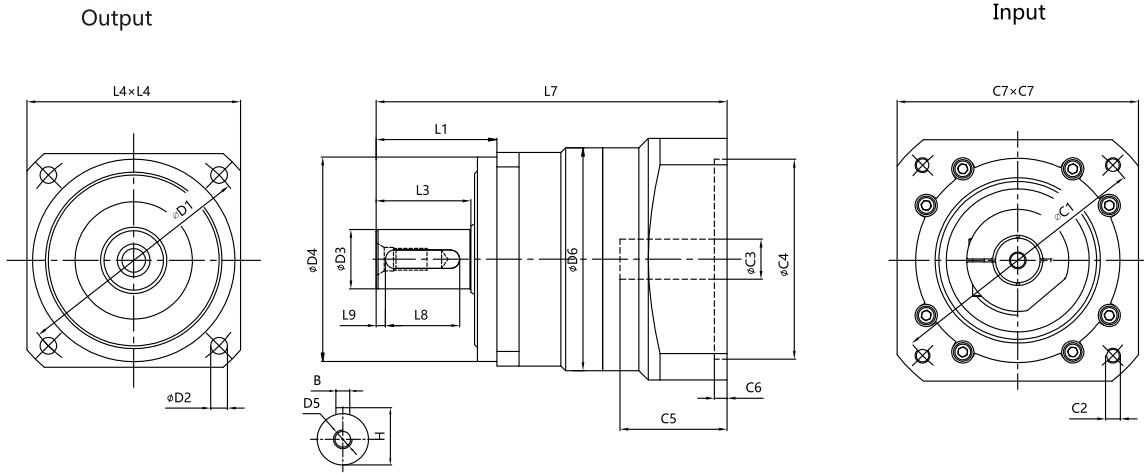
Input



TVB120-L2																									
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	130	9	32	110	M12	125	65	12	49	115	10	173	238	40	5	14	145	M8	22	110	62.5	8	130	10	35
TypeⅡ	130	9	32	110	M12	125	65	12	49	115	10	173	238	40	5	14	145	M8	24	110	62.5	8	130	10	35
TypeⅢ	130	9	32	110	M12	125	65	12	49	115	10	154.5	219.5	40	5	14	90	M5	19	70	47.5	6	90	10	35

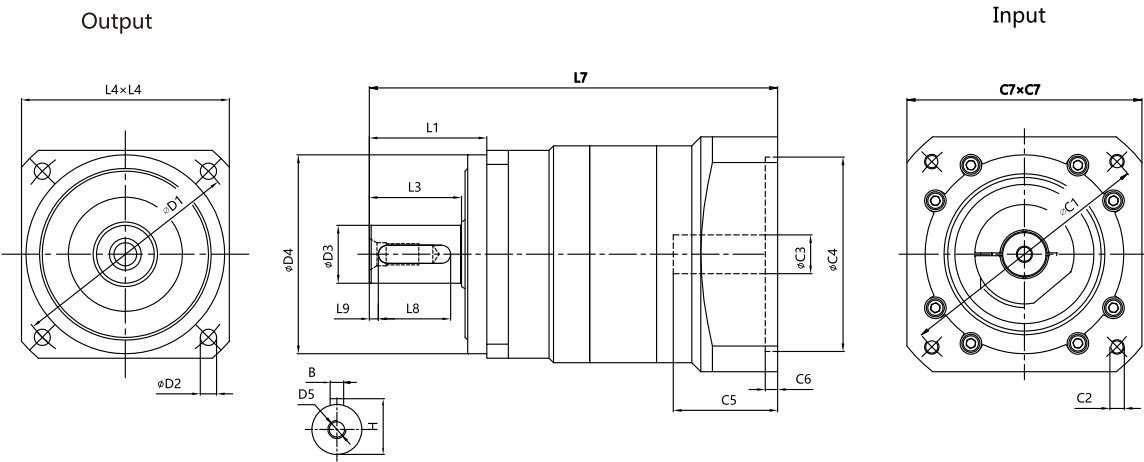
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TVB140-L1



TVB140-L1																							
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7
Type I	165	11	40	130	M16	150	97	12	82	140	12	162	259	65	5	13.5	200	M12	35	114.3	81.5	8	180

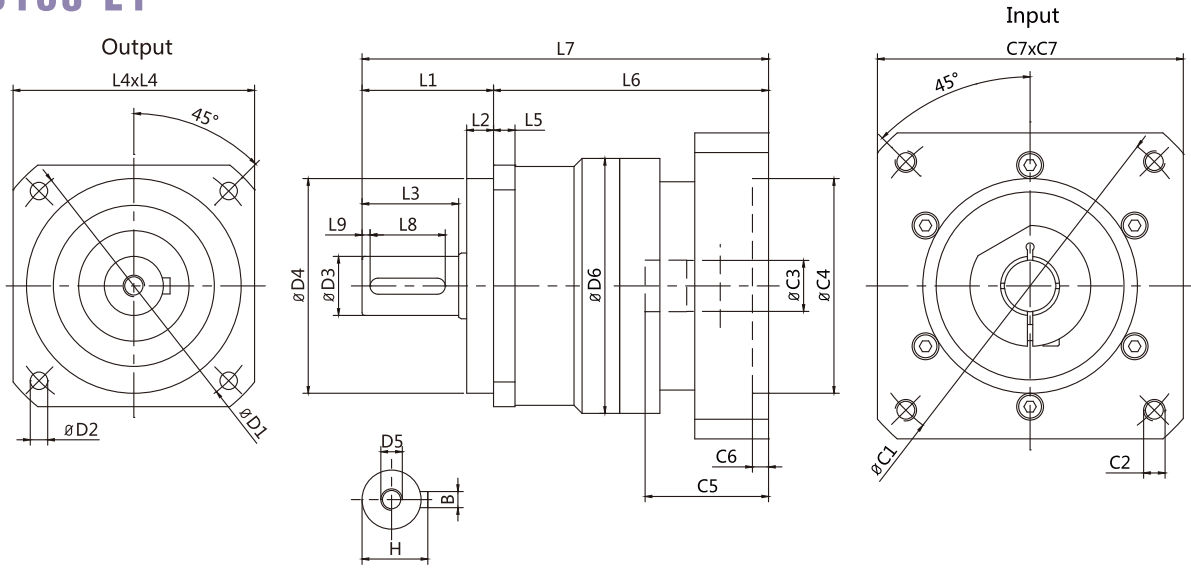
TVB140-L2



TVB140-L2																							
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7
Type I	165	11	40	130	M16	150	97	12	82	140	12	203.5	300.5	65	5	13.5	200	M12	35	114.3	81.5	8	180
Type II	165	11	40	130	M16	150	97	12	82	140	12	196	293	65	5	13.5	145	M8	24	110	74	8	130
Type III	165	11	40	130	M16	150	97	12	82	140	12	196	293	65	5	13.5	145	M8	22	110	74	8	130

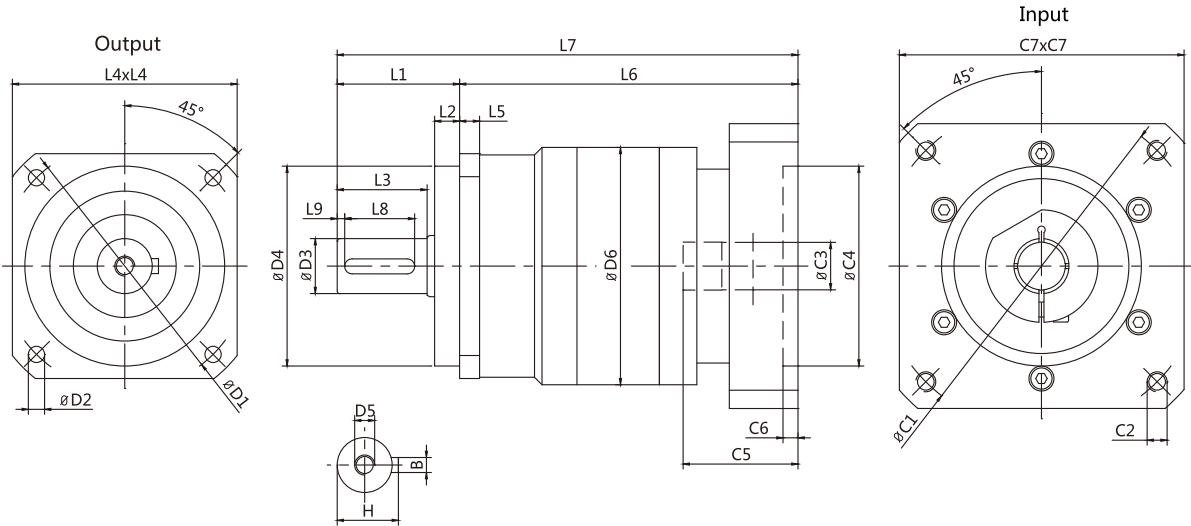
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TVB180-L1



TVB180-L1																							
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B
Type I	215	13.5	55	160	M20	200	105	20	82	180	15	176.5	281.5	70	6	200	M12	42	114.3	82.5	10	180	16

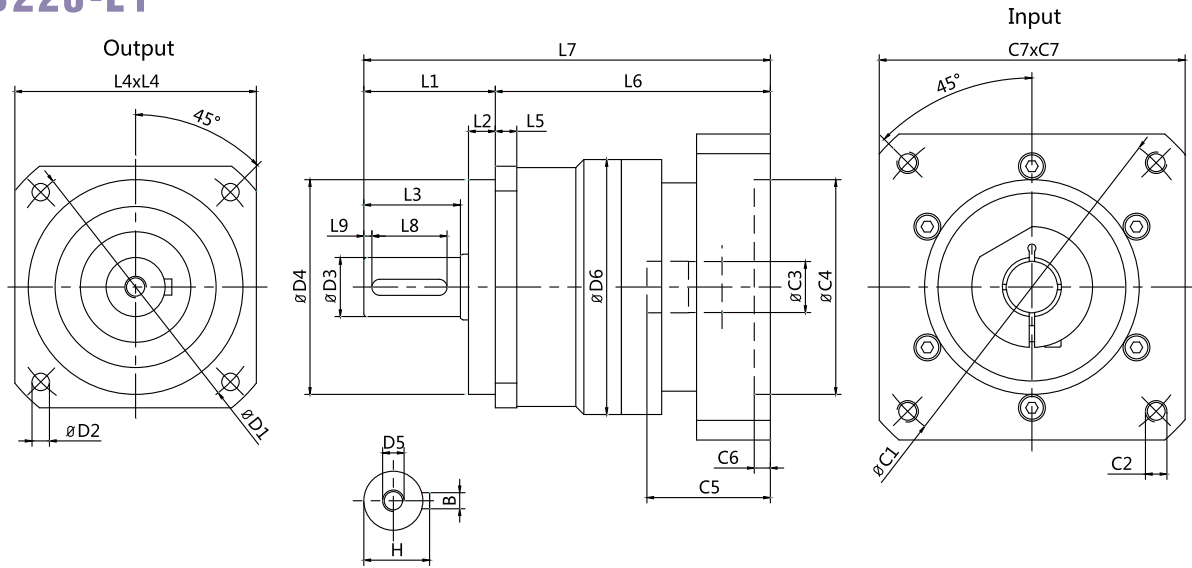
TVB180-L2



TVB180-L2																							
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B
Type I	215	13.5	55	160	M20	200	105	20	82	180	15	228.5	333.5	70	6	200	M12	42	114.3	82.5	10	180	16
Type II	215	13.5	55	160	M20	200	105	20	82	180	15	228.5	333.5	70	6	200	M12	35	114.3	82.5	10	180	16

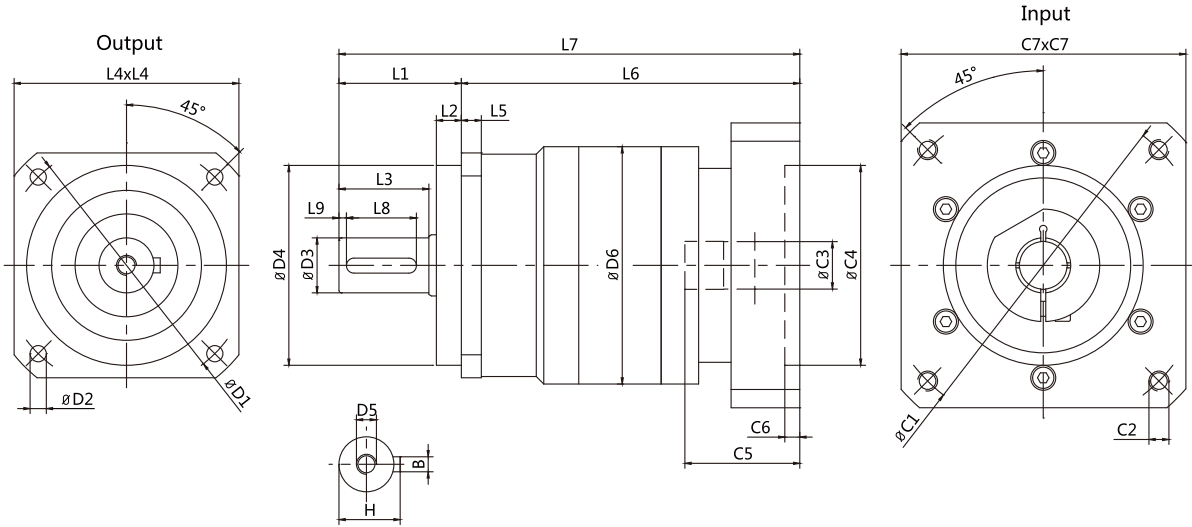
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TVB220-L1



TVB220-L1																			
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	※C1	※C2	※C3	※C4
Type I	250	17	75	180	M20	225	138	30	105	220	20	212	350	90	7	235	M12	55	200

TVB220-L2



TVB220-L2																			
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	※C1	※C2	※C3	※C4
Type I	250	17	75	180	M20	225	138	30	105	220	20	276	414	90	7	235	M12	55	200
Type II	250	17	75	180	M20	225	138	30	105	220	20	240	378	90	7	200	M12	42	114.3
Type III	250	17	75	180	M20	225	138	30	105	220	20	240	378	90	7	200	M12	35	114.3

※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TVB040

速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	14	14	20	20	20	14	14	20	20	20	20	20	20	14
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2倍额定输出扭矩 2 times of Nominal Output Torque													
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	5000													
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	8500													
扭转刚性	Torsional Rigidity	Nm/arcmin	3													
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	380													
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	190													
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)													
噪音值	Noise	dB	≤63 (输入转速=3000rpm、空载、距离1M②)													
使用温度	Operating Temp	℃	-10 ~ +90													
防护等级	Degree of Reducer Protection		IP65													
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils													
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
精密背隙 P1	Precision Backlash P1	arcmin	≤3							≤5						
标准背隙 P2	Standard Backlash P2	arcmin	≤5							≤8						
效率 η	Efficiency η	%	≥95%							≥92%						

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TVB060

速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	55	50	60	50	40	55	50	60	55	50	50	60	50	40
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque													
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	5000													
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	10000													
扭转刚性	Torsional Rigidity	Nm/arcmin	7													
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	1530													
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	630													
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)													
噪音值	Noise	dB	≤60 (输入转速=3000rpm、空载、距离1M②)													
使用温度	Operating Temp	℃	-10 ~ +90													
防护等级	Degree of Reducer Protection		IP65													
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils													
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	0.16	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
精密背隙 P1	Precision Backlash P1	arcmin	≤3							≤5						
标准背隙 P2	Standard Backlash P2	arcmin	≤5							≤8						
效率 η	Efficiency η	%	≥95%							≥92%						

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TVB090																		
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100		
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	130	140	160	140	100	130	140	160	150	140	140	160	140	100		
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque															
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	4000															
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	8000															
扭转刚性	Torsional Rigidity	Nm/arcmin	14															
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	3250															
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	1300															
使用寿命	Service Life	hr	20000（连续运转寿命减半①）															
噪音值	Noise	dB	≤60（输入转速=3000rpm、空载、距离1M②）															
使用温度	Operating Temp	℃	-10 ~ +90															
防护等级	Degree of Reducer Protection		IP65															
润滑	Lubrication		合成润滑油脂（终身润滑） Synthetic lubrication oils															
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	0.61	0.48	0.47	0.45	0.44	0.47	0.47	0.47	0.44	0.45	0.44	0.44	0.13	0.13		
精密背隙 P1	Precision Backlash P1	arcmin	≤3					≤5										
标准背隙 P2	Standard Backlash P2	arcmin	≤5					≤8										
效率 η	Efficiency η	%	≥95%					≥92%										

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TVB120																		
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100		
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	208	290	330	300	230	208	290	330	310	300	290	330	300	230		
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque															
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	4000															
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	8000															
扭转刚性	Torsional Rigidity	Nm/arcmin	25															
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	6700															
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	3000															
使用寿命	Service Life	hr	20000（连续运转寿命减半①）															
噪音值	Noise	dB	≤65（输入转速=3000rpm、空载、距离1M②）															
使用温度	Operating Temp	℃	-10 ~ +90															
防护等级	Degree of Reducer Protection		IP65															
润滑	Lubrication		合成润滑油脂（终身润滑） Synthetic lubrication oils															
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	3.25	2.74	2.71	2.62	2.57	2.71	2.71	2.71	2.57	2.62	2.57	2.57	0.44	0.44		
精密背隙 P1	Precision Backlash P1	arcmin	≤3					≤5										
标准背隙 P2	Standard Backlash P2	arcmin	≤5					≤8										
效率 η	Efficiency η	%	≥95%					≥92%										

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TVB140																		
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100		
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	342	542	650	550	450	342	542	650	600	550	542	650	550	450		
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque															
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	3000															
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	6000															
扭转刚性	Torsional Rigidity	Nm/arcmin	50															
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	9400															
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	4700															
使用寿命	Service Life	hr	20000（连续运转寿命减半①）															
噪音值	Noise	dB	≤67（输入转速=3000rpm、空载、距离1M②）															
使用温度	Operating Temp	℃	-10 ~ +90															
防护等级	Degree of Reducer Protection		IP65															
润滑	Lubrication		合成润滑油脂（终身润滑） Synthetic lubrication oils															
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	9.21	7.54	7.42	7.14	7.03	7.42	7.42	7.42	7.03	7.14	7.03	7.03	2.57	2.57		
精密背隙 P1	Precision Backlash P1	arcmin	≤3					≤5										
标准背隙 P2	Standard Backlash P2	arcmin	≤5					≤8										
效率 η	Efficiency η	%	≥95%					≥92%										

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TVB180																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	588	1050	1200	1100	900	588	1050	1200	1100	1100	1050	1200	1100	900	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	3000														
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	6000														
扭转刚性	Torsional Rigidity	Nm/arcmin	145														
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	14500														
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	7250														
使用寿命	Service Life	hr	20000（连续运转寿命减半①）														
噪音值	Noise	dB	≤70（输入转速=3000rpm、空载、距离1M②）														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂（终身润滑） Synthetic lubrication oils														
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	29	23.7	23.3	22.5	22.5	23.3	23.3	23.3	22.5	22.5	22.5	22.5	7.03	7.03	
精密背隙 P1	Precision Backlash P1	arcmin	≤3						≤5								
标准背隙 P2	Standard Backlash P2	arcmin	≤5						≤8								
效率 η	Efficiency η	%	≥95%						≥92%								

TVB220																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	1140	1700	2000	1800	1500	1140	1700	2000	1900	1800	1700	2000	1800	1500	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	2000														
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	4000														
扭转刚性	Torsional Rigidity	Nm/arcmin	225														
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	50000														
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	35000														
使用寿命	Service Life	hr	20000（连续运转寿命减半①）														
噪音值	Noise	dB	≤72（输入转速=3000rpm、空载、距离1M②）														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂（终身润滑） Synthetic lubrication oils														
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	69.6	54.4	53.3	51	50.6	53.3	53.3	53.3	50.6	51	50.6	22.5	22.5	22.5	
精密背隙 P1	Precision Backlash P1	arcmin	≤3					≤5									
标准背隙 P2	Standard Backlash P2	arcmin	≤5					≤8									
效率 η	Efficiency η	%	≥95%					≥92%									

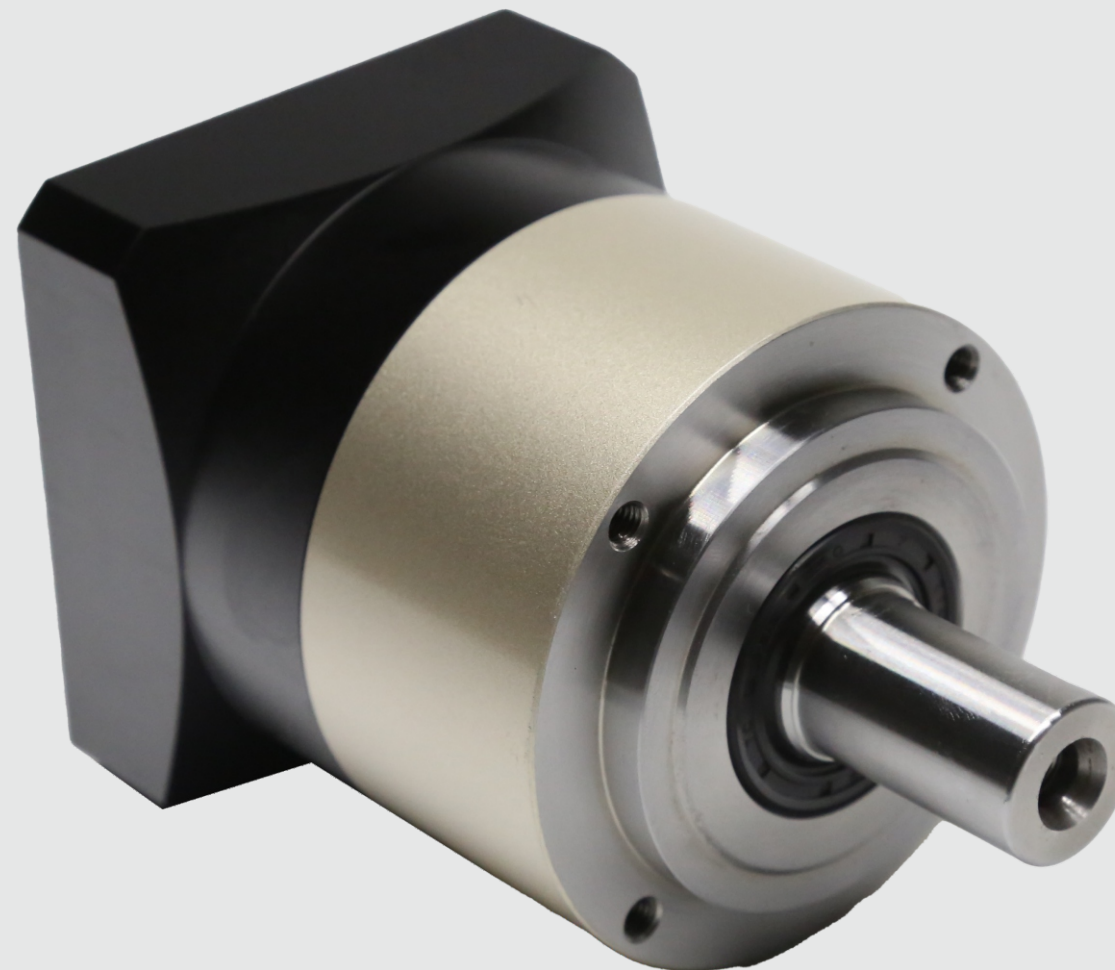
① Half-life under continuous operation mode.

② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

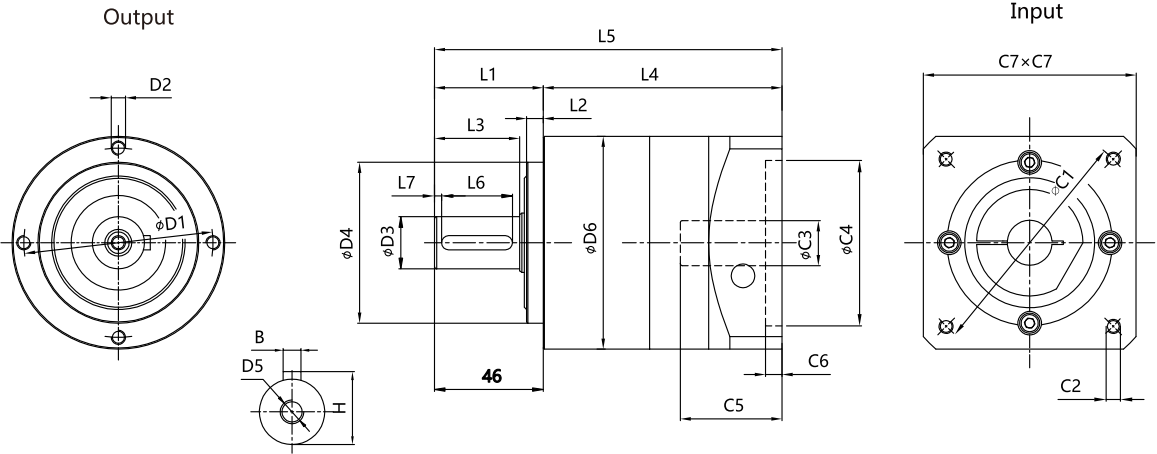
TAE Series

- **低噪音**：采用螺旋齿轮设计，实现了减速机的顺畅、安静运转。
- **高精度**：背隙可达3弧分以内，定位精确。
- **高刚性、高扭矩**：输出轴采用大尺寸、大跨距式双支撑轴承设计，大大提高了减速机刚性和扭矩。
- **高效率**：单段可达95%以上，双段可达92%以上。
- **免维护**：油脂磨损低，可终身润滑。
- **密封效果好**：润滑油脂具有高粘度、不易分离的特性，并采用IP65防护等级，确保无润滑油脂泄漏。
- **自由安装**：可任意安装减速机。
- **适用性广**：适用于任意型式伺服电机。

- **Low Noise**: The use of helical gear design, to achieve a smooth, quiet operation of the reducer.
- **High Precision**: Backlash 3 arcmin or less, accurate positioning.
- **High Rigidity, High Torque**: The output shaft used large size, large span double support bearing design, which improves the rigidity and torque of the reducer.
- **High Efficiency**: 1-Stage up to 95% or more, 2-Stage up to 92% or more.
- **Maintenance-Free**: Low grease wear, can be lifetime lubrication.
- **Sealing Effect Is Good**: Lubricating grease with high viscosity, not easy to separate the characteristics, ip65 protection class to ensure that no grease leakage.
- **Installation Unrestrained**: Can be installed arbitrarily.
- **Wide Applicability**: Applicable to any type of servo motor.

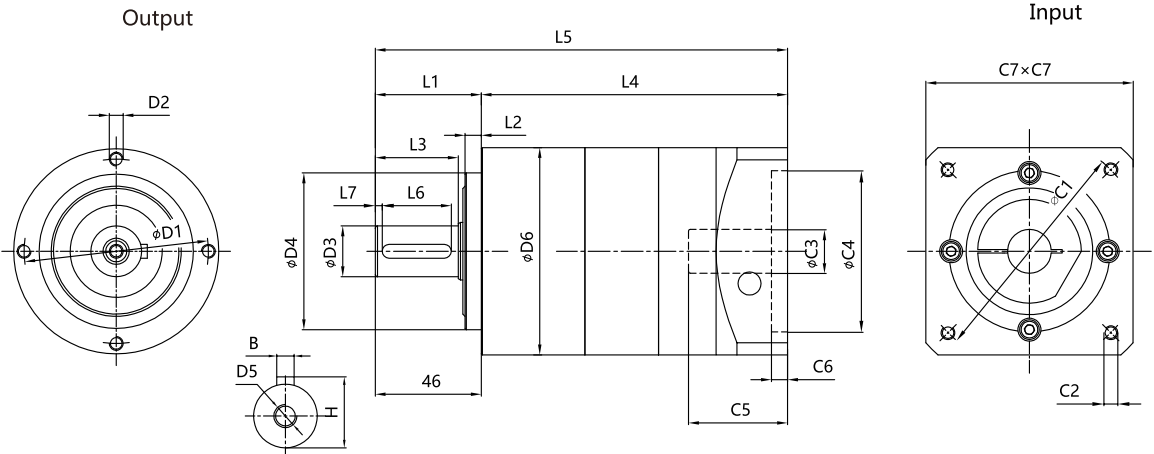


TAE060-L1



TAE060-L1																						
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	62	M5	16	52	M5	60	36	6	28.5	77	113	20	3	70	M5	14	50	32.5	5.5	60	5	18

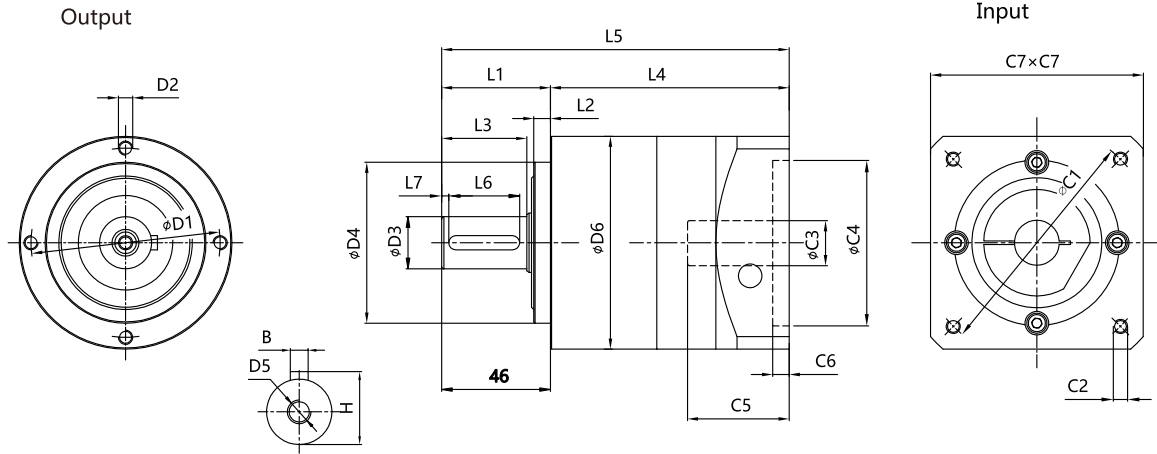
TAE060-L2



TAE060-L2																						
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	62	M5	16	52	M5	60	36	6	28.5	99	128	20	3	70	M4	14	50	32.5	5.5	60	5	18

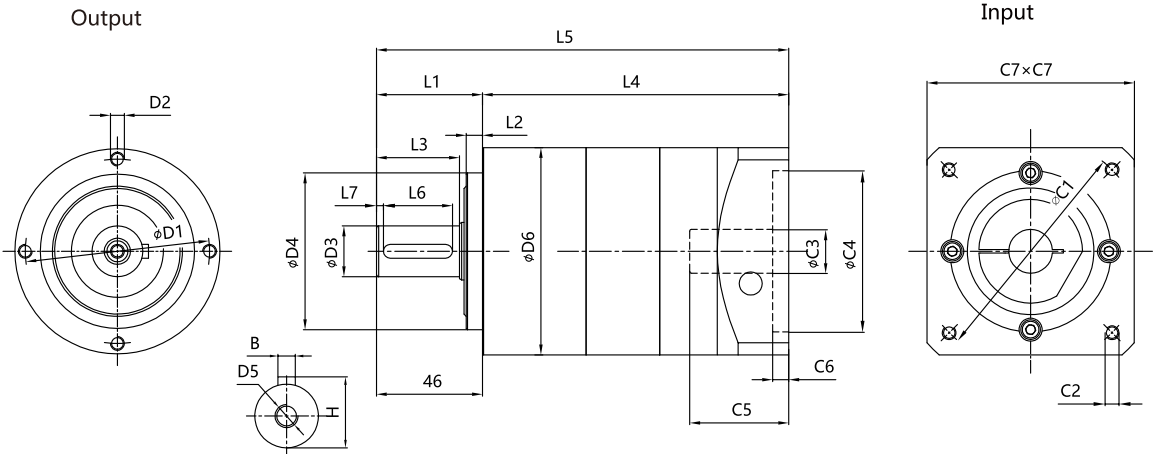
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAE090-L1



TAE090-L1																						
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	80	M6	22	68	M8	89.2	46	7	36	101	147	30	3	90	M5	19	70	47	6	90	6	24.5
TypeII	80	M6	22	68	M8	89.2	46	7	36.5	122	162.5	30	3	145	M8	19	110	61.5	10	130	6	24.5
TypeIII	80	M6	22	68	M8	89.2	46	7	36.5	122	162.5	30	3	145	M8	22	110	61.5	10	130	6	24.5
TypeIV	80	M6	22	68	M8	89.2	46	7	36	122	160	30	3	145	M8	24	110	61.5	10	130	6	24.5

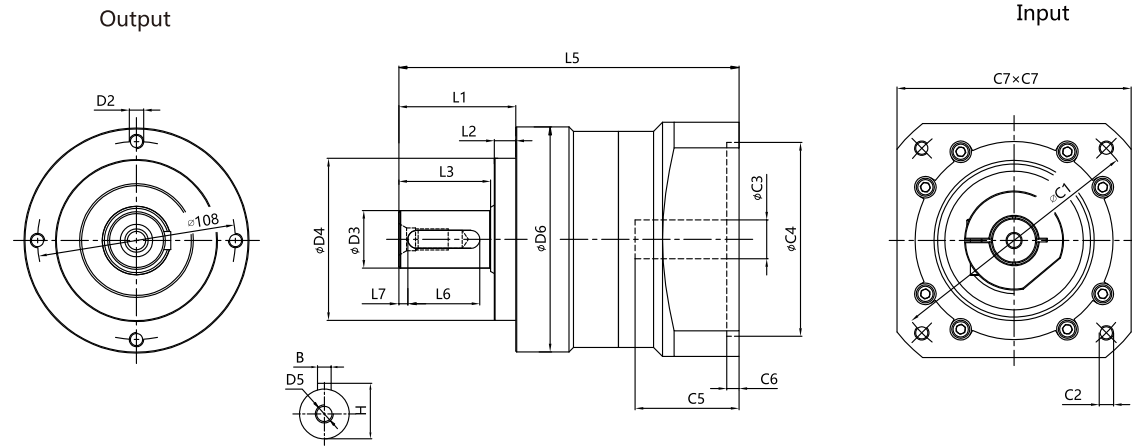
TAE090-L2



TAE090-L2																						
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	70	M6	22	60	M8	89.2	46	3	36.5	135	179	30	3	90	M5	19	70	47	6	90	6	24.5
TypeII	70	M6	22	60	M8	90	46	7	36.5	120	179	30	3	70	M4	14	50	32.5	5.5	60	6	24.5

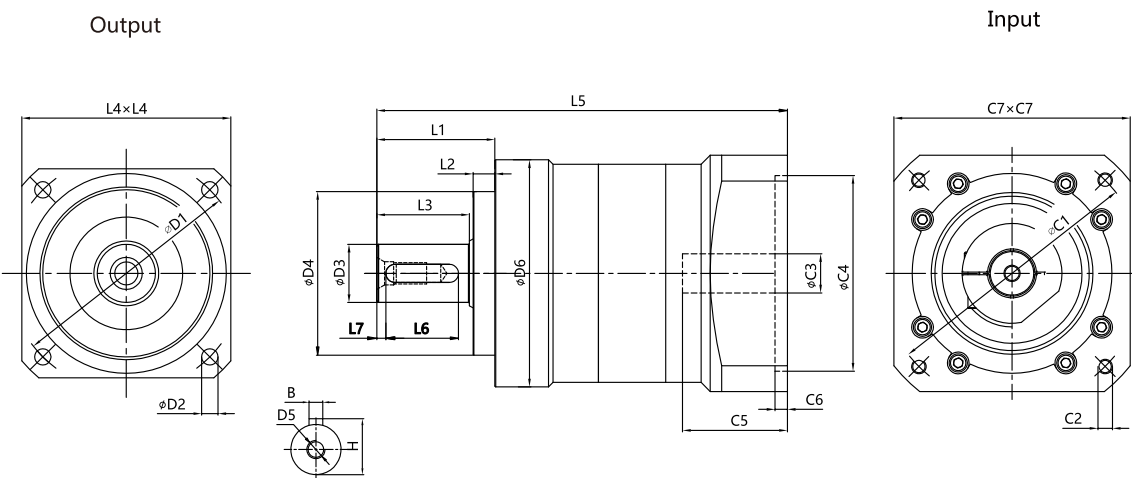
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAE120-L1



TAE120-L1																						
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	✕C1	✕C2	✕C3	✕C4	✕C5	✕C6	✕C7	B	H
Type I	110	M8	32	90	M12	125	65	4	50	124	189	40	5	145	M8	22	110	62.5	12	130	10	35
TypeII	110	M8	32	90	M12	125	65	4	50	124	189	40	5	145	M8	24	110	62.5	8	130	10	35

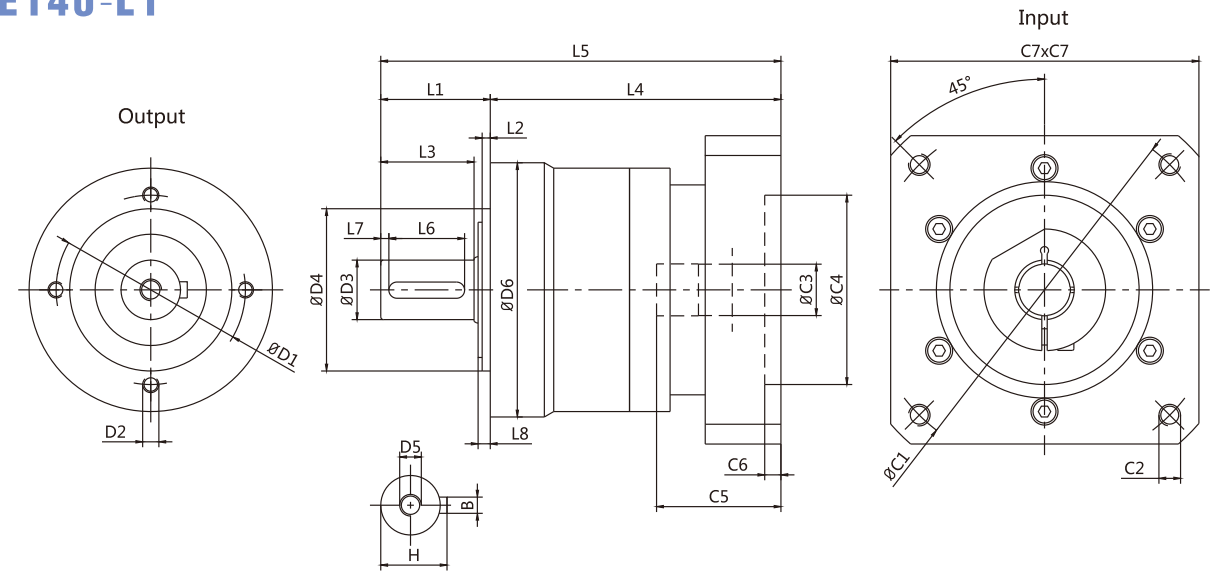
TAE120-L2



TAE120-L2																						
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	✕C1	✕C2	✕C3	✕C4	✕C5	✕C6	✕C7	B	H
Type I	110	M8	32	90	M12	125	65	12	50	161	228	40	5	145	M8	22	110	62.5	12	130	8	28
TypeII	110	M8	32	90	M12	125	65	12	50	161	228	40	5	145	M8	24	110	62.5	8	130	8	28
TypeIII	110	M8	32	90	M12	125	65	12	50	154.5	209.5	40	5	90	M5	19	70	47.5	6	90	8	28

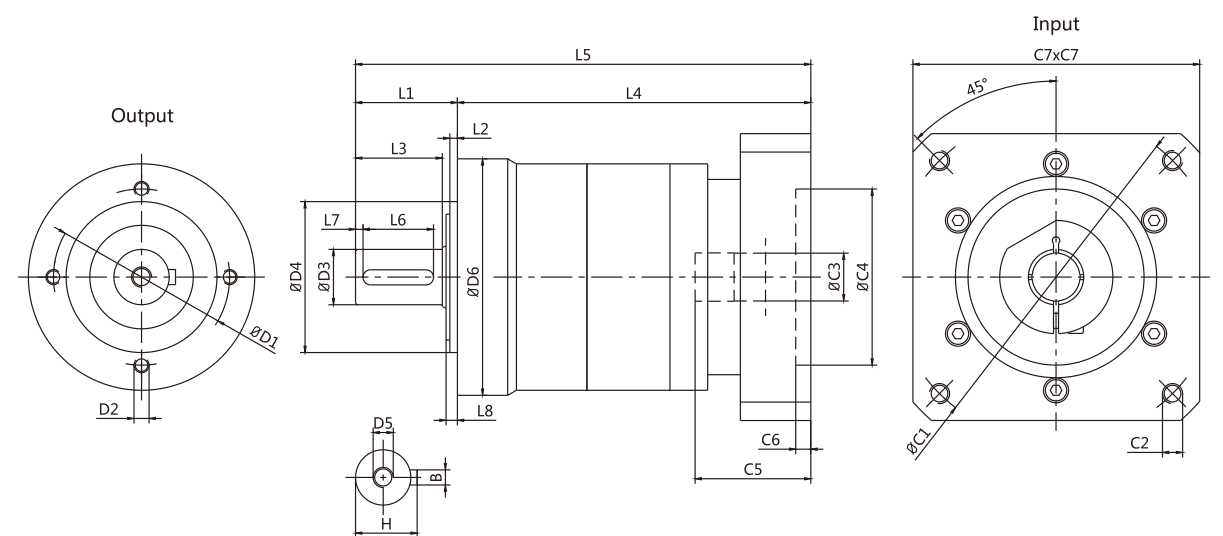
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAE140-L1



TAE140-L1																							
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	✕C1	✕C2	✕C3	✕C4	✕C5	✕C6	✕C7	B	H
Type I	120	M10	40	120	M16	155	97	12	82	160	257	65	5	13.5	200	M12	35	114.3	81.5	8	180	12	43

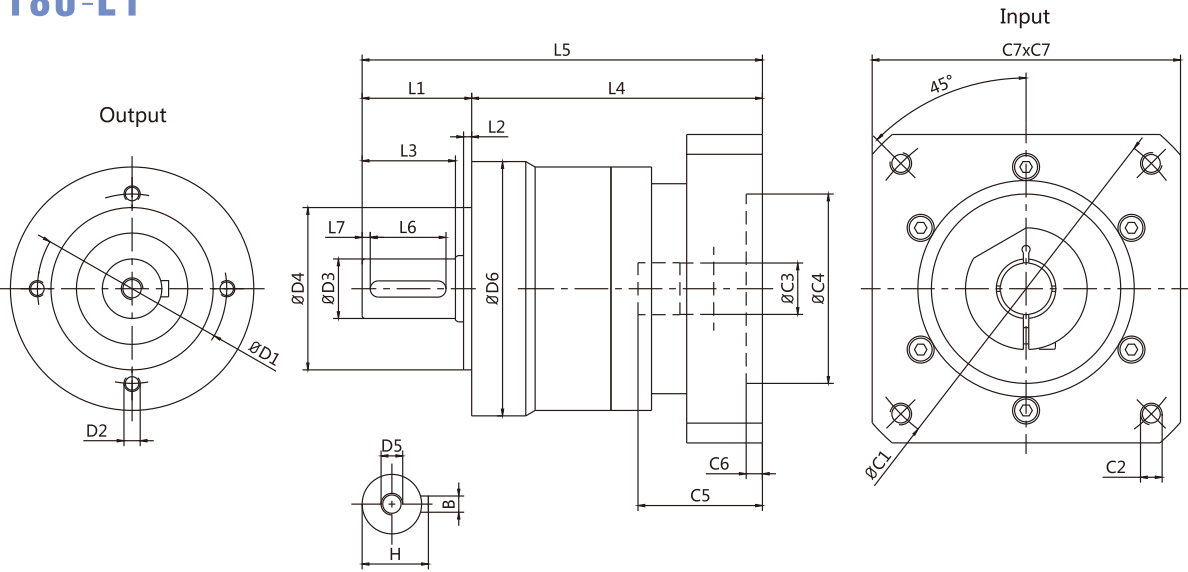
TAE140-L2



TAE140-L2																							
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	✕C1	✕C2	✕C3	✕C4	✕C5	✕C6	✕C7	^B	H
Type I	120	M10	40	120	M16	155	97	12	82	204	301	65	5	13.5	200	M12	35	114.3	81.5	8	180	12	43

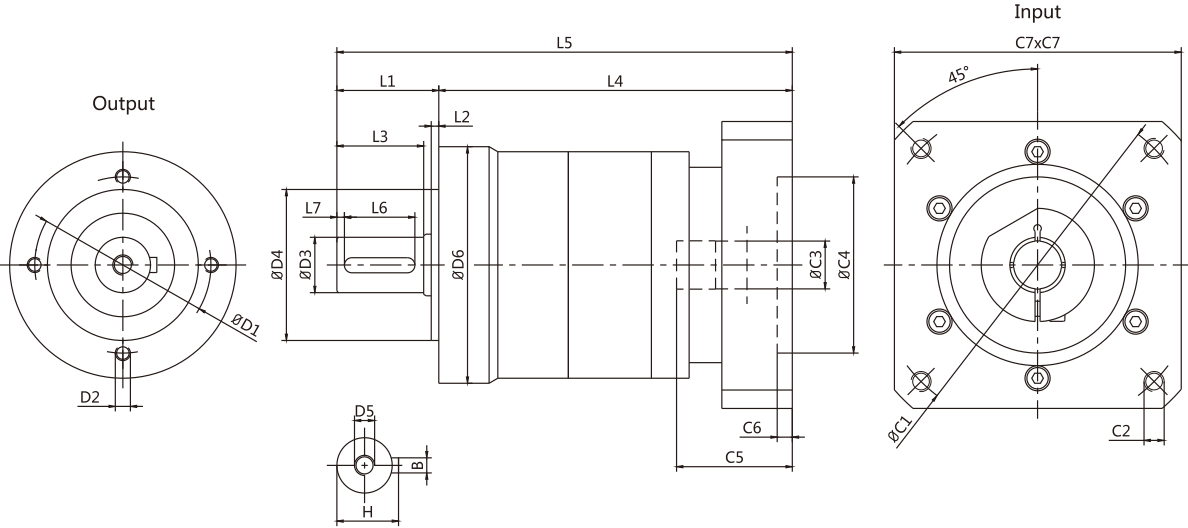
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAE180-L1



TAE180-L1																				
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3	※C4	※C5	※C6	※C7
Type I	184	M12	55	160	M20	205	100	15	82	181.5	281.5	70	6	200	M12	42	114.3	82.5	10	180

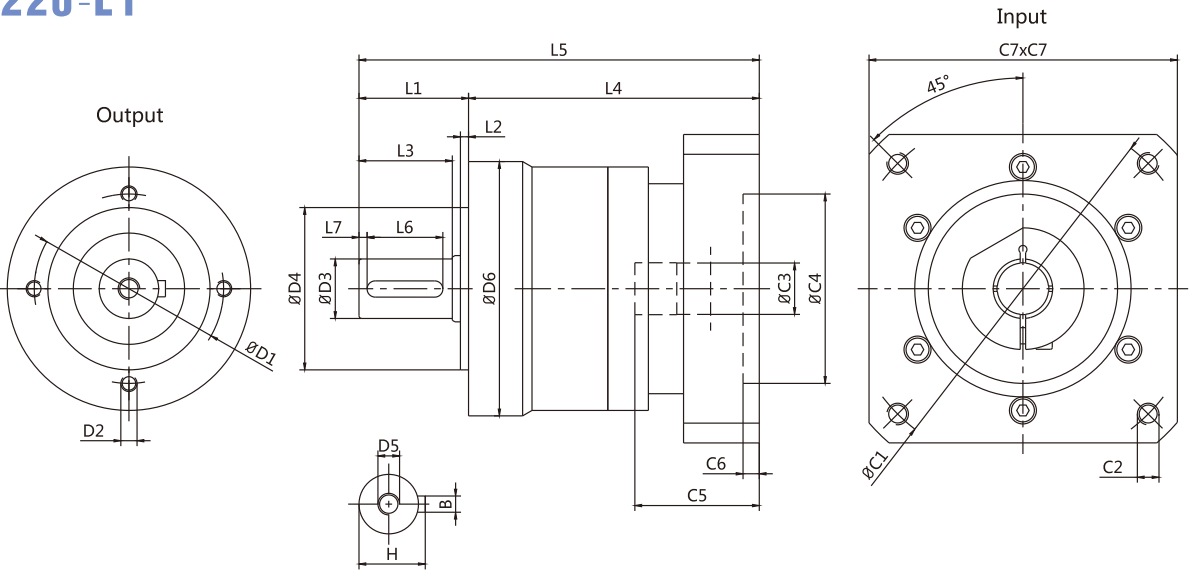
TAE180-L2



TAE180-L2																				
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3	※C4	※C5	※C6	※C7
Type I	184	M12	55	160	M20	205	100	15	82	233.5	333.5	70	6	200	M12	42	114.3	82.5	10	180
Type II	184	M12	55	160	M20	205	100	15	82	233.5	333.5	70	6	200	M12	35	114.3	82.5	10	180

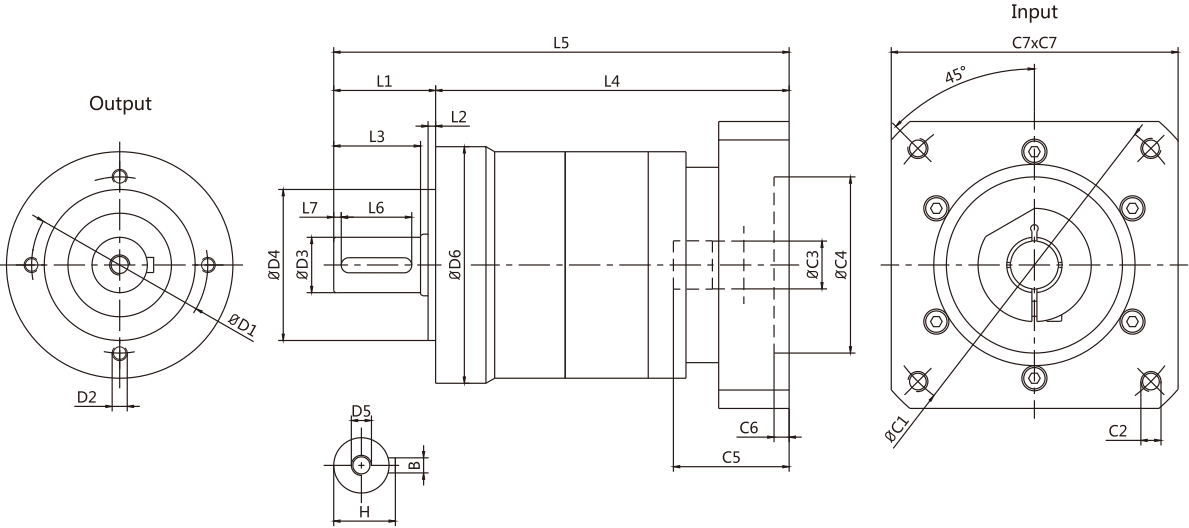
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAE220-L1



TAE220-L1																				
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3	※C4	※C5	※C6	※C7
Type I	210	M16	75	180	M20	235	126	18	105	224	350	90	7	235	M12	55	200	117.5	10	225

TAE220-L2



TAE220-L2																				
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3	※C4	※C5	※C6	※C7
Type I	210	M16	75	180	M20	235	126	18	105	288	414	90	7	235	M12	55	200	117.5	10	225
Type II	210	M16	75	180	M20	235	126	18	105	252	378	90	7	200	M12	42	114.3	82.5	10	180
Type III	210	M16	75	180	M20	235	126	18	105	252	378	90	7	200	M12	35	114.3	82.5	10	180

※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAE060																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T_{2N}	Nominal Output Torque T_{2N}	Nm	35	40	45	40	30	35	45	45	40	40	40	45	40	30	
急停扭矩 T_{2NOT}	Emergency Stop Torque T_{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n_{1N}	Nominal Input Speed n_{1N}	rpm	5000														
最大输入转速 n_{1B}	Max. Input Speed n_{1B}	rpm	10000														
扭转刚性	Torsional Rigidity	Nm/arcmin	5														
容许径向力 F_{2rB}	Max. Radial Load F_{2rB}	N	1300														
容许轴向力 F_{2aB}	Max. Axial Load F_{2aB}	N	550														
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)														
噪音值	Noise	dB	≤60 (输入转速=3000rpm、空载、距离1M②)														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils														
转动惯量 J_1	Mass Moments of Inertia J_1	kg·cm ²	0.16	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	
精密背隙 P1	Precision Backlash P1	arcmin	≤3						≤5								
标准背隙 P2	Standard Backlash P2	arcmin	≤5						≤5								
效率 η	Efficiency η	%	≥95%						≥92%								

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TAE090																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T_{2N}	Nominal Output Torque T_{2N}	Nm	100	110	125	110	80	100	110	125	110	125	110	125	110	80	
急停扭矩 T_{2NOT}	Emergency Stop Torque T_{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n_{1N}	Nominal Input Speed n_{1N}	rpm	4000														
最大输入转速 n_{1B}	Max. Input Speed n_{1B}	rpm	8000														
扭转刚性	Torsional Rigidity	Nm/arcmin	11														
容许径向力 F_{2rB}	Max. Radial Load F_{2rB}	N	2800														
容许轴向力 F_{2aB}	Max. Axial Load F_{2aB}	N	1000														
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)														
噪音值	Noise	dB	≤60 (输入转速=3000rpm、空载、距离1M②)														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils														
转动惯量 J_1	Mass Moments of Inertia J_1	kg·cm ²	0.61	0.48	0.47	0.45	0.44	0.47	0.47	0.47	0.44	0.45	0.44	0.44	0.13	0.13	
精密背隙 P1	Precision Backlash P1	arcmin	≤3							≤5							
标准背隙 P2	Standard Backlash P2	arcmin	≤5							≤8							
效率 η	Efficiency η	%	≥95%							≥92%							

- ① Half-life under continuous operation mode.
② Reducer under no-load mode, input speed is 3000, the value which Noise Measurement machine get at one meter away position.

TAE120																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T_{2N}	Nominal Output Torque T_{2N}	Nm	170	220	250	200	180	170	220	250	220	200	220	250	200	180	
急停扭矩 T_{2NOT}	Emergency Stop Torque T_{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n_{1N}	Nominal Input Speed n_{1N}	rpm	4000														
最大输入转速 n_{1B}	Max. Input Speed n_{1B}	rpm	8000														
扭转刚性	Torsional Rigidity	Nm/arcmin	18														
容许径向力 F_{2rB}	Max. Radial Load F_{2rB}	N	5200														
容许轴向力 F_{2aB}	Max. Axial Load F_{2aB}	N	2300														
使用寿命	Service Life	hr	20000（连续运转寿命减半①）														
噪音值	Noise	dB	≤65（输入转速=3000rpm、空载、距离1M②）														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂（终身润滑） Synthetic lubrication oils														
转动惯量 J_1	Mass Moments of Inertia J_1	kg·cm ²	3.25	2.74	2.71	2.62	2.57	2.71	2.71	2.71	2.57	2.62	2.57	2.57	0.44	0.44	
精密背隙 P1	Precision Backlash P1	arcmin	≤3							≤5							
标准背隙 P2	Standard Backlash P2	arcmin	≤5							≤8							
效率 η	Efficiency η	%	≥95%							≥92%							

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TAE140																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T_{2N}	Nominal Output Torque T_{2N}	Nm	342	542	650	550	450	342	542	650	600	550	542	650	550	450	
急停扭矩 T_{2NOT}	Emergency Stop Torque T_{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n_{1N}	Nominal Input Speed n_{1N}	rpm	3000														
最大输入转速 n_{1B}	Max. Input Speed n_{1B}	rpm	6000														
扭转刚性	Torsional Rigidity	Nm/arcmin	50														
容许径向力 F_{2rB}	Max. Radial Load F_{2rB}	N	9400														
容许轴向力 F_{2aB}	Max. Axial Load F_{2aB}	N	4700														
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)														
噪音值	Noise	dB	≤67 (输入转速=3000rpm、空载、距离1M②)														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils														
转动惯量 J_1	Mass Moments of Inertia J_1	kg·cm ²	9.21	7.54	7.42	7.14	7.03	7.42	7.42	7.42	7.03	7.14	7.03	7.03	2.57	2.57	
精密背隙 P1	Precision Backlash P1	arcmin	≤3						≤5								
标准背隙 P2	Standard Backlash P2	arcmin	≤5						≤8								
效率 η	Efficiency η	%	≥95%						≥92%								

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TAE180																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	588	1050	1200	1100	900	588	1050	1200	1100	1100	1050	1200	1100	900	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	3000														
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	6000														
扭转刚性	Torsional Rigidity	Nm/arcmin	145														
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	14500														
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	7250														
使用寿命	Service Life	hr	20000（连续运转寿命减半①）														
噪音值	Noise	dB	≤70（输入转速=3000rpm、空载、距离1M②）														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂（终身润滑） Synthetic lubrication oils														
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	29	23.7	23.3	22.5	22.5	23.3	23.3	23.3	22.5	22.5	22.5	22.5	7.03	7.03	
精密背隙 P1	Precision Backlash P1	arcmin	≤3					≤5									
标准背隙 P2	Standard Backlash P2	arcmin	≤5					≤8									
效率 η	Efficiency η	%	≥95%					≥92%									

① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

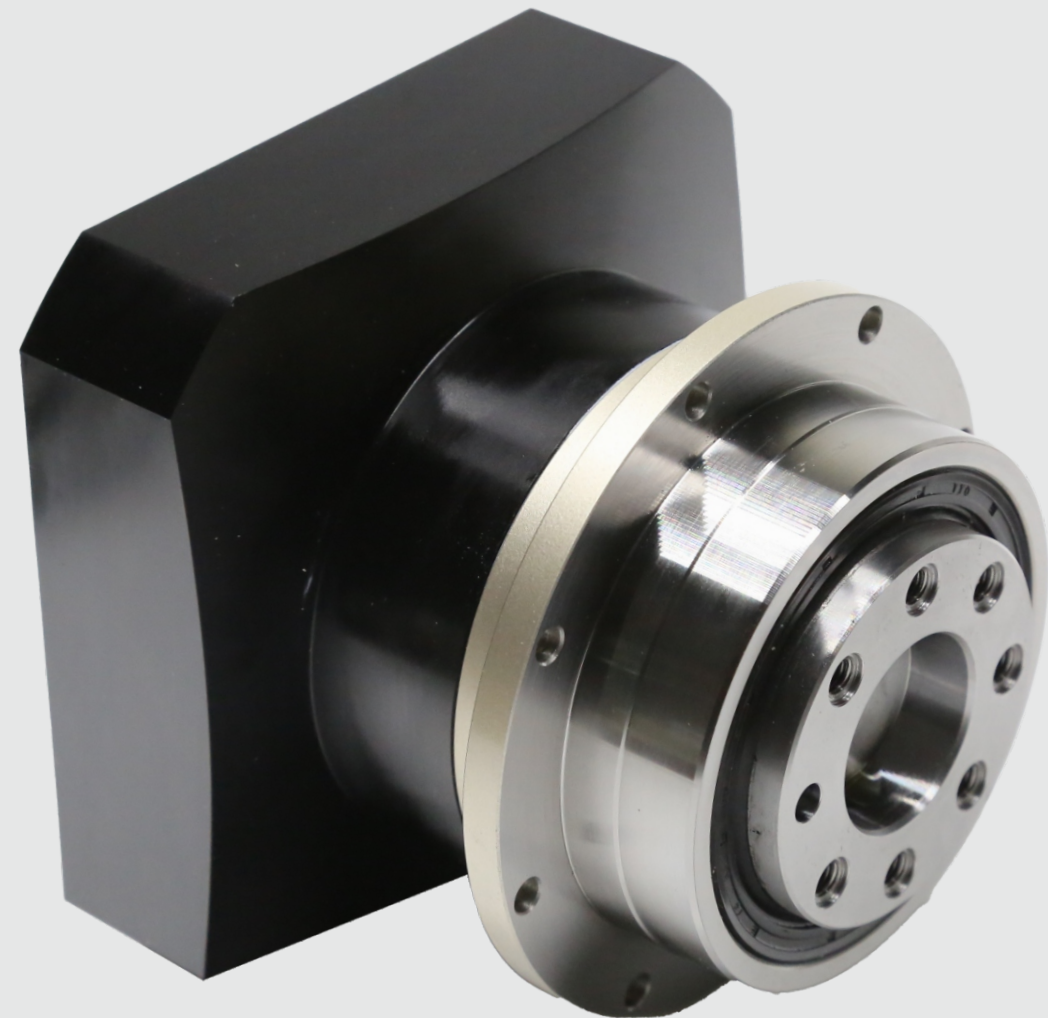
TAE220																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	1140	1700	2000	1800	1500	1140	1700	2000	1900	1800	1700	2000	1800	1500	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	2000														
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	4000														
扭转刚性	Torsional Rigidity	Nm/arcmin	225														
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	50000														
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	35000														
使用寿命	Service Life	hr	20000（连续运转寿命减半①）														
噪音值	Noise	dB	≤72（输入转速=3000rpm、空载、距离1M②）														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂（终身润滑） Synthetic lubrication oils														
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	69.6	54.4	53.3	51	50.6	53.3	53.3	53.3	50.6	51	50.6	22.5	22.5	22.5	
精密背隙 P1	Precision Backlash P1	arcmin	≤3					≤5									
标准背隙 P2	Standard Backlash P2	arcmin	≤5					≤8									
效率 η	Efficiency η	%	≥95%					≥92%									

① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

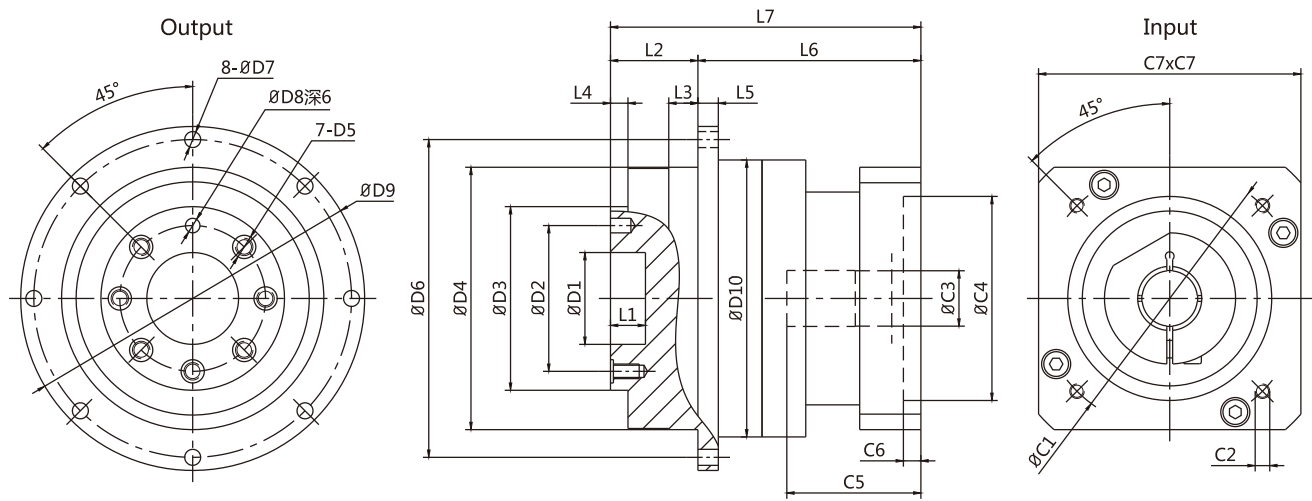
TAD Series

- **低噪音**：采用螺旋齿轮设计，实现了减速机的顺畅、安静运转。
- **高精度**：背隙可达3弧分以内，定位精确。
- **高刚性、高负载**：法兰盘式输出，并采用跨距式双支撑角接触球轴承设计，大大提高了减速机刚性和负载能力。
- **高效率**：单段可达95%以上，双段可达92%以上。
- **免维护**：油脂磨耗低，可终身润滑。
- **密封效果好**：润滑油脂具有高粘度、不易分离的特性，并采用IP65防护等级，确保无润滑油脂泄漏。
- **自由安装**：可任意安装减速机。
- **适用性广**：适用于任意型式伺服电机。

- **Low Noise**: The use of helical gear design, to achieve a smooth, quiet operation of the reducer.
- **High Precision**: Backlash 3 arcmin or less, accurate positioning.
- **High Rigidity, High Load**: Flange-type output, and the use of large span double support angular contact ball bearings design, which improves the rigidity and load capacity of the reducer.
- **High Efficiency**: 1-Stage up to 95% or more, 2-Stage up to 92% or more.
- **Maintenance-Free**: Low grease wear, can be lifetime lubrication.
- **Sealing Effect Is Good**: Lubricating grease with high viscosity, not easy to separate the characteristics, ip65 protection class to ensure that no grease leakage.
- **Installation Unrestrained**: Can be installed arbitrarily.
- **Wide Applicability**: Applicable to any type of servo motor.

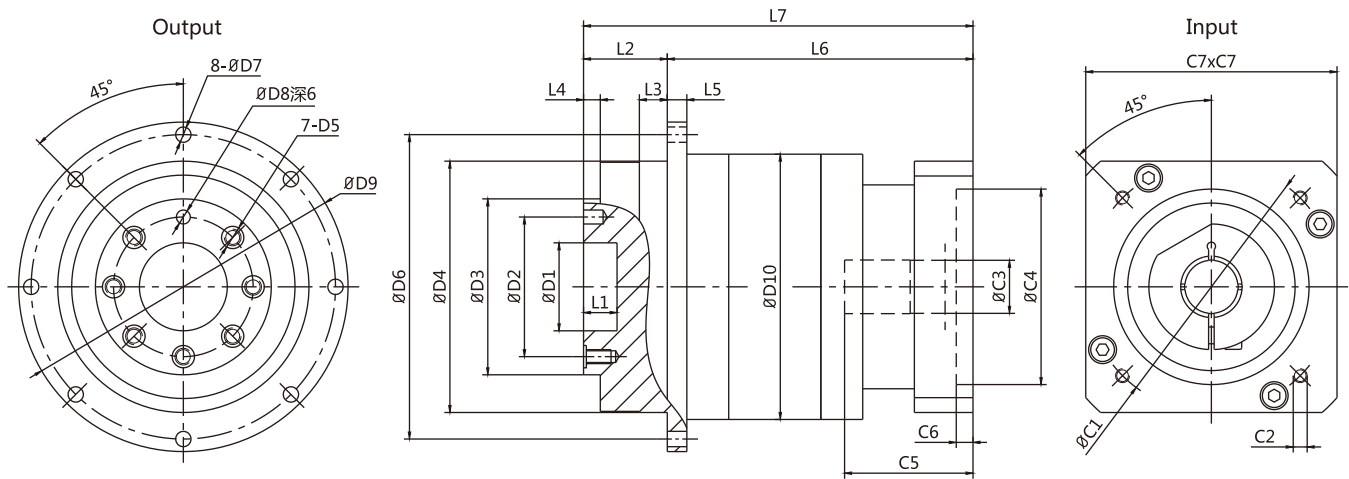


TAD060-L1



TAD060-L1																			
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	※C1	※C2
Type I	20	31.5	40	64	M5	79	4.5	5	86	70	8	19.5	8	3	4	64.5	84	70	M4
Type II	20	31.5	40	64	M5	79	4.5	5	86	70	8	19.5	8	3	4	81	100.5	90	M5

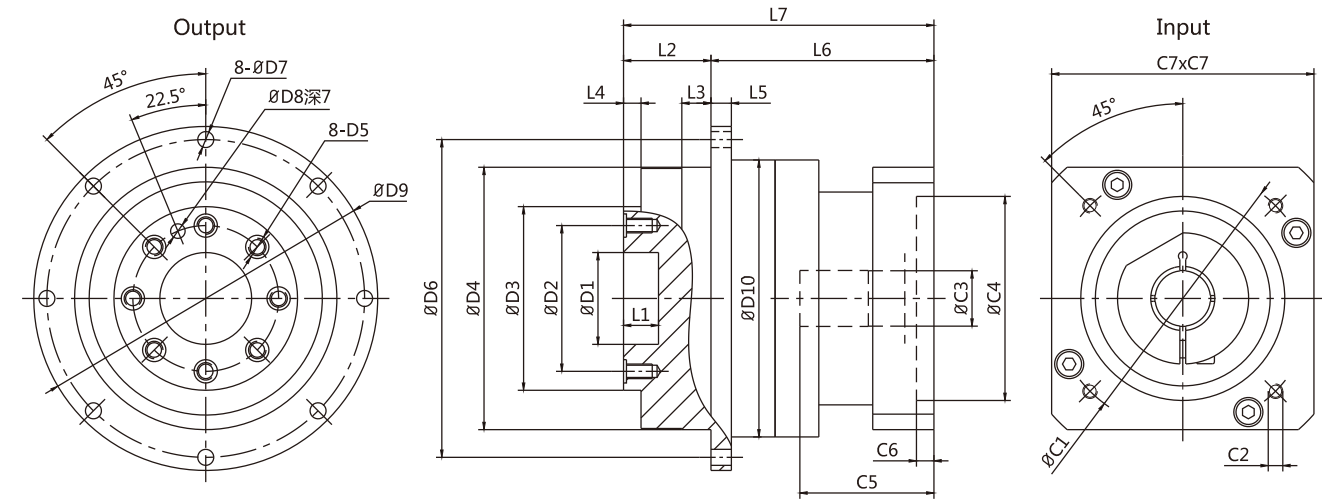
TAD060-L2



TAD060-L2																			
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	※C1	※C2
Type I	20	31.5	40	64	M5	79	4.5	5	86	70	8	19.5	8	3	4	84.5	104	70	M4
Type II	20	31.5	40	64	M5	79	4.5	5	86	70	8	19.5	8	3	4	84.5	104	70	M4

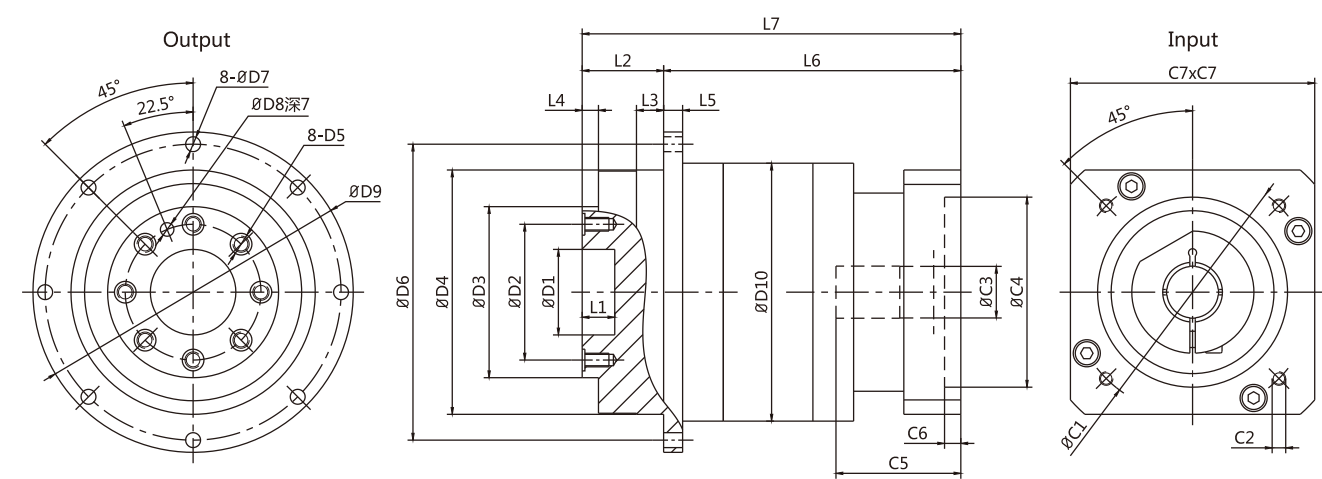
※Dimension can be customized according to the motor, if necessary, please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAD090-L1



TAD090-L1																			
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	※C1	※C2
Type I	31.5	50	63	90	M6	109	5.5	6	118	95	12	30	10	6	7	76.5	106.5	90	M5
Type II	31.5	50	63	90	M6	109	5.5	6	118	95	12	30	10	6	7	92.5	122.5	145	M8
Type III	31.5	50	63	90	M6	109	5.5	6	118	95	12	30	10	6	7	92.5	122.5	145	M8
Type IV	31.5	50	63	90	M6	109	5.5	6	118	95	12	30	10	6	7	92.5	122.5	145	M8

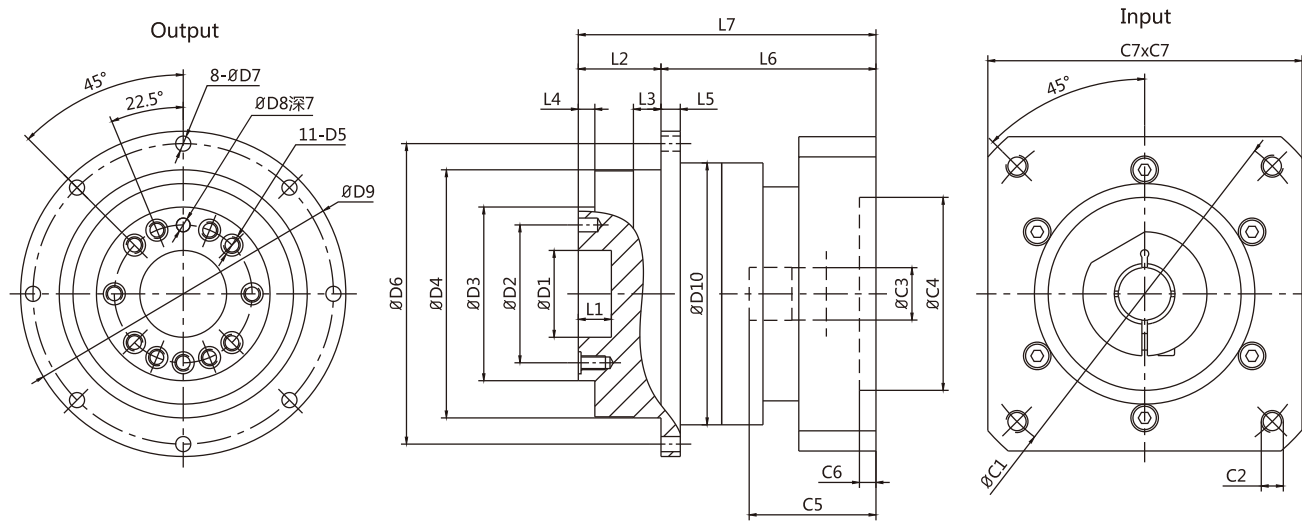
TAD090-L2



TAD090-L2																			
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	※C1	※C2
Type I	31.5	50	63	90	M6	109	5.5	6	118	95	12	30	10	6	7	104.5	134.5	90	M5
Type II	31.5	50	63	90	M6	109	5.5	6	118	95	12	30	10	6	7	92	122	70	M4

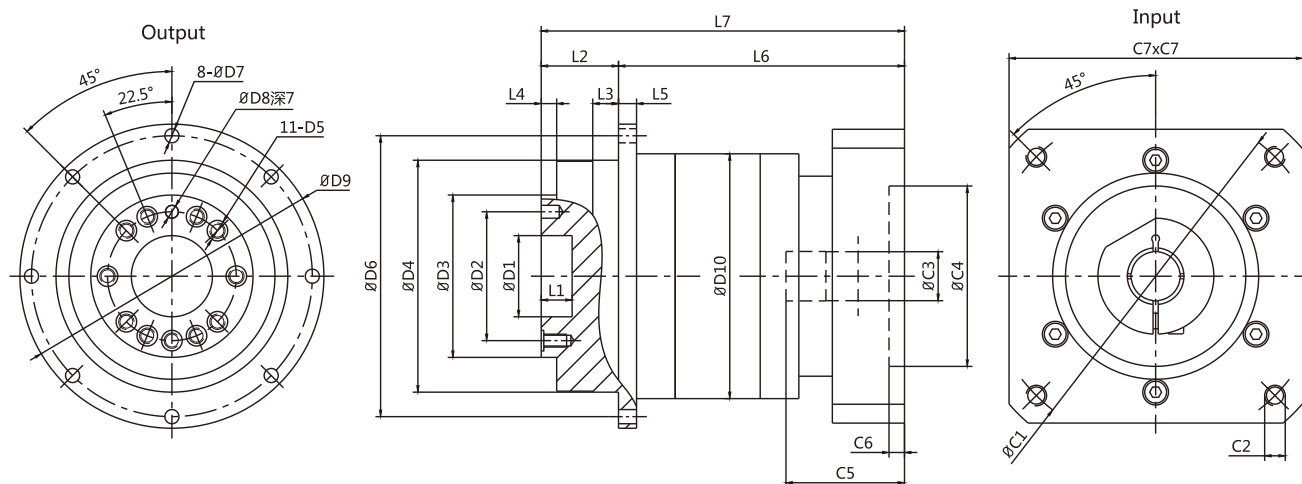
※Dimension can be customized according to the motor, if necessary, please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAD120-L1



TAD120-L1																								
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3	※C4	※C5	※C6	※C7
Type I	40	63	80	110	M6	135	5.5	6	145	115	13	29	8	7	8	117	146	145	M8	22	110	67	8	130
TypeⅡ	40	63	80	110	M6	135	5.5	6	145	115	13	29	8	7	8	117	146	145	M8	24	110	67	8	130

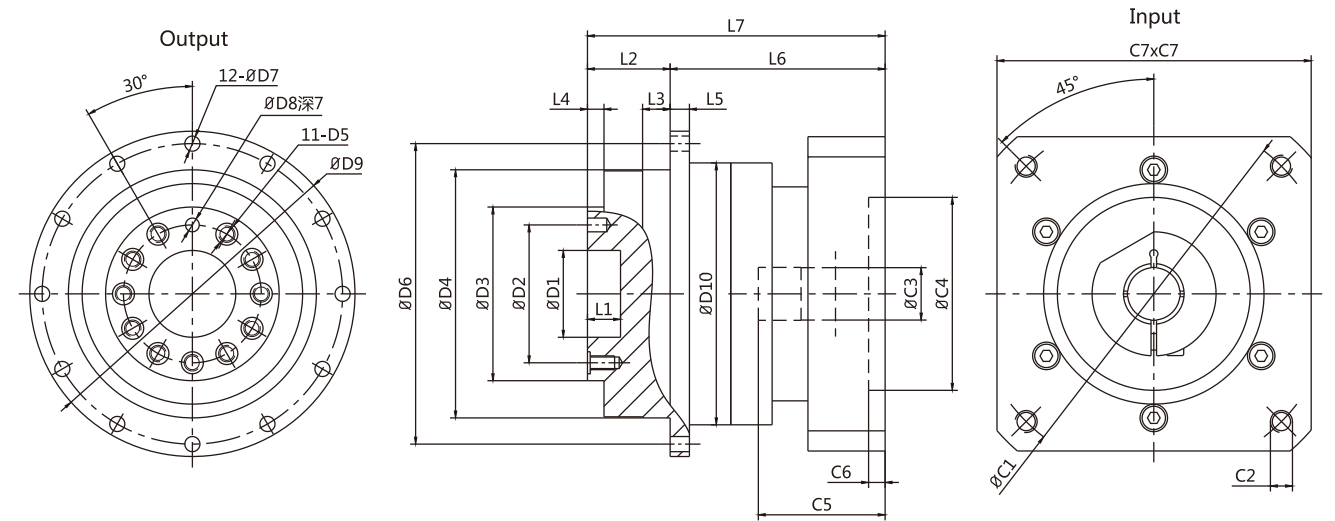
TAD120-L2



TAD120-L2																								
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	✖C1	✖C2	✖C3	✖C4	✖C5	✖C6	✖C7
Type I	40	63	80	110	M6	135	5.5	6	145	115	13	29	8	7	8	148	177	145	M8	22	110	67	8	130
TypeII	40	63	80	110	M6	135	5.5	6	145	115	13	29	8	7	8	148	177	145	M8	24	110	67	8	130
TypeIII	40	63	80	110	M6	135	5.5	6	145	115	13	29	8	7	8	125	154	90	M5	19	70	45.5	6	90

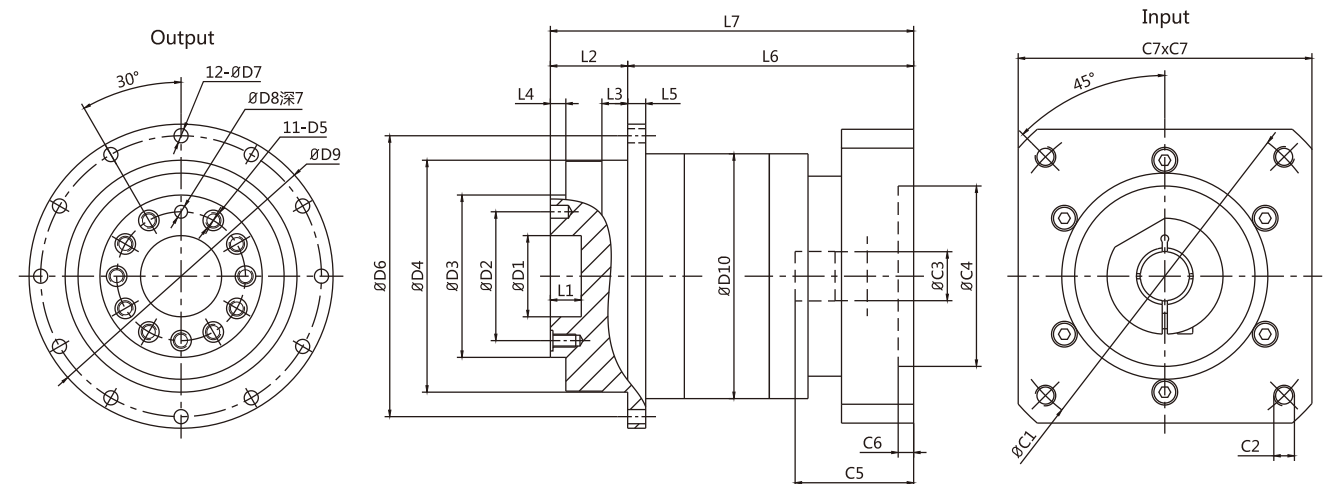
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAD140-L1



TAD140-L1																								
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	✖C1	✖C2	✖C3	✖C4	✖C5	✖C6	✖C7
Type I	50	80	100	140	M8	168	6.5	8	179	152.5	12	38	14.5	7.5	10	138	176	200	M12	35	114.3	83	10	180

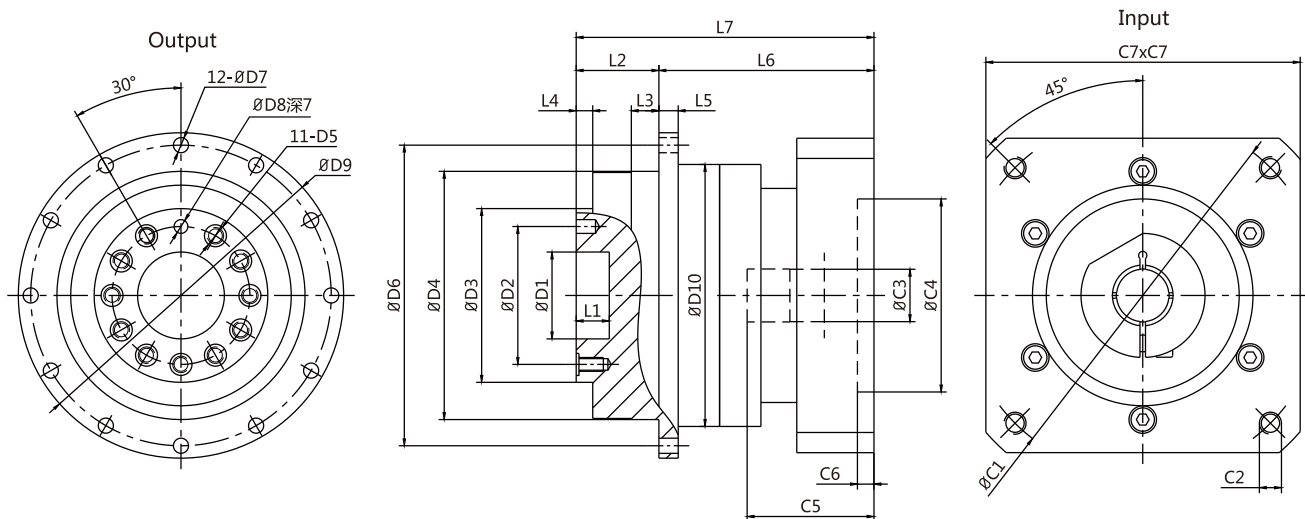
TAD140-L2



TAD140-L2																								
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	✕C1	✕C2	✕C3	✕C4	✕C5	✕C6	✕C7
Type I	50	80	100	140	M8	168	6.5	8	179	152.5	12	38	14.5	7.5	10	175.5	213.5	200	M12	35	114.3	83	10	180
Type II	50	80	100	140	M8	168	6.5	8	179	152.5	12	38	14.5	7.5	10	171.5	209.5	145	M8	22	110	79	8	130
Type III	50	80	100	140	M8	168	6.5	8	179	152.5	12	38	14.5	7.5	10	171.5	209.5	145	M8	24	110	79	8	130

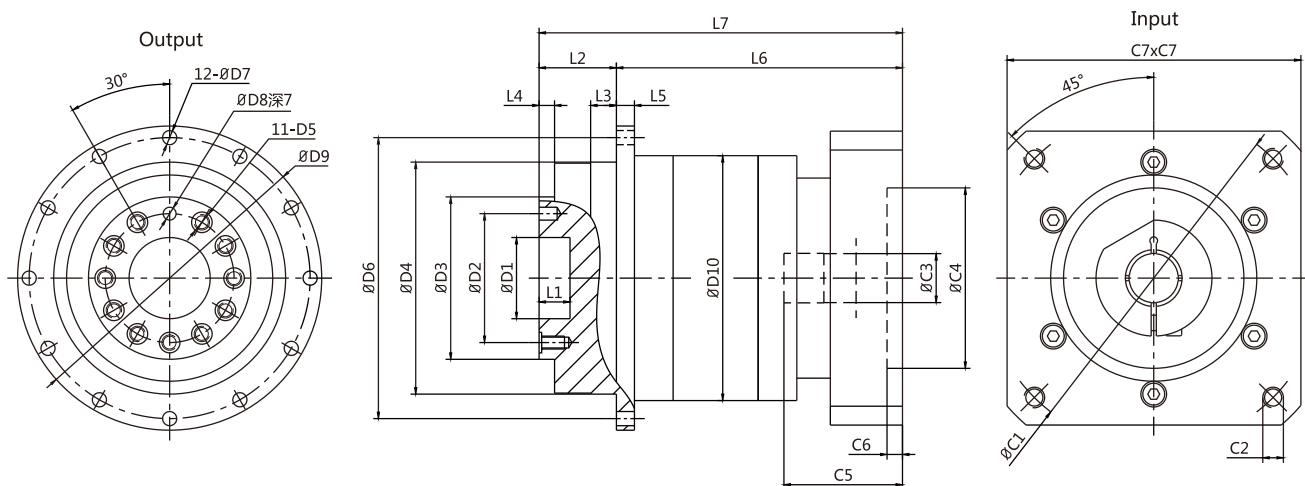
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAD180-L1



TAD180-L1																								
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	✕C1	✕C2	✕C3	✕C4	✕C5	✕C6	✕C7
Type I	80	125	160	200	M10	233	9	10	247	212	16	50	15	8	12	200.5	250.5	200	M12	42	114.3	82	10	180

TAD180-L2



TAD180-L2																								
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	✕C1	✕C2	✕C3	✕C4	✕C5	✕C6	✕C7
Type I	80	125	160	200	M10	233	9	10	247	212	16	50	15	8	12	252.5	302.5	200	M12	42	114.3	82	10	180
TypeII	80	125	160	200	M10	233	9	10	247	212	16	50	15	8	12	252.5	302.5	200	M12	35	114.3	82	10	180

※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAD060

速比	Ratio		4	5	7	10	20	25	35	40	50	70	100		
额定输出扭矩 T_{2N}	Nominal Output Torque T_{2N}	Nm	48	60	50	40	48	60	50	48	60	50	40		
急停扭矩 T_{2NOT}	Emergency Stop Torque T_{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque												
额定输入转速 n_{1N}	Nominal Input Speed n_{1N}	rpm	5000												
最大输入转速 n_{1B}	Max. Input Speed n_{1B}	rpm	10000												
扭转刚性	Torsional Rigidity	Nm/arcmin	13												
最大弯曲力矩 M_{2KB}	Max. Bending moment M_{2KB}	Nm	125												
容许轴向力 F_{2aB}	Max. Axial Load F_{2aB}	N	2110												
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)												
噪音值	Noise	dB	≤60 (输入转速=3000rpm、空载、距离1M②)												
使用温度	Operating Temp	℃	-10 ~ +90												
防护等级	Degree of Reducer Protection		IP65												
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils												
转动惯量 J_1	Mass Moments of Inertia J_1	kg·cm ²	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13		
精密背隙 P1	Precision Backlash P1	arcmin	≤3						≤5						
标准背隙 P2	Standard Backlash P2	arcmin	≤5						≤8						
效率 η	Efficiency η	%	≥95%						≥92%						

① Half-life under continuous operation mode.
② Reducer under no-load mode, input speed is 3000, the value which Noise Measurement machine get at one meter away postion.

TAD090

速比	Ratio		4	5	7	10	20	25	35	40	50	70	100		
额定输出扭矩 T_{2N}	Nominal Output Torque T_{2N}	Nm	130	160	140	100	130	160	140	130	160	140	100		
急停扭矩 T_{2NOT}	Emergency Stop Torque T_{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque												
额定输入转速 n_{1N}	Nominal Input Speed n_{1N}	rpm	4000												
最大输入转速 n_{1B}	Max. Input Speed n_{1B}	rpm	8000												
扭转刚性	Torsional Rigidity	Nm/arcmin	31												
最大弯曲力矩 M_{2KB}	Max. Bending moment M_{2KB}	Nm	235												
容许轴向力 F_{2aB}	Max. Axial Load F_{2aB}	N	2310												
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)												
噪音值	Noise	dB	≤60 (输入转速=3000rpm、空载、距离1M②)												
使用温度	Operating Temp	℃	-10 ~ +90												
防护等级	Degree of Reducer Protection		IP65												
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils												
转动惯量 J_1	Mass Moments of Inertia J_1	kg·cm ²	0.48	0.47	0.45	0.44	0.47	0.47	0.47	0.44	0.44	0.13	0.13		
精密背隙 P1	Precision Backlash P1	arcmin	≤3						≤5						
标准背隙 P2	Standard Backlash P2	arcmin	≤5						≤8						
效率 η	Efficiency η	%	≥95%						≥92%						

① Half-life under continuous operation mode.
② Reducer under no-load mode, input speed is 3000, the value which Noise Measurement machine get at one meter away postion.

TAD120														
速比	Ratio		4	5	7	10	20	25	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	270	330	300	230	270	330	300	270	330	300	230	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque											
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	4000											
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	8000											
扭转刚性	Torsional Rigidity	Nm/arcmin	82											
最大弯曲力矩 M _{2KB}	Max. Bending moment M _{2KB}	Nm	430											
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	4800											
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)											
噪音值	Noise	dB	≤65 (输入转速=3000rpm、空载、距离1M②)											
使用温度	Operating Temp	℃	-10 ~ +90											
防护等级	Degree of Reducer Protection		IP65											
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils											
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	2.74	2.71	2.62	2.57	2.71	2.71	2.62	2.57	2.57	0.44	0.44	
精密背隙 P1	Precision Backlash P1	arcmin	≤3				≤5							
标准背隙 P2	Standard Backlash P2	arcmin	≤5				≤8							
效率 η	Efficiency η	%	≥95%				≥92%							

① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TAD140														
速比	Ratio		4	5	7	10	20	25	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	560	650	550	450	560	650	550	560	650	550	450	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque											
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	3000											
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	6000											
扭转刚性	Torsional Rigidity	Nm/arcmin	151											
最大弯曲力矩 M _{2KB}	Max. Bending moment M _{2KB}	Nm	1300											
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	6200											
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)											
噪音值	Noise	dB	≤67 (输入转速=3000rpm、空载、距离1M②)											
使用温度	Operating Temp	℃	-10 ~ +90											
防护等级	Degree of Reducer Protection		IP65											
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils											
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	7.54	7.42	7.14	7.03	7.42	7.42	7.14	7.03	7.03	2.57	2.57	
精密背隙 P1	Precision Backlash P1	arcmin	≤3				≤5							
标准背隙 P2	Standard Backlash P2	arcmin	≤5				≤8							
效率 η	Efficiency η	%	≥95%				≥92%							

① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

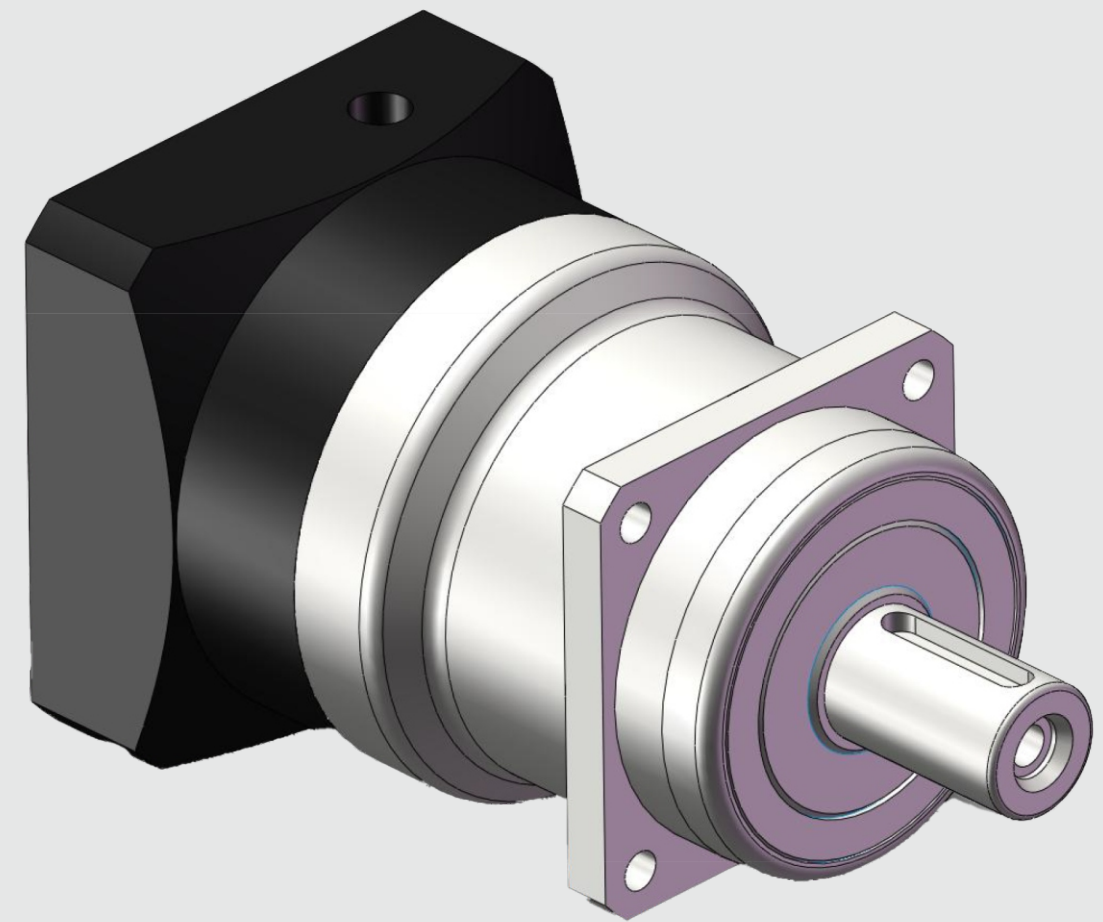
TAD180														
速比	Ratio		4	5	7	10	20	25	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	1100	1200	1100	900	1100	1200	1100	1100	1200	1100	900	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque											
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	3000											
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	6000											
扭转刚性	Torsional Rigidity	Nm/arcmin	440											
最大弯曲力矩 M _{2KB}	Max. Bending moment M _{2KB}	Nm	3064											
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	5450											
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)											
噪音值	Noise	dB	≤70 (输入转速=3000rpm、空载、距离1M②)											
使用温度	Operating Temp	℃	-10 ~ +90											
防护等级	Degree of Reducer Protection		IP65											
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils											
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	23.67	23.29	22.48	22.51	23.29	23.29	22.48	22.51	22.51	7.03	7.03	
精密背隙 P1	Precision Backlash P1	arcmin	≤3				≤5				≤8			
标准背隙 P2	Standard Backlash P2	arcmin	≤5				≤8				≤8			
效率 η	Efficiency η	%	≥95%				≥92%				≥92%			

① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

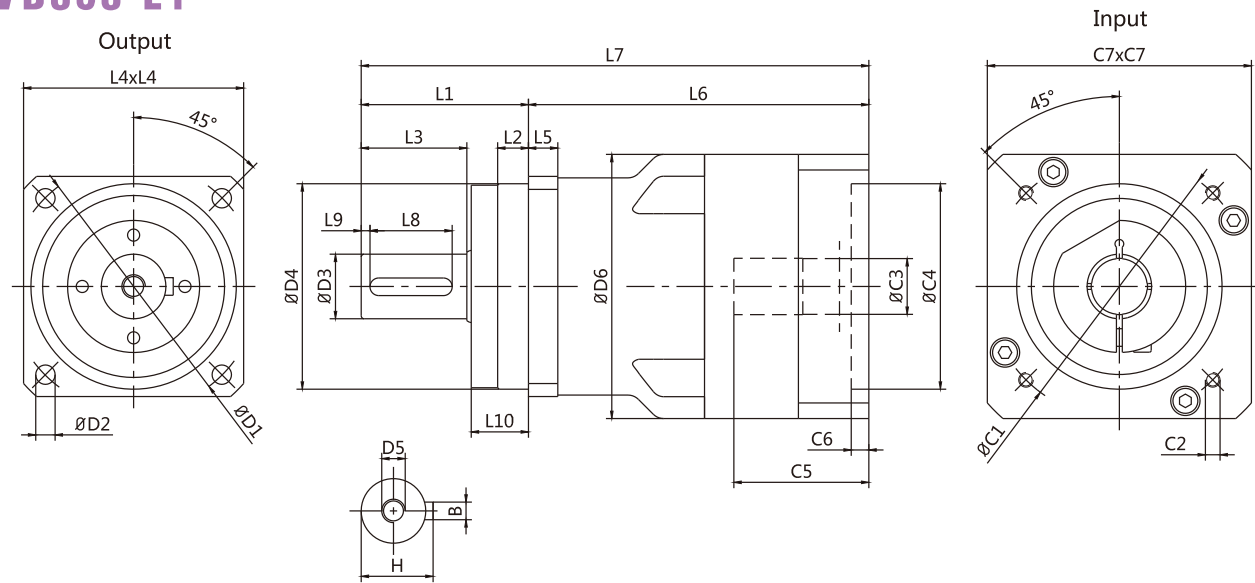
TVD Series

- **低噪音**：采用螺旋齿轮设计，实现了减速机的顺畅、安静运转。
- **高精度**：背隙可达3弧分以内，定位精确。
- **高刚性、高负载**：输出轴采用并列式圆锥滚子轴承设计，大大提高了减速机刚性和负载能力。
- **高效率**：单段可达95%以上，双段可达92%以上。
- **免维护**：油脂磨耗低，可终身润滑。
- **密封效果好**：润滑油脂具有高粘度、不易分离的特性，并采用IP65防护等级，确保无润滑油脂泄漏。
- **自由安装**：可任意安装减速机。
- **适用性广**：适用于任意型式伺服电机。

- **Low Noise**: The use of helical gear design, to achieve a smooth, quiet operation of the reducer.
- **High Precision**: Backlash 3 arcmin or less, accurate positioning.
- **High Rigidity, High Load**: The output shaft with side-by-side tapered roller bearing design, which improves the rigidity and load capacity of the reducer.
- **High Efficiency**: 1-Stage up to 95% or more, 2-Stage up to 92% or more.
- **Maintenance-Free**: Low grease wear, can be lifetime lubrication.
- **Sealing Effect Is Good**: Lubricating grease with high viscosity, not easy to separate the characteristics, ip65 protection class to ensure that no grease leakage.
- **Installation Unrestrained**: Can be installed arbitrarily.
- **Wide Applicability**: Applicable to any type of servo motor.

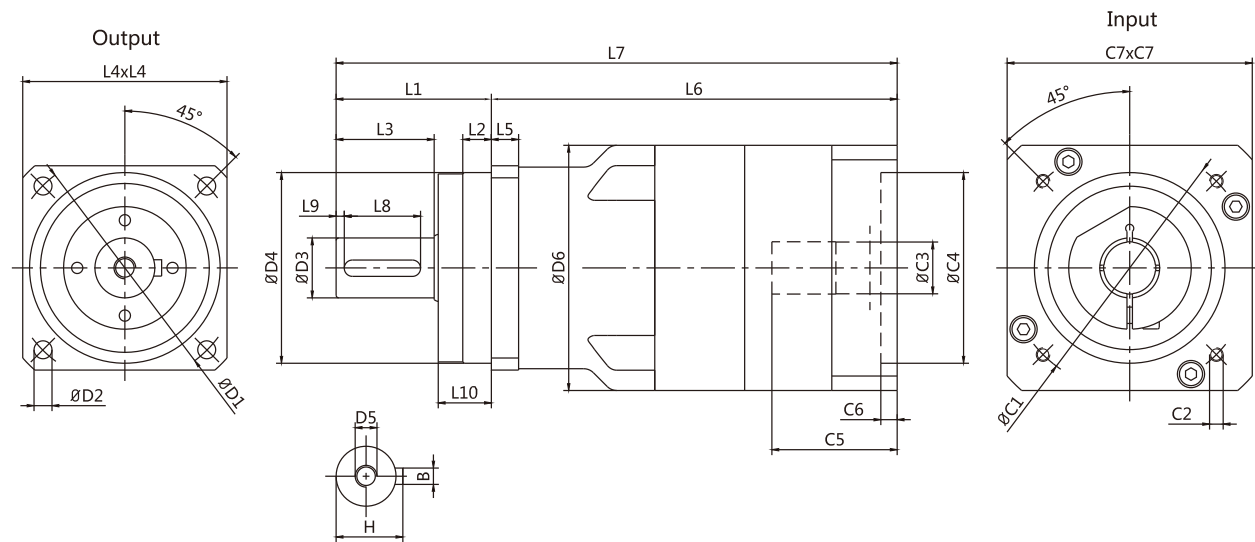


TVD060-L1



TVD060-L1																				
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4
Type I	68	5.5	16	60	M5	60	48	5	28	60	6	88.5	136.5	20	3	19	70	M4	14	50

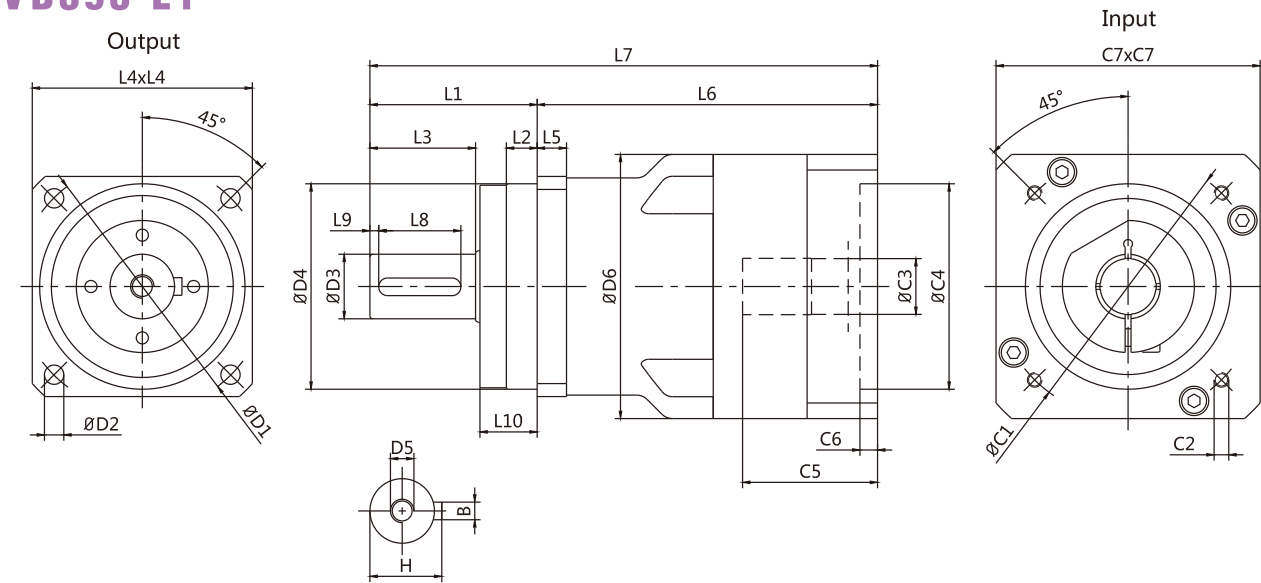
TVD060-L2



TVD060-L2																				
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4
Type I	68	5.5	16	60	M5	60	48	5	28	60	6	117.5	165.5	20	3	19	70	M4	14	50

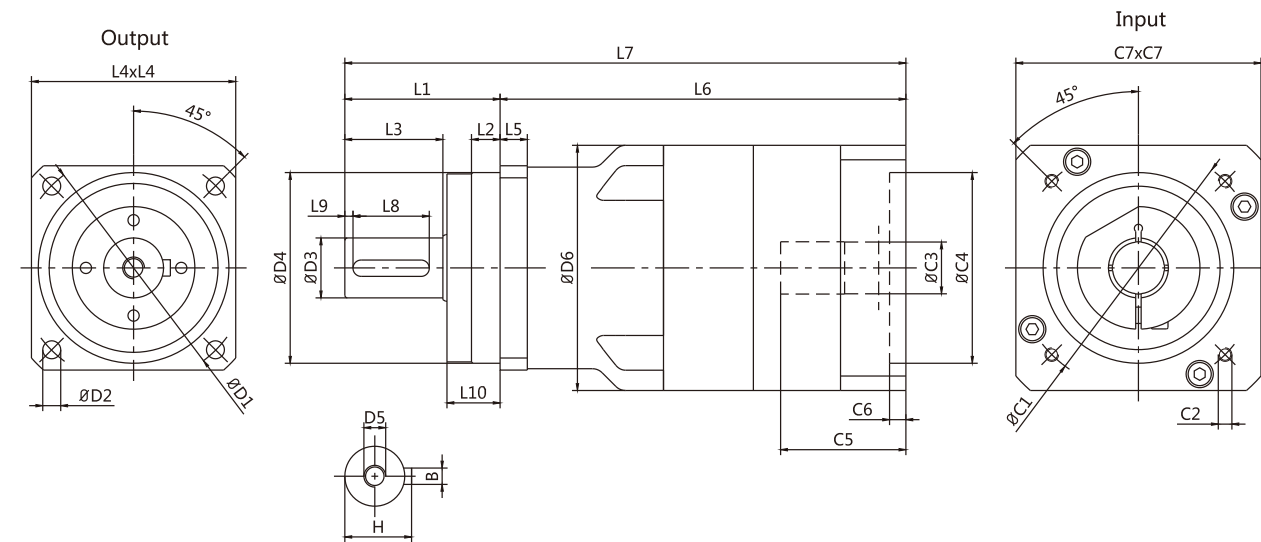
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TVD090-L1



TVD090-L1																				
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4
Type I	85	6.5	22	70	M8	90	56	6	35.5	75	8	114.5	170.5	30	3	19.5	90	M5	19	70

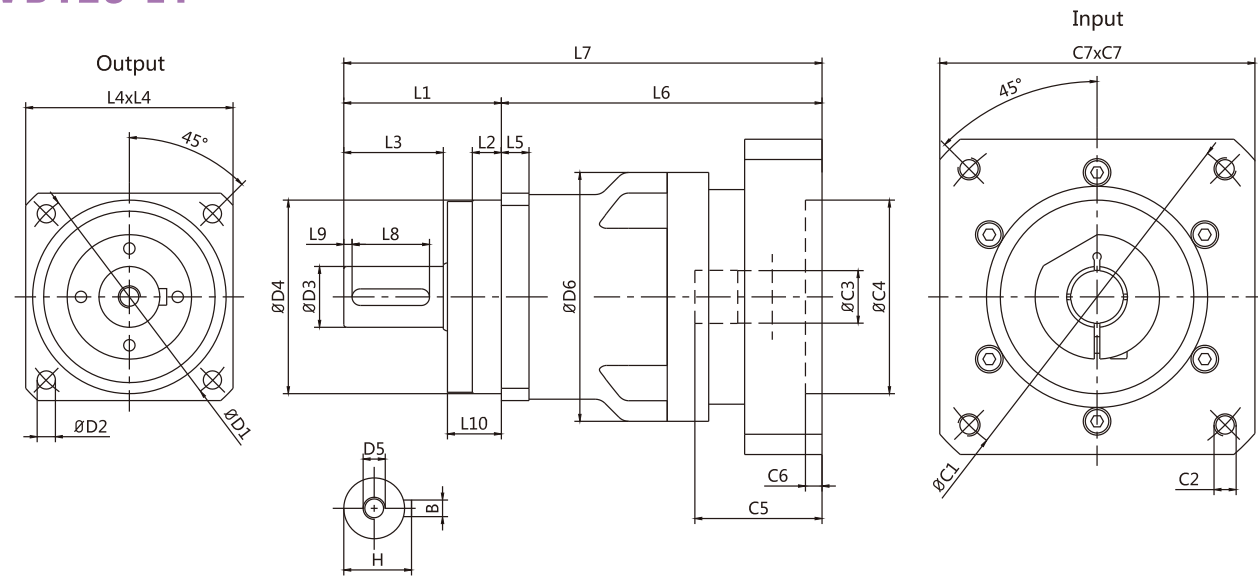
TVD090-L2



TVD090-L2																				
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4
Type I	85	6.5	22	70	M8	90	56	6	35.5	75	10	143.5	199.5	30	3	19.5	90	M5	19	70

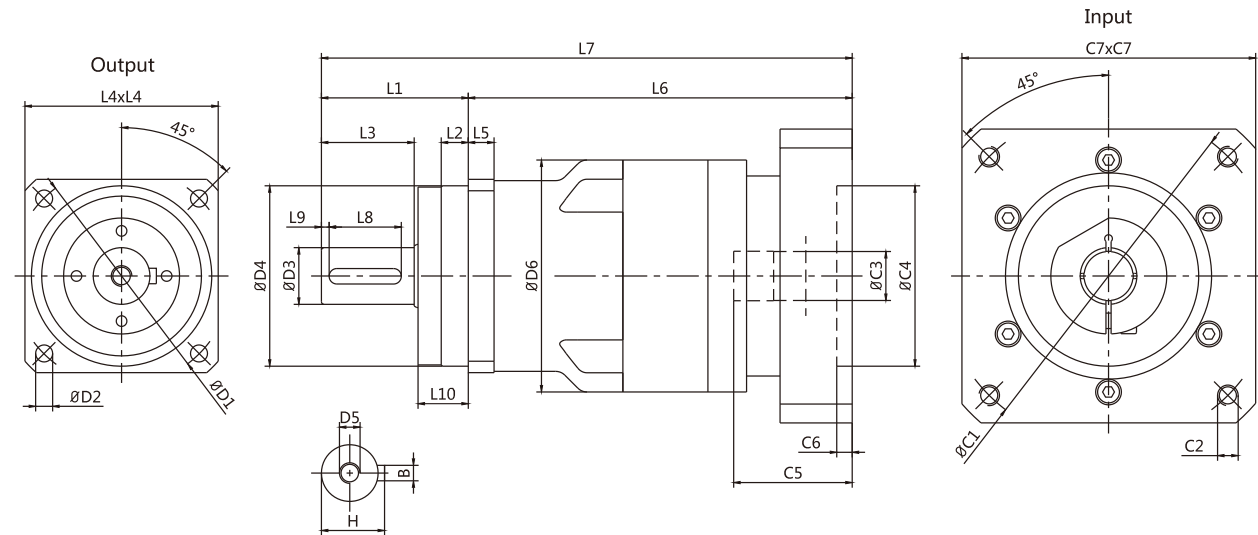
※Dimension can be customized according to the motor,if necessary,please contact us!
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TVD120-L1



TVD120-L1																									
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	120	9	32	90	M12	120	88	8	58	100	10	145	233	40	5	29	145	M8	22	110	60	8	130	10	35
TypeII	120	9	32	90	M12	120	88	8	58	100	10	145	233	40	5	29	145	M8	24	110	60	8	130	10	35

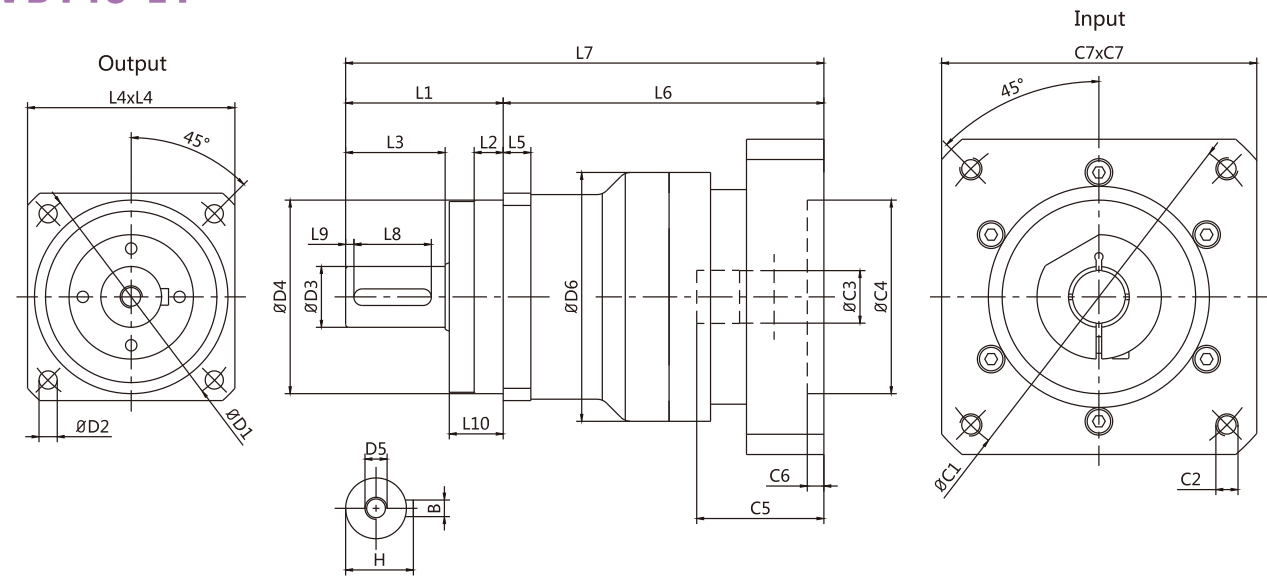
TVD120-L2



TVD120-L2																									
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	120	9	32	90	M12	120	88	8	58	100	10	178	266	40	5	29	145	M8	22	110	60	8	130	10	35
TypeII	120	9	32	90	M12	120	88	8	58	100	10	178	266	40	5	29	145	M8	24	110	60	8	130	10	35
TypeIII	120	9	32	90	M12	120	88	8	58	100	10	160	248	40	5	29	90	M5	19	70	45	6	90	10	35

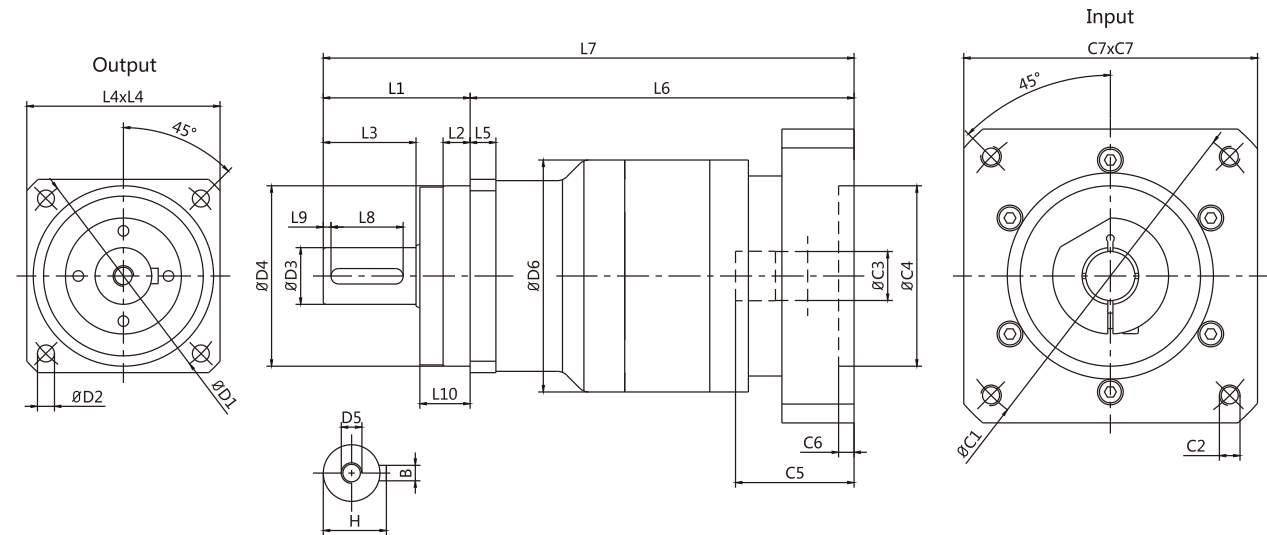
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TVD140-L1



TVD140-L1																									
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	165	11	40	130	M16	150	112	10	82	140	12	182.5	294.5	65	5	29	200	M12	35	114.3	81.5	8	180	12	43

TVD140-L2



TVD140-L2																									
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	B	H
Type I	165	11	40	130	M16	150	112	10	82	140	12	222	334	65	5	29	200	M12	35	114.3	81.5	8	180	12	43
TypeⅡ	165	11	40	130	M16	150	112	10	82	140	12	214.5	326.5	65	5	29	145	M8	24	110	74	8	130	12	43
TypeⅢ	165	11	40	130	M16	150	112	10	82	140	12	214.5	326.5	65	5	29	145	M8	22	110	74	8	130	12	43

※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TVD060																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	18	27	27	27	18	18	27	27	27	27	27	27	27	18	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	3000														
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	6000														
扭转刚性	Torsional Rigidity	Nm/arcmin	6														
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	2800														
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	2400														
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)														
噪音值	Noise	dB	≤60 (输入转速=3000rpm、空载、距离1M②)														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils														
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	0.16	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	
精密背隙 P1	Precision Backlash P1	arcmin	≤3						≤5								
标准背隙 P2	Standard Backlash P2	arcmin	≤5						≤8								
效率 η	Efficiency η	%	≥95%						≥92%								

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TVD090																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	50	75	75	75	50	50	75	75	75	75	75	75	75	50	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	3000														
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	6000														
扭转刚性	Torsional Rigidity	Nm/arcmin	10														
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	4200														
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	3350														
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)														
噪音值	Noise	dB	≤60 (输入转速=3000rpm、空载、距离1M②)														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils														
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	0.61	0.48	0.47	0.45	0.44	0.47	0.47	0.47	0.44	0.45	0.44	0.44	0.13	0.13	
精密背隙 P1	Precision Backlash P1	arcmin	≤3						≤5								
标准背隙 P2	Standard Backlash P2	arcmin	≤5						≤8								
效率 η	Efficiency η	%	≥95%						≥92%								

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

角标② 单级在输出转速为100rpm时, 双级在输出转速为50rpm时, 三级在输出转速为10rpm时, 作用于输出轴中心位置(1/2轴长处)所测得允许径向力及轴向力(同时受力)

TVD120																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	120	180	180	180	120	120	180	180	180	180	180	180	180	120	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	3000														
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	6000														
扭转刚性	Torsional Rigidity	Nm/arcmin	25														
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	6500														
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	5650														
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)														
噪音值	Noise	dB	≤65 (输入转速=3000rpm、空载、距离1M②)														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils														
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	3.25	2.74	2.71	2.62	2.57	2.71	2.71	2.71	2.57	2.62	2.57	2.57	0.44	0.44	
精密背隙 P1	Precision Backlash P1	arcmin	≤3							≤5							
标准背隙 P2	Standard Backlash P2	arcmin	≤5							≤8							
效率 η	Efficiency η	%	≥95%							≥92%							

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

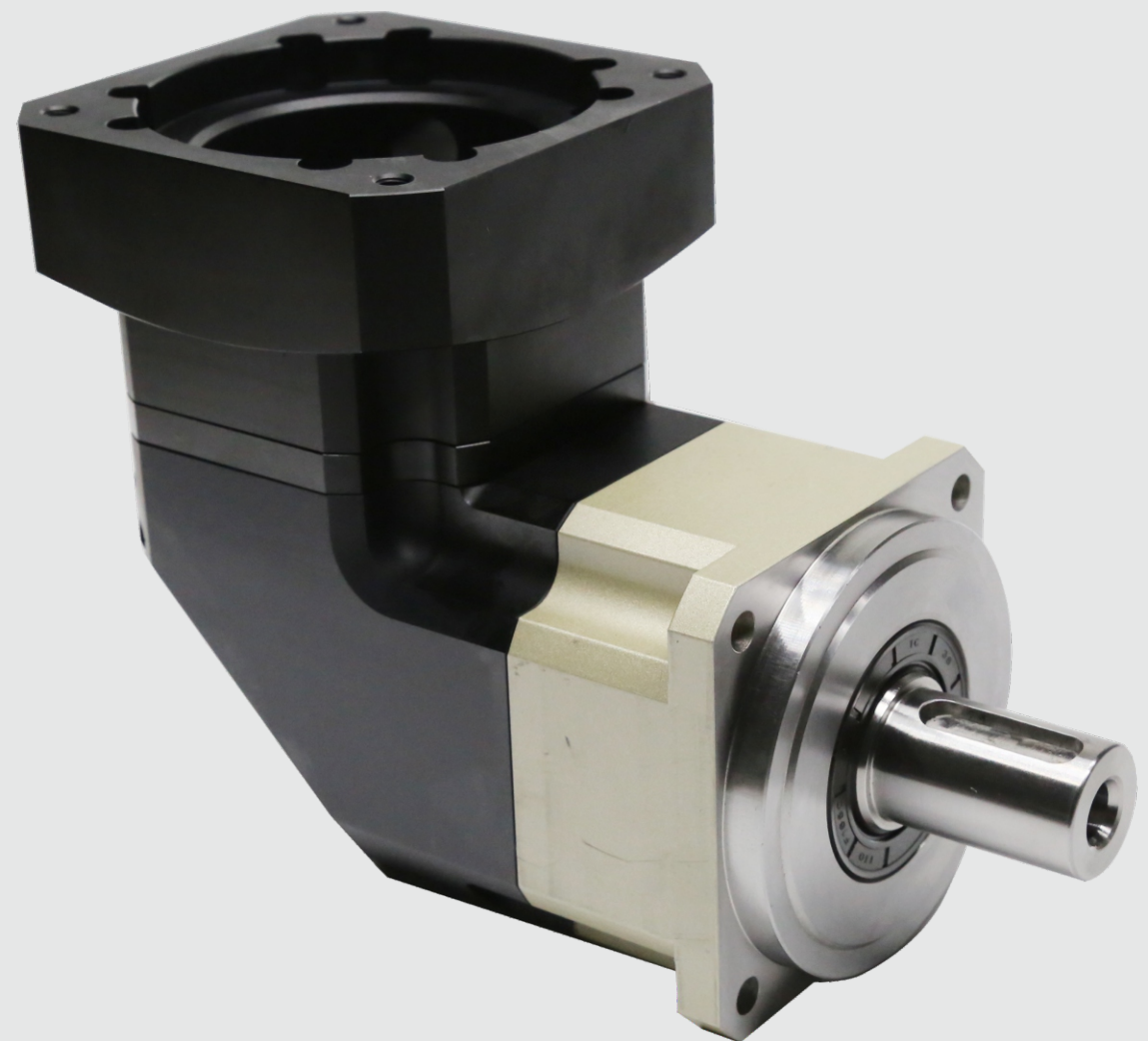
TVD140																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T_{2N}	Nominal Output Torque T_{2N}	Nm	240	360	360	360	240	240	360	360	340	360	360	360	360	240	
急停扭矩 T_{2NOT}	Emergency Stop Torque T_{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n_{1N}	Nominal Input Speed n_{1N}	rpm	2000														
最大输入转速 n_{1B}	Max. Input Speed n_{1B}	rpm	4000														
扭转刚性	Torsional Rigidity	Nm/arcmin	50														
容许径向力 F_{2rB}	Max. Radial Load F_{2rB}	N	10000														
容许轴向力 F_{2aB}	Max. Axial Load F_{2aB}	N	9000														
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)														
噪音值	Noise	dB	≤67 (输入转速=3000rpm、空载、距离1M②)														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils														
转动惯量 J_1	Mass Moments of Inertia J_1	kg·cm ²	9.21	7.54	7.42	7.14	7.03	7.42	7.42	7.42	7.03	7.14	7.03	7.03	2.57	2.57	
精密背隙 P1	Precision Backlash P1	arcmin	≤3								≤5						
标准背隙 P2	Standard Backlash P2	arcmin	≤5								≤8						
效率 η	Efficiency η	%	≥95%								≥92%						

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

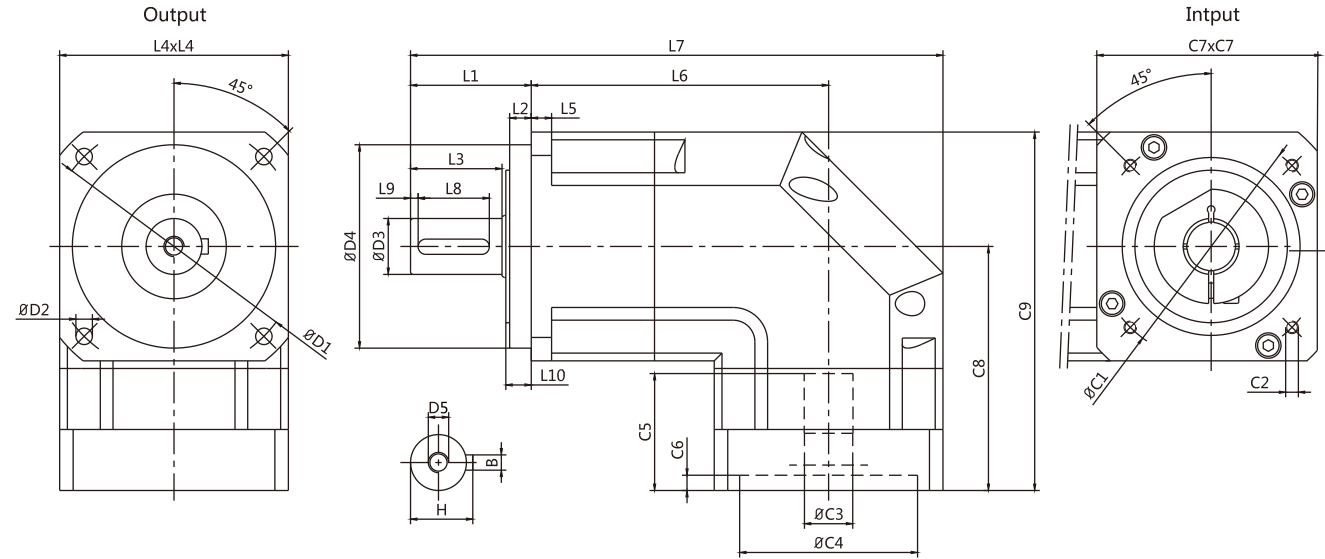
TABR Series

- **低噪音**：采用螺旋齿轮设计，实现了减速机的顺畅、安静运转。
- **高刚性、高扭矩**：输出轴采用大尺寸、大跨距式双支撑轴承设计，大大提高了减速机刚性和扭矩。
- **高效率**：单段可达 93% 以上，双段可达 90% 以上。
- **免维护**：油脂磨损低，可终身润滑。
- **密封效果好**：润滑油脂具有高粘度、不易分离的特性，并采用 IP65 防护等级，确保无润滑油脂泄漏。
- **节省空间**：转角壳体采用一体式设计，既能保证减速机运转之精度又能节省安装空间。
- **适用性广**：适用于任意型式伺服电机。

- **Low Noise**: The use of helical gear design, to achieve a smooth, quiet operation of the reducer.
- **High Rigidity, High Torque**: The output shaft used large size, large span double support bearing design, which improves the rigidity and torque of the reducer.
- **High Efficiency**: 1-Stage up to 93% or more, 2-Stage up to 90% or more.
- **Maintenance-Free**: Low grease wear, can be lifetime lubrication.
- **Sealing Effect Is Good**: Lubricating grease with high viscosity, not easy to separate the characteristics, ip65 protection class to ensure that no grease leakage.
- **Space Saving**: Right angle housing with integrated design, both to ensure the accuracy of the reducer operation can save space.
- **Wide Applicability**: Applicable to any type of servo motor.

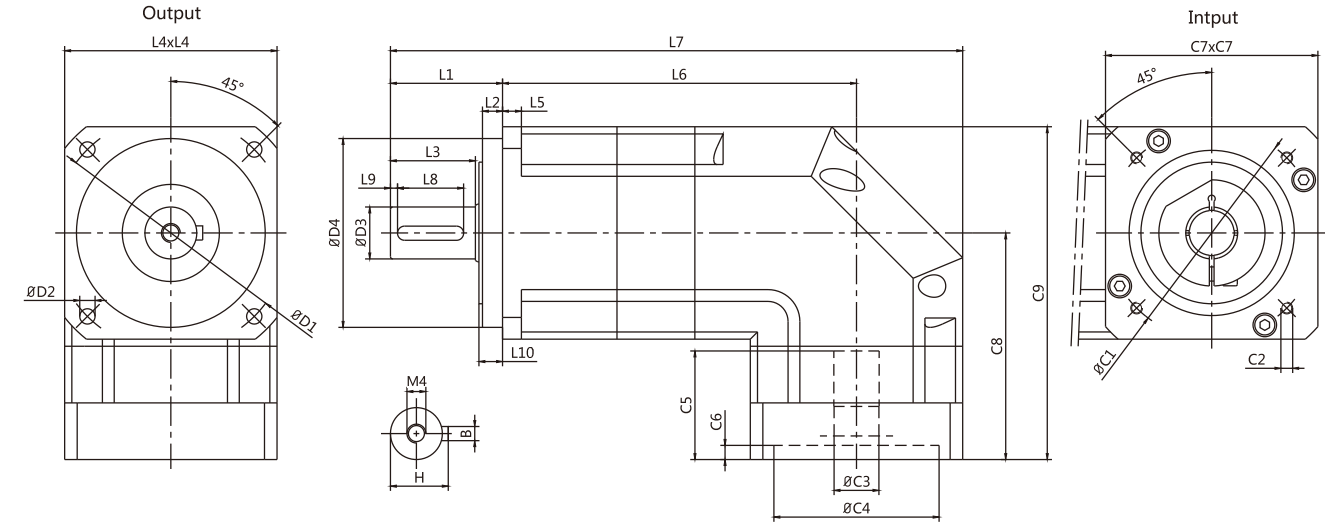


TABR040-L1



TABR040-L1																										
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	50	3.5	13	35	M4	26	5	20	45	5	76	121	16	0	5	46	M3	8	30	26	5	45	72.5	95	5	15

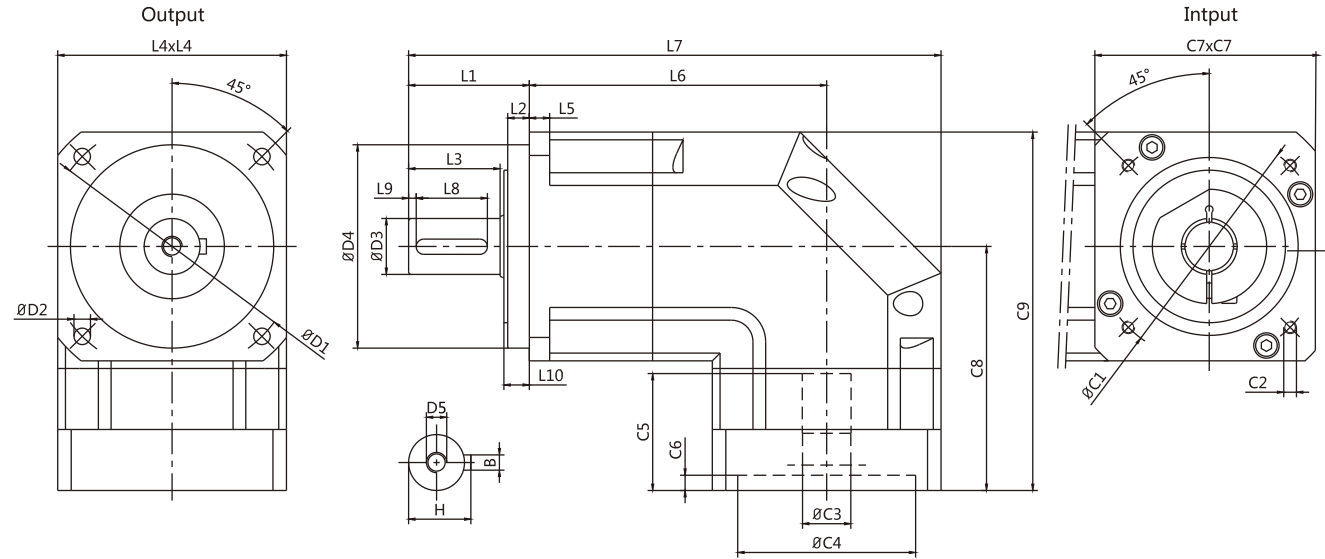
TABR040-L2



TABR040-L2																										
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	50	3.5	13	35	M4	26	5	20	45	5	100	136	16	0	5	46	M4	8	30	26	5	45	72.5	95	5	15

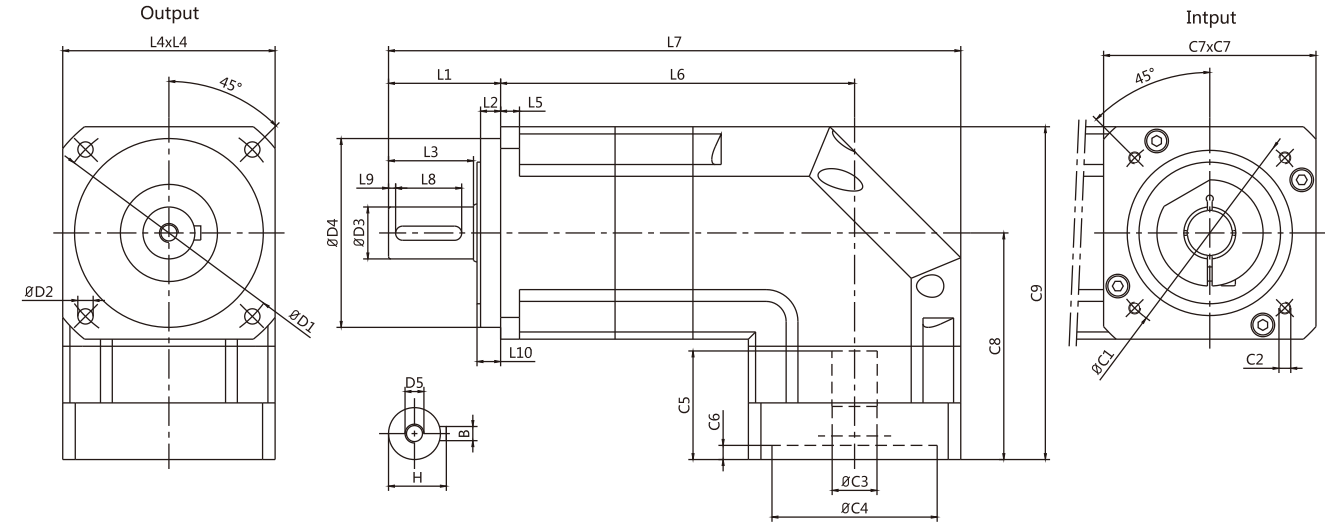
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TABR060-L1



TABR060-L1																										
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	70	5.5	16	50	M5	37	7	28.5	60	8	91	158	20	3	7.5	70	M4	14	50	32	6	60	75	105	5	18
Type II	70	5.5	16	50	M5	37	7	28.5	60	8	91	158	20	3	7.5	90	M5	19	70	43	6	80	87	117	5	18

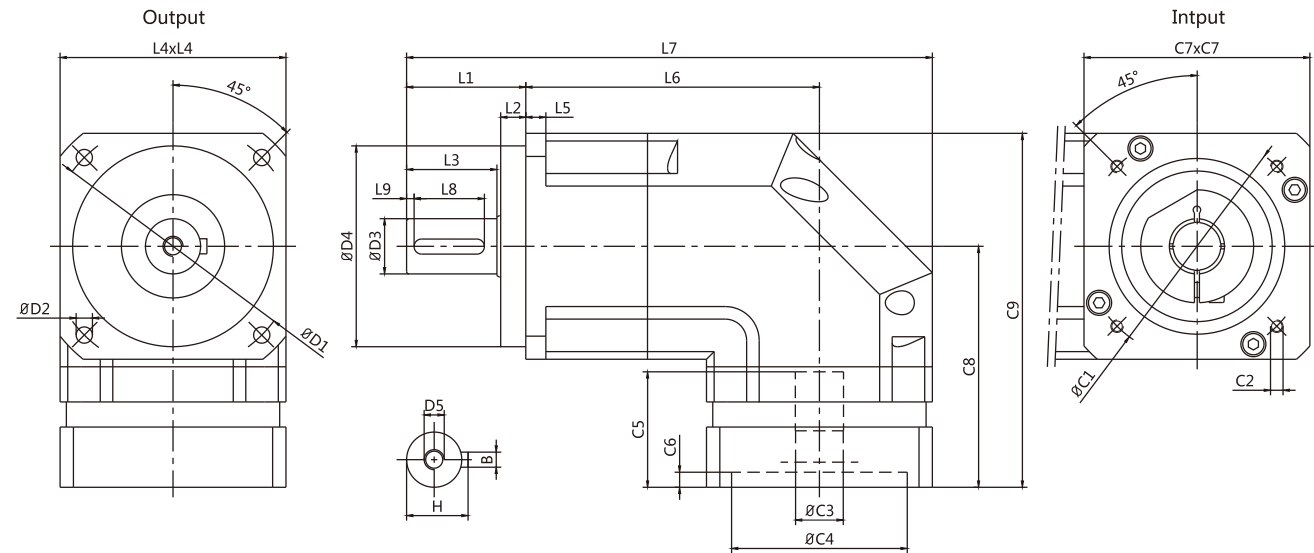
TABR060-L2



TABR060-L2																										
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	70	5.5	16	50	M5	37	7	28.5	60	8	111	178	20	3	7.5	70	M4	14	50	32	6	60	75	105	5	18
Type II	70	5.5	16	50	M5	37	7	28.5	60	8	111	178	20	3	7.5	70	M4	11	50	32	6	60	75	105	5	18

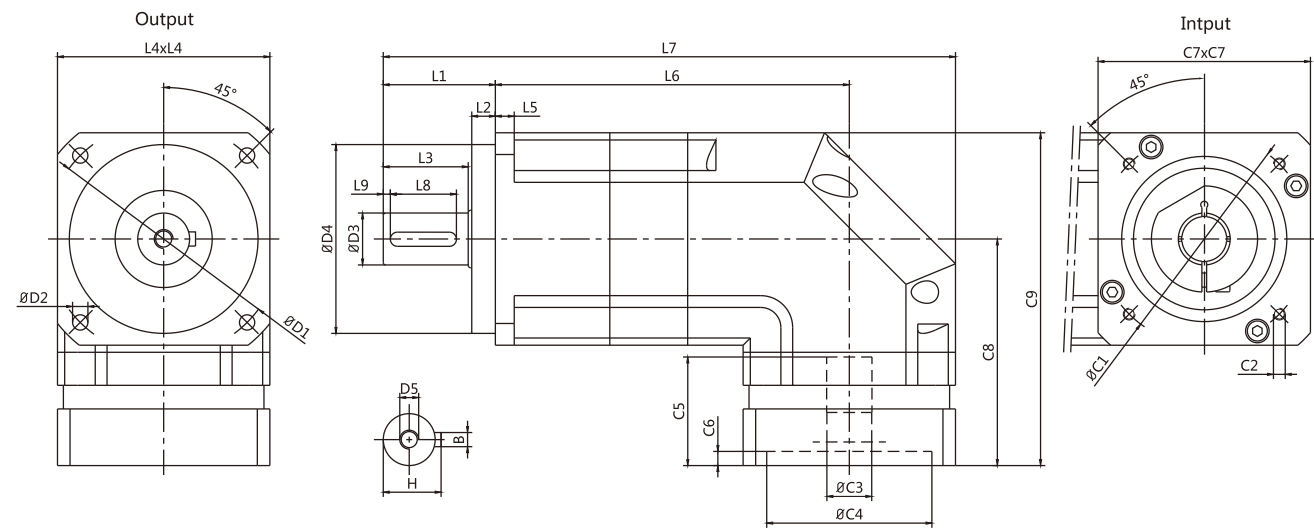
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TABR090-L1



TABR090-L1																									
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	100	6.5	22	80	M8	47.5	10	36	90	8	117	209.5	30	3	90	M5	19	70	46	6	90	96	141	6	24.5
TypeII	100	6.5	22	80	M8	47.5	10	36	90	8	117	209.5	30	3	145	M8	19	110	60	10	130	116	161	6	24.5
TypeIII	100	6.5	22	80	M8	47.5	10	36	90	8	117	209.5	30	3	145	M8	22	110	60	10	130	116	161	6	24.5
TypeIV	100	6.5	22	80	M8	47.5	10	36	90	8	117	209.5	30	3	145	M8	24	110	60	10	130	116	161	6	24.5

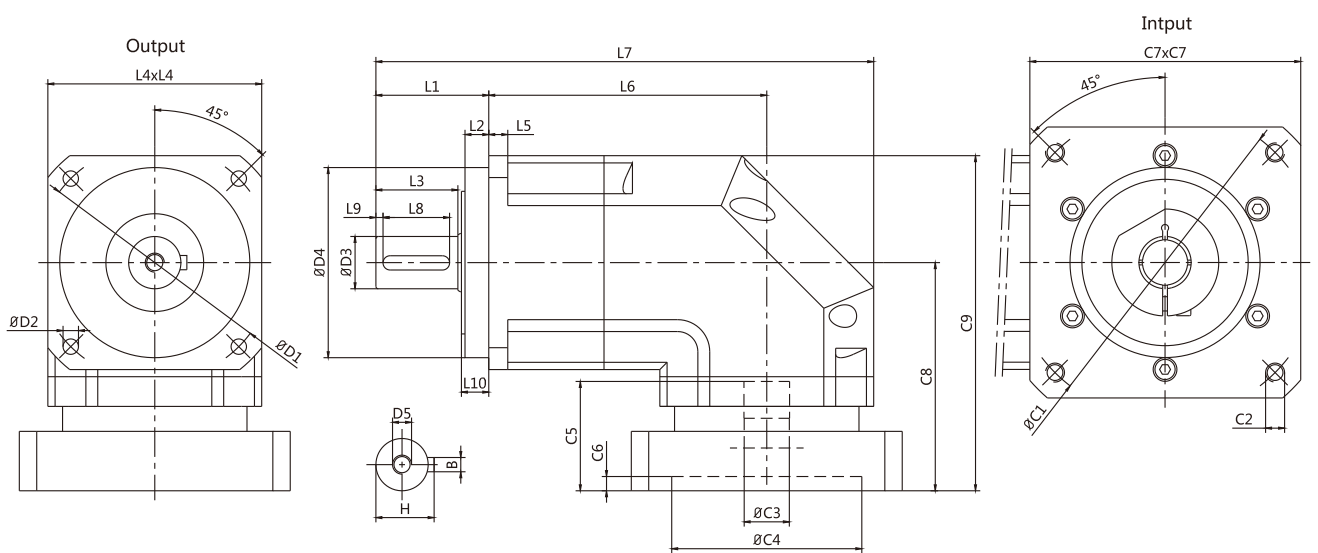
TABR090-L2



TABR090-L2																									
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	100	6.5	22	80	M8	47.5	10	36	90	8	150	242.5	30	3	90	M5	19	70	46	6	90	96	141	6	24.5
TypeII	100	6.5	22	80	M8	47.5	10	36	90	8	150	242.5	30	3	70	M4	14	50	35	6	60	90	135	6	24.5

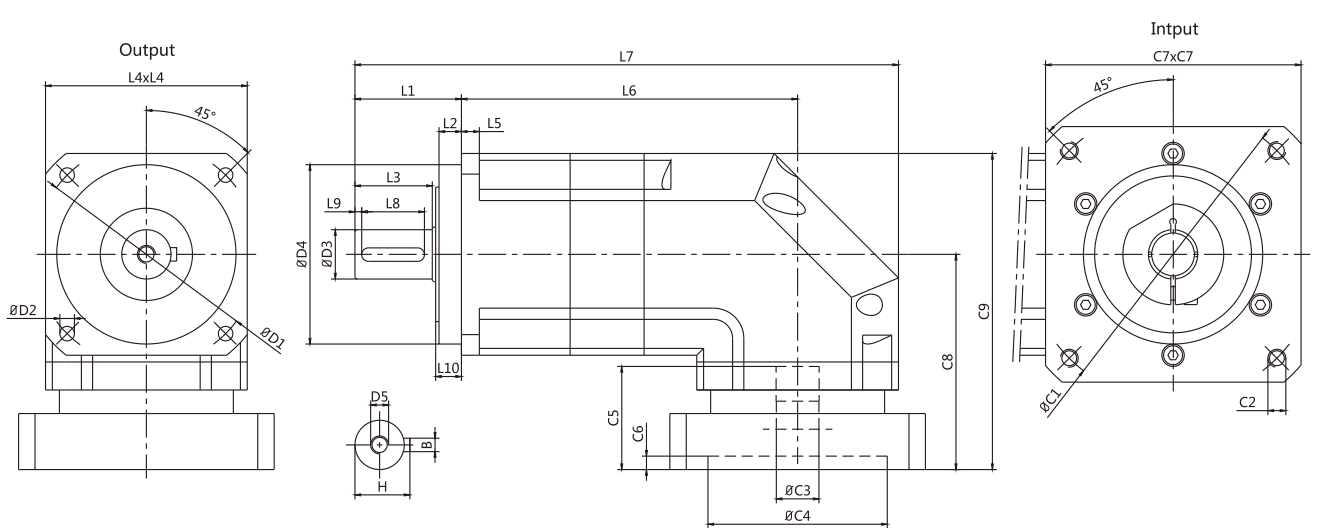
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TABR120-L1



TABR120-L1																										
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	130	9	32	110	M12	65	12	49	115	10	135.5	258	40	5	14	145	M8	22	110	62.5	8	130	134	191.5	10	35
TypeII	130	9	32	110	M12	65	12	49	115	10	135.5	258	40	5	14	145	M8	24	110	62.5	8	130	134	191.5	10	35

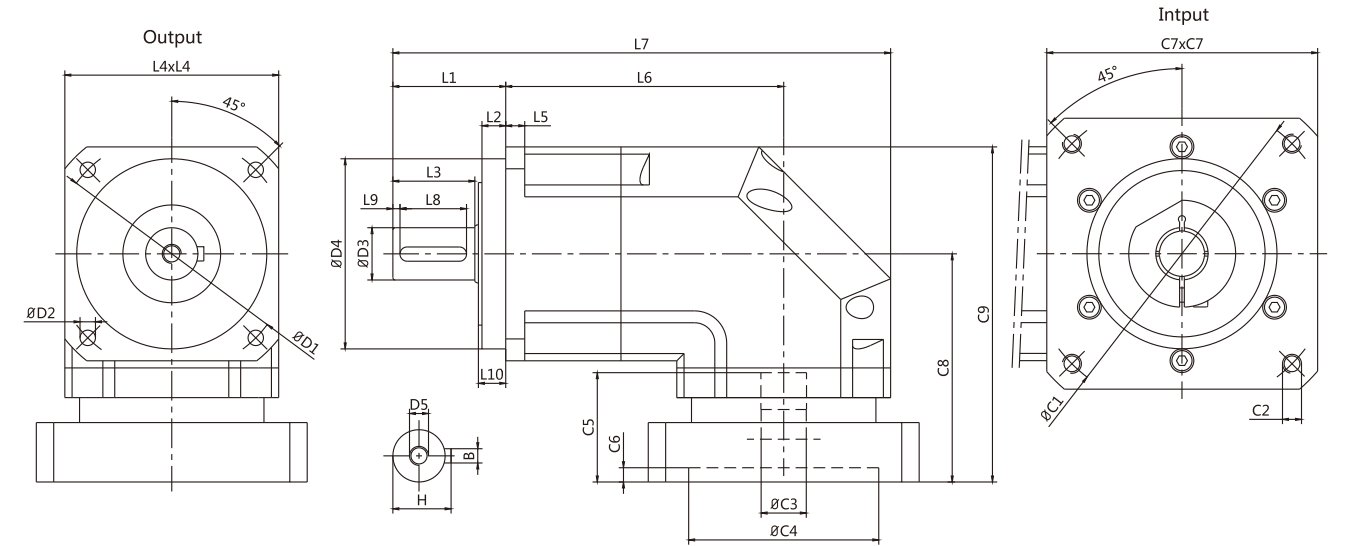
TABR120-L2



TABR120-L2																										
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	130	9	32	110	M12	65	12	49	115	10	172.5	295	40	5	14	145	M8	22	110	62.5	8	130	134	191.5	10	35
Type II	130	9	32	110	M12	65	12	49	115	10	172.5	295	40	5	14	145	M8	24	110	62.5	8	130	134	191.5	10	35
Type III	130	9	32	110	M12	65	12	49	115	10	172.5	295	40	5	14	90	M5	19	70	45	6	90	124	181.5	10	35

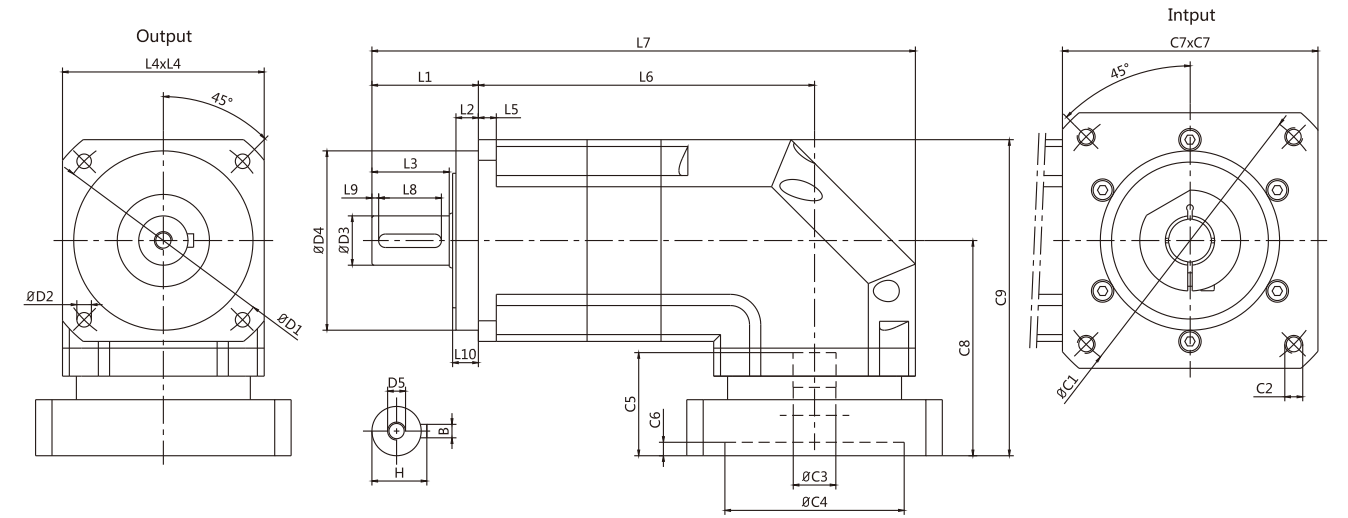
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TABR140-L1



TABR140-L1																						
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7
Type I	165	11	40	130	M16	97	12	82	140	12	185.5	352.5	65	5	13.5	200	M12	35	114.3	81.5	8	180

TABR140-L2



TABR140-L2																						
Dimension	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7
Type I	165	11	40	130	M16	97	12	82	140	12	227	394	65	5	13.5	200	M12	35	114.3	81.5	8	180
Type II	165	11	40	130	M16	97	12	82	140	12	227	394	65	5	13.5	145	M8	24	110	65	8	130
Type III	165	11	40	130	M16	97	12	82	140	12	227	394	65	5	13.5	145	M8	22	110	65	8	130

※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TABR040

速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	9	12	15	19	14	14	14	15	20	19	17	14	19	14
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque													
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	5000													
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	10000													
扭转刚性	Torsional Rigidity	Nm/arcmin	7													
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	780													
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	390													
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)													
噪音值	Noise	dB	≤70 (输入转速=3000rpm、空载、距离1M②)													
使用温度	Operating Temp	℃	-10 ~ +90													
防护等级	Degree of Reducer Protection		IP65													
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils													
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
标准背隙 P2	Standard Backlash P2	arcmin	≤8							≤10						
效率 η	Efficiency η	%	≥93%							≥90%						

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TABR060

速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	55	50	60	50	40	55	50	60	55	50	50	60	50	40
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque													
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	5000													
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	10000													
扭转刚性	Torsional Rigidity	Nm/arcmin	7													
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	1530													
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	630													
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)													
噪音值	Noise	dB	≤70 (输入转速=3000rpm、空载、距离1M②)													
使用温度	Operating Temp	℃	-10 ~ +90													
防护等级	Degree of Reducer Protection		IP65													
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils													
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	0.16	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
标准背隙 P2	Standard Backlash P2	arcmin	≤8							≤10						
效率 η	Efficiency η	%	≥93%							≥90%						

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TAB

TVB

TAE

TAD

TVD

TABR

TVBR

TAER

TADR

TABR090																		
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100		
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	130	140	160	140	100	130	140	160	150	140	140	160	140	100		
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque															
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	4000															
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	8000															
扭转刚性	Torsional Rigidity	Nm/arcmin	14															
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	3250															
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	1300															
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)															
噪音值	Noise	dB	≤70 (输入转速=3000rpm、空载、距离1M②)															
使用温度	Operating Temp	℃	-10 ~ +90															
防护等级	Degree of Reducer Protection		IP65															
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils															
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	0.61	0.48	0.47	0.45	0.44	0.47	0.47	0.47	0.44	0.45	0.44	0.44	0.13	0.13		
标准背隙 P2	Standard Backlash P2	arcmin	≤8							≤10								
效率 η	Efficiency η	%	≥93%							≥90%								

① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TABR120																		
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100		
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	208	290	330	300	230	208	290	330	310	300	290	330	300	230		
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque															
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	4000															
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	8000															
扭转刚性	Torsional Rigidity	Nm/arcmin	25															
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	6700															
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	3000															
使用寿命	Service Life	hr	20000 (连续运转寿命减半 ①)															
噪音值	Noise	dB	≤72 (输入转速=3000rpm、空载、距离1M ②)															
使用温度	Operating Temp	℃	-10 ~ +90															
防护等级	Degree of Reducer Protection		IP65															
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils															
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	3.25	2.74	2.71	2.62	2.57	2.71	2.71	2.71	2.57	2.62	2.57	2.57	0.44	0.44		
标准背隙 P2	Standard Backlash P2	arcmin	≤8							≤10								
效率 η	Efficiency η	%	≥93%							≥90%								

① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

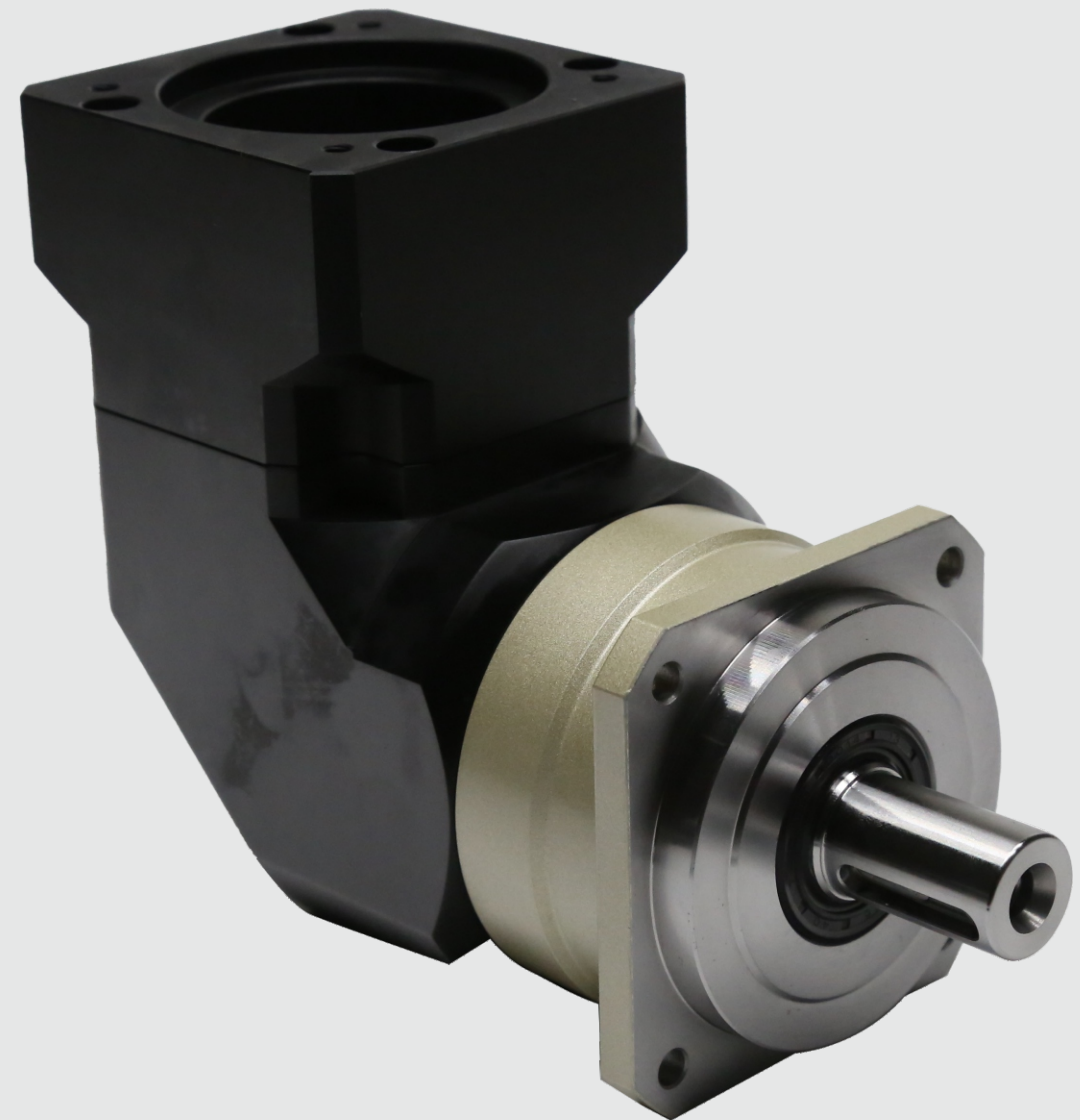
TABR140																		
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100		
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	342	542	650	550	450	342	542	650	600	550	542	650	550	450		
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque															
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	3000															
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	6000															
扭转刚性	Torsional Rigidity	Nm/arcmin	50															
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	9400															
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	4700															
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)															
噪音值	Noise	dB	≤75 (输入转速=3000rpm、空载、距离1M②)															
使用温度	Operating Temp	℃	-10 ~ +90															
防护等级	Degree of Reducer Protection		IP65															
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils															
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	9.21	7.54	7.42	7.14	7.03	7.42	7.42	7.42	7.03	7.14	7.03	7.03	2.57	2.57		
标准背隙 P2	Standard Backlash P2	arcmin	≤8							≤10								
效率 η	Efficiency η	%	≥93%							≥90%								

① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

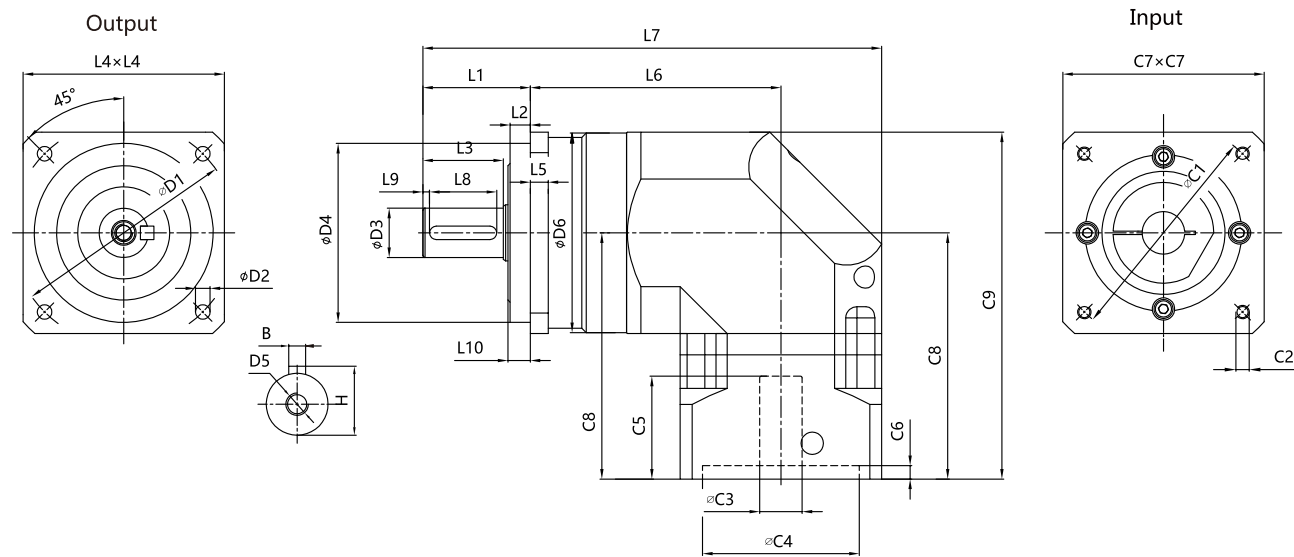
TVBR Series

- **低噪音：**采用螺旋齿轮设计，实现了减速机的顺畅、安静运转。
- **高刚性、高扭矩：**输出轴采用大尺寸、大跨距式双支撑轴承设计，大大提高了减速机刚性和扭矩。
- **高效率：**单段可达 93% 以上，双段可达 90% 以上。
- **免维护：**油脂磨损低，可终身润滑。
- **密封效果好：**润滑油脂具有高粘度、不易分离的特性，并采用 IP65 防护等级，确保无润滑油脂泄漏。
- **节省空间：**转角壳体采用一体式设计，既能保证减速机运转之精度又能节省安装空间。
- **适用性广：**适用于任意型式伺服电机。

- **Low Noise:** The use of helical gear design, to achieve a smooth, quiet operation of the reducer.
- **High Rigidity, High Torque:** The output shaft used large size, large span double support bearing design, which improves the rigidity and torque of the reducer.
- **High Efficiency:** 1-Stage up to 93% or more, 2-Stage up to 90% or more.
- **Maintenance-Free:** Low grease wear, can be lifetime lubrication.
- **Sealing Effect Is Good:** Lubricating grease with high viscosity, not easy to separate the characteristics, ip65 protection class to ensure that no grease leakage.
- **Space Saving:** Right angle housing with integrated design, both to ensure the accuracy of the reducer operation can save space.
- **Wide Applicability:** Applicable to any type of servo motor.

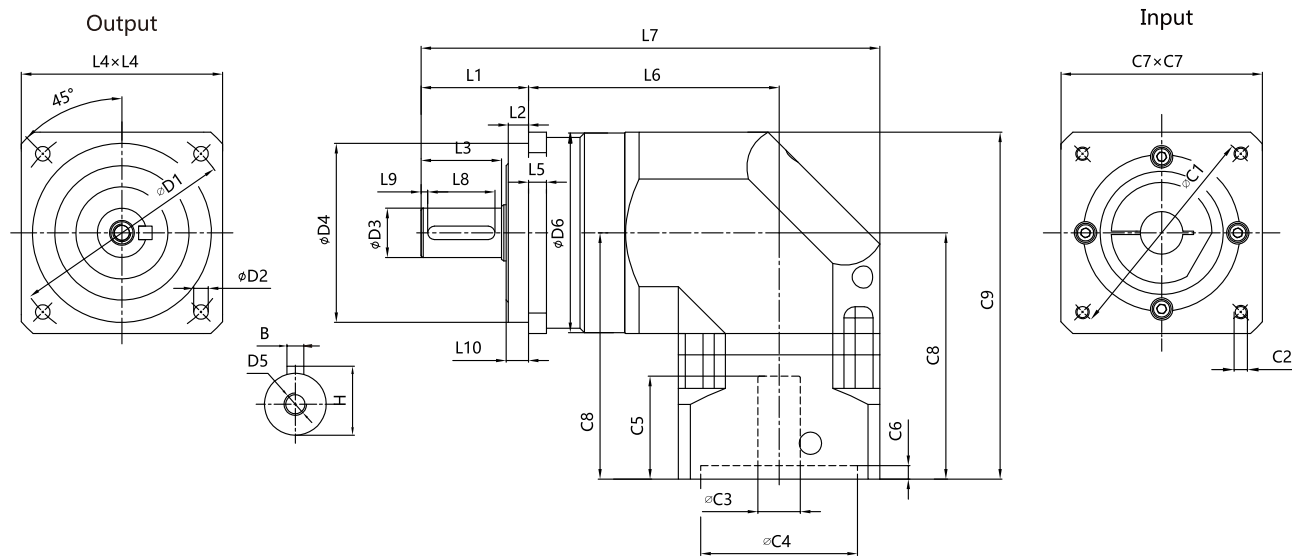


TVBR060-L1



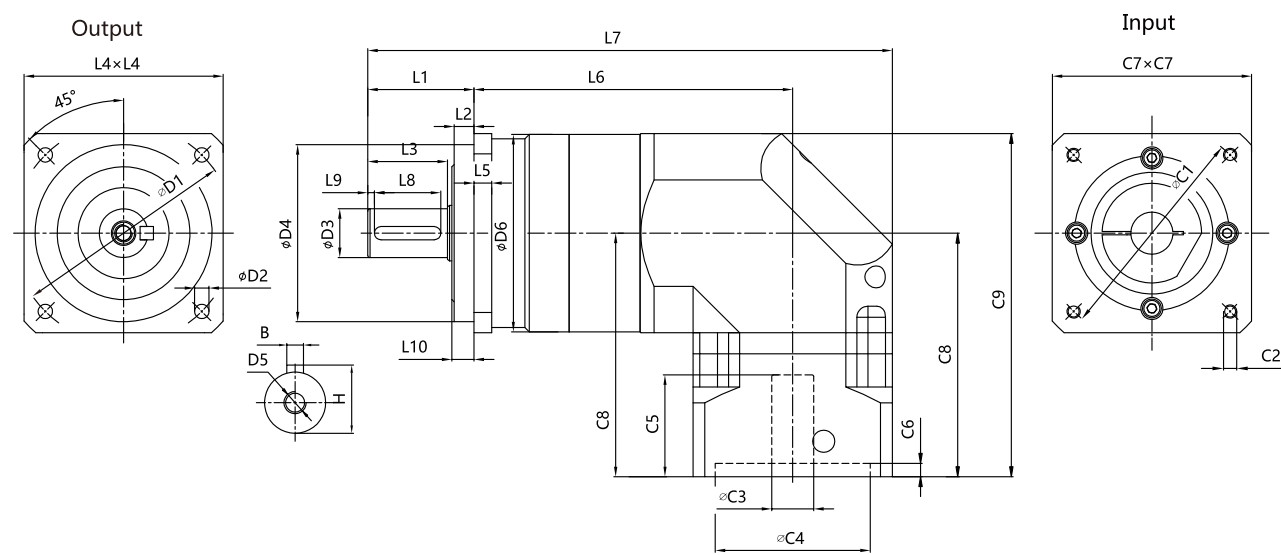
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Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	70	5.5	16	50	M5	60	37	7	28.5	60	8	87.5	154.5	20	3	7.5	70	M5	14	50	32	6	60	81.5	115	5	18

TVBR090-L1



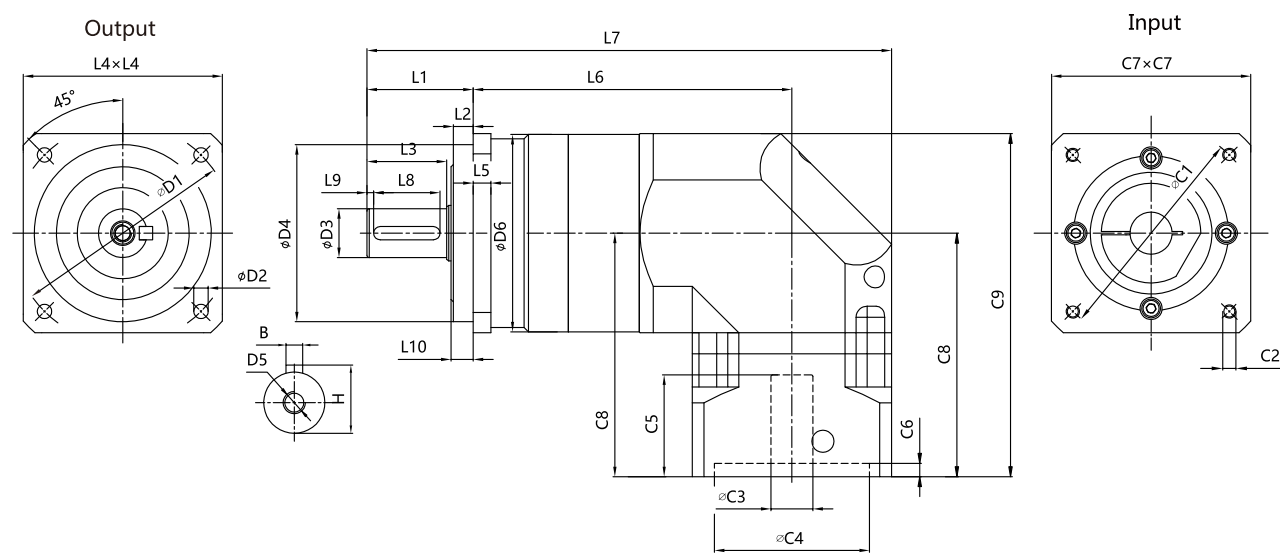
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Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	100	6.5	22	80	M8	90	48	9	36	90	8	112	205	30	3	9	90	M5	19	70	47.5	6	90	110	155	6	24.5

TVBR060-L2



TVBR060-L2																											
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	70	5.5	16	50	M5	60	37	7	28.5	60	8	109.5	176.5	20	3	7.5	70	M4	14	50	32	6	60	81.5	111.5	5	18

TVBR090-L2

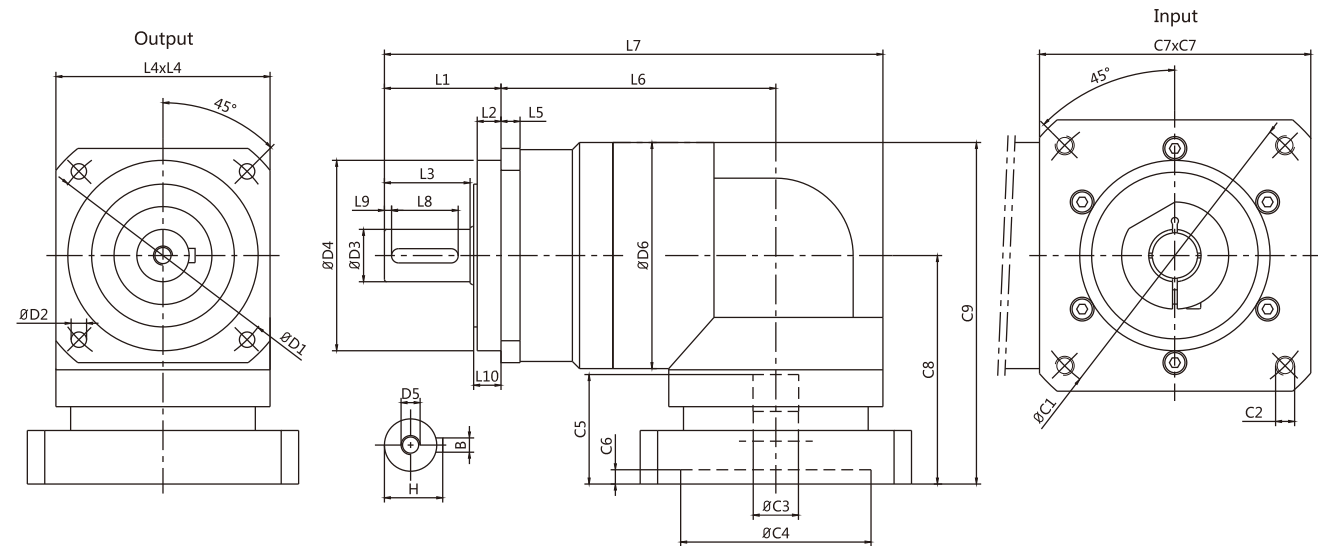


TVBR090-L2																											
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	100	6.5	22	80	M8	90	48	9	36	90	8	144	237	30	3	9	90	M5	19	70	47.5	6	90	110	155	6	24.5

※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

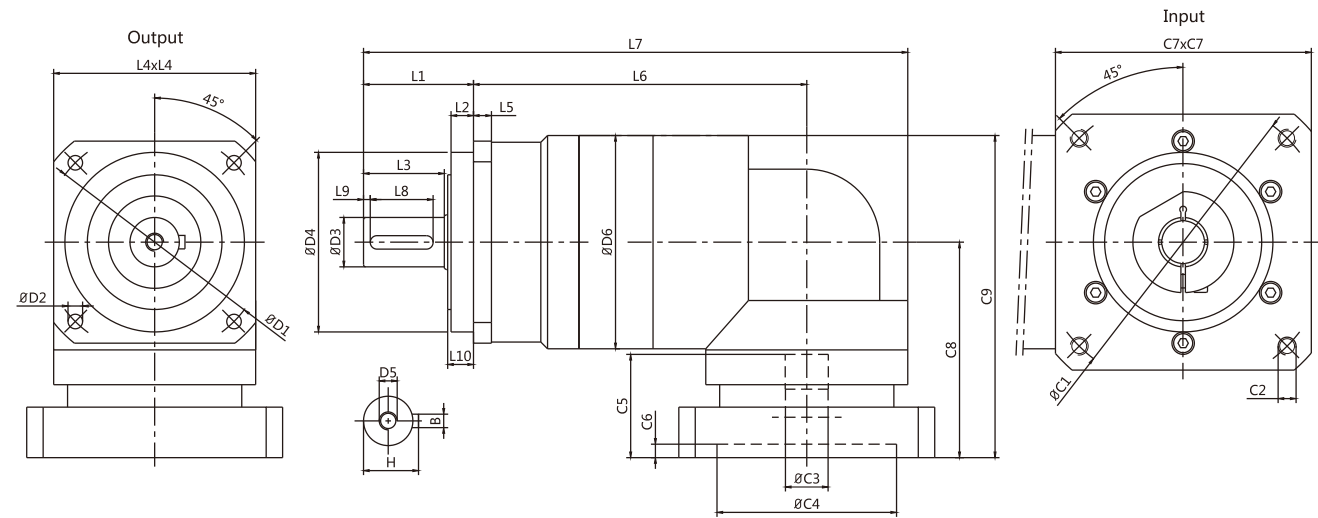
※Dimension can be customized according to the motor,if necessary,please contact us!
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TVBR120-L1



TVBR120-L1																											
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	130	9	32	110	M12	125	65	12	49	115	10	135.5	263	40	5	14	145	M8	22	110	62.5	8	130	134	196.5	10	35
TypeII	130	9	32	110	M12	125	65	12	49	115	10	135.5	263	40	5	14	145	M8	24	110	62.5	8	130	134	196.5	10	35

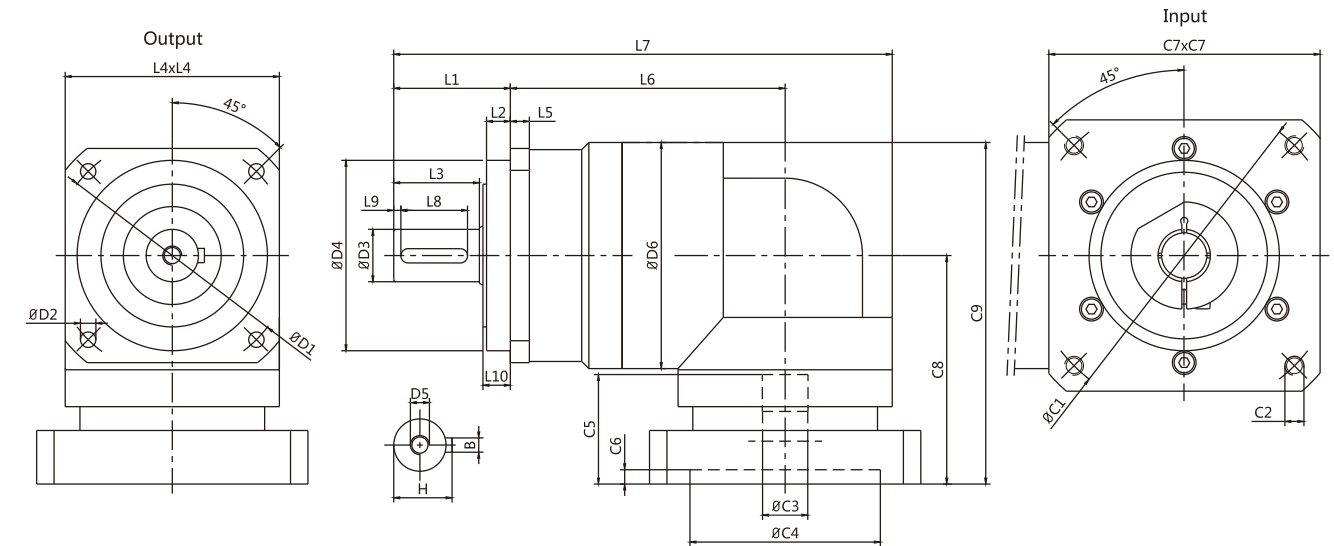
TVBR120-L2



TVBR120-L2																											
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	130	9	32	110	M12	125	65	12	49	115	10	172.5	300	40	5	14	145	M8	22	110	62.5	8	130	134	196.5	10	35
TypeⅡ	130	9	32	110	M12	125	65	12	49	115	10	172.5	300	40	5	14	145	M8	24	110	62.5	8	130	134	196.5	10	35
TypeⅢ	130	9	32	110	M12	125	65	12	49	115	10	172.5	300	40	5	14	90	M5	19	70	47.5	6	90	124	186.5	10	35

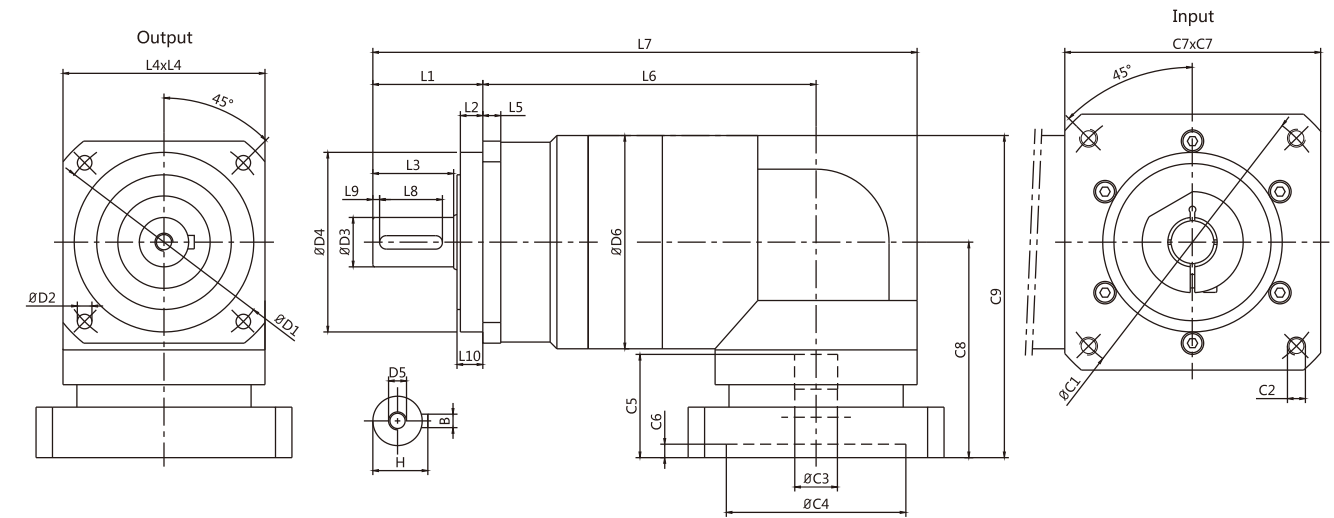
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TVBR140-L1



TVBR140-L1																											
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	165	11	40	130	M16	150	97	12	82	140	12	185.5	357.5	65	5	13.5	200	M12	35	114.3	81.5	8	180	167	242	12	43

TVBR140-L2



TVBR140-L2																											
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
TypeⅠ	165	11	40	130	M16	150	97	12	82	140	12	227	399	65	5	13.5	200	M12	35	114.3	81.5	8	180	167	242	12	43
TypeⅡ	165	11	40	130	M16	150	97	12	82	140	12	227	399	65	5	13.5	145	M8	24	110	74	8	130	157	232	12	43
TypeⅢ	165	11	40	130	M16	150	97	12	82	140	12	227	399	65	5	13.5	145	M8	22	110	74	8	130	157	232	12	43

※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TVBR060																		
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100		
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	55	50	60	50	40	55	50	60	55	50	50	60	50	40		
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque															
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	5000															
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	10000															
扭转刚性	Torsional Rigidity	Nm/arcmin	7															
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	1530															
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	630															
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)															
噪音值	Noise	dB	≤70 (输入转速=3000rpm、空载、距离1M②)															
使用温度	Operating Temp	℃	-10 ~ +90															
防护等级	Degree of Reducer Protection		IP65															
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils															
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	0.16	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13		
标准背隙 P2	Standard Backlash P2	arcmin	≤8							≤10								
效率 η	Efficiency η	%	≥93%							≥90%								

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TVBR090																		
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100		
额定输出扭矩 T_{2N}	Nominal Output Torque T_{2N}	Nm	130	140	160	140	100	130	140	160	150	140	140	160	140	100		
急停扭矩 T_{2NOT}	Emergency Stop Torque T_{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque															
额定输入转速 n_{1N}	Nominal Input Speed n_{1N}	rpm	4000															
最大输入转速 n_{1B}	Max. Input Speed n_{1B}	rpm	8000															
扭转刚性	Torsional Rigidity	Nm/arcmin	14															
容许径向力 F_{2rB}	Max. Radial Load F_{2rB}	N	3250															
容许轴向力 F_{2aB}	Max. Axial Load F_{2aB}	N	1300															
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)															
噪音值	Noise	dB	≤70 (输入转速=3000rpm、空载、距离1M②)															
使用温度	Operating Temp	℃	-10 ~ +90															
防护等级	Degree of Reducer Protection		IP65															
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils															
转动惯量 J_1	Mass Moments of Inertia J_1	kg·cm ²	0.61	0.48	0.47	0.45	0.44	0.47	0.47	0.47	0.44	0.45	0.44	0.44	0.13	0.13		
标准背隙 P2	Standard Backlash P2	arcmin	≤8							≤10								
效率 η	Efficiency η	%	≥93%							≥90%								

- ① Half-life under continuous operation mode.
② Reducer under no-load mode, input speed is 3000, the value which Noise Measurement machine get at one meter away position.

TVBR120																		
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100		
额定输出扭矩 T_{2N}	Nominal Output Torque T_{2N}	Nm	208	290	330	300	230	208	290	330	310	300	290	330	300	230		
急停扭矩 T_{2NOT}	Emergency Stop Torque T_{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque															
额定输入转速 n_{1N}	Nominal Input Speed n_{1N}	rpm	4000															
最大输入转速 n_{1B}	Max. Input Speed n_{1B}	rpm	8000															
扭转刚性	Torsional Rigidity	Nm/arcmin	25															
容许径向力 F_{2rB}	Max. Radial Load F_{2rB}	N	6700															
容许轴向力 F_{2aB}	Max. Axial Load F_{2aB}	N	3000															
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)															
噪音值	Noise	dB	≤72 (输入转速=3000rpm、空载、距离1M②)															
使用温度	Operating Temp	℃	-10 ~ +90															
防护等级	Degree of Reducer Protection		IP65															
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils															
转动惯量 J_1	Mass Moments of Inertia J_1	kg·cm ²	3.25	2.74	2.71	2.62	2.57	2.71	2.71	2.71	2.57	2.62	2.57	2.57	0.44	0.44		
标准背隙 P2	Standard Backlash P2	arcmin	≤8								≤10							
效率 η	Efficiency η	%	≥93%								≥90%							

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TVBR140																		
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100		
额定输出扭矩 T_{2N}	Nominal Output Torque T_{2N}	Nm	342	542	650	550	450	342	542	650	600	550	542	650	550	450		
急停扭矩 T_{2NOT}	Emergency Stop Torque T_{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque															
额定输入转速 n_{1N}	Nominal Input Speed n_{1N}	rpm	3000															
最大输入转速 n_{1B}	Max. Input Speed n_{1B}	rpm	6000															
扭转刚性	Torsional Rigidity	Nm/arcmin	50															
容许径向力 F_{2rB}	Max. Radial Load F_{2rB}	N	9400															
容许轴向力 F_{2aB}	Max. Axial Load F_{2aB}	N	4700															
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)															
噪音值	Noise	dB	≤75 (输入转速=3000rpm、空载、距离1M②)															
使用温度	Operating Temp	℃	-10 ~ +90															
防护等级	Degree of Reducer Protection		IP65															
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils															
转动惯量 J_1	Mass Moments of Inertia J_1	kg·cm ²	9.21	7.54	7.42	7.14	7.03	7.42	7.42	7.42	7.03	7.14	7.03	7.03	2.57	2.57		
标准背隙 P2	Standard Backlash P2	arcmin	≤8								≤10							
效率 η	Efficiency η	%	≥93%								≥90%							

- ② Reducer under no-load mode, input speed is 3000, the value which Noise Measurement machine get at one meter away position.

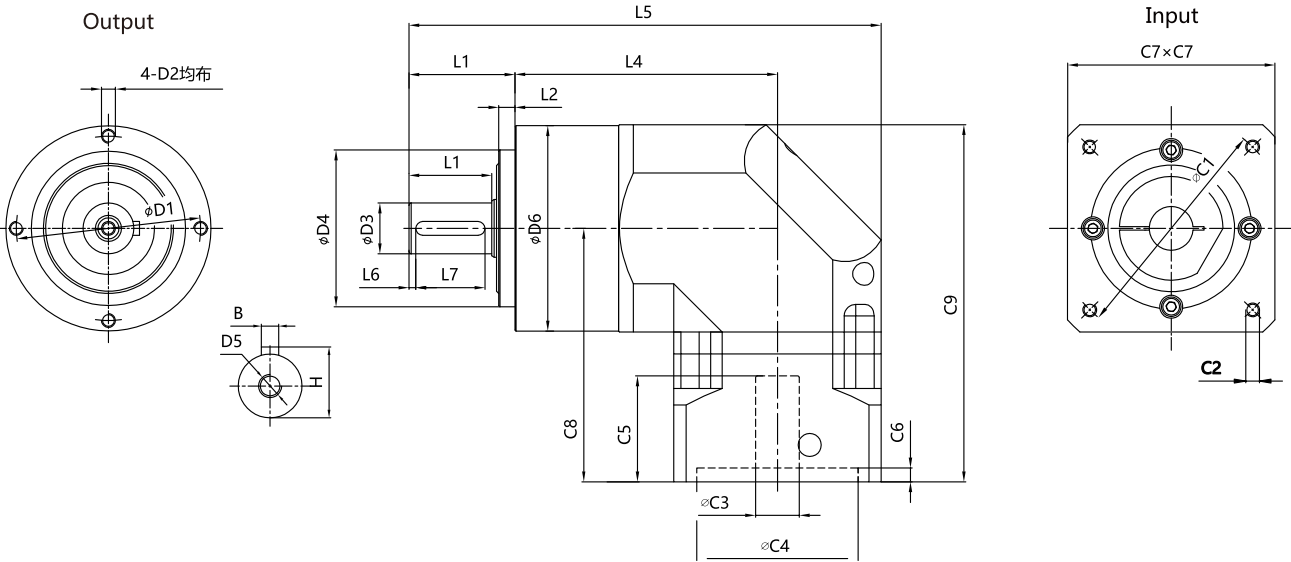
TAER Series

- **低噪音**：采用螺旋齿轮设计，实现了减速机的顺畅、安静运转。
- **高刚性、高扭矩**：输出轴采用大尺寸、大跨距式双支撑轴承设计，大大提高了减速机刚性和扭矩。
- **高效率**：单段可达 93% 以上，双段可达 90% 以上。
- **免维护**：油脂磨耗低，可终身润滑。
- **密封效果好**：润滑油脂具有高粘度、不易分离的特性，并采用 IP65 防护等级，确保无润滑油脂泄漏。
- **节省空间**：转角壳体采用一体式设计，既能保证减速机运转之精度又能节省安装空间。
- **适用性广**：适用于任意型式伺服电机。

- **Low Noise**: The use of helical gear design, to achieve a smooth, quiet operation of the reducer.
- **High Rigidity, High Torque**: The output shaft used large size, large span double support bearing design, which improves the rigidity and torque of the reducer.
- **High Efficiency**: 1-Stage up to 93% or more, 2-Stage up to 90% or more.
- **Maintenance-Free**: Low grease wear, can be lifetime lubrication.
- **Sealing Effect Is Good**: Lubricating grease with high viscosity, not easy to separate the characteristics, ip65 protection class to ensure that no grease leakage.
- **Space Saving**: Right angle housing with integrated design, both to ensure the accuracy of the reducer operation can save space.
- **Wide Applicability**: Applicable to any type of servo motor.

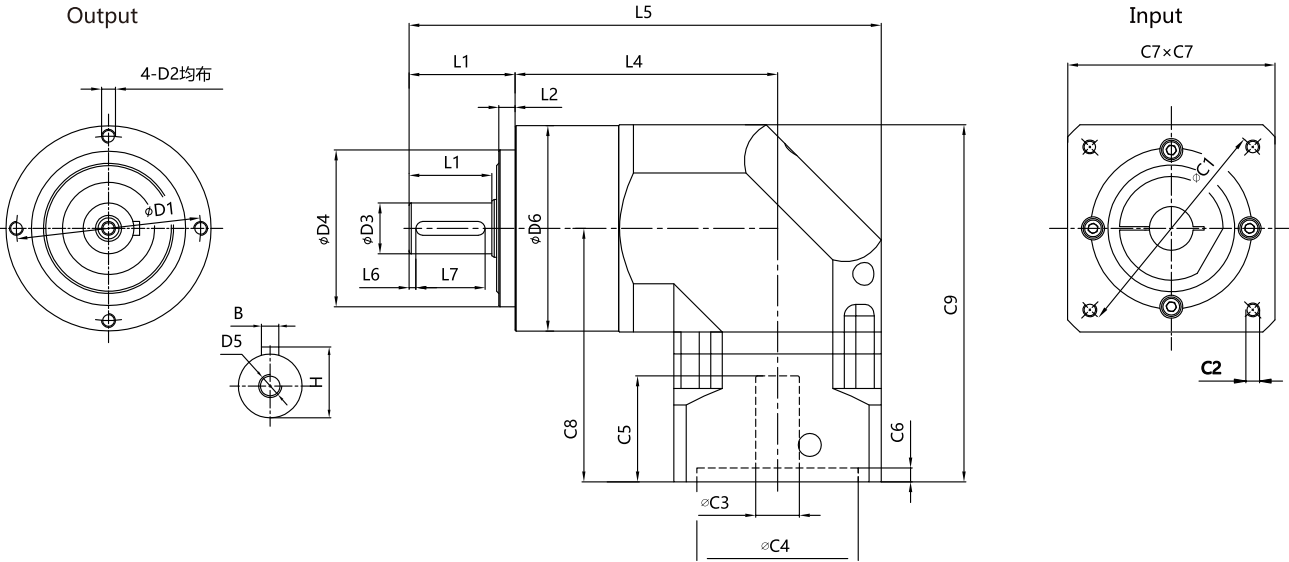


TAER060-L1



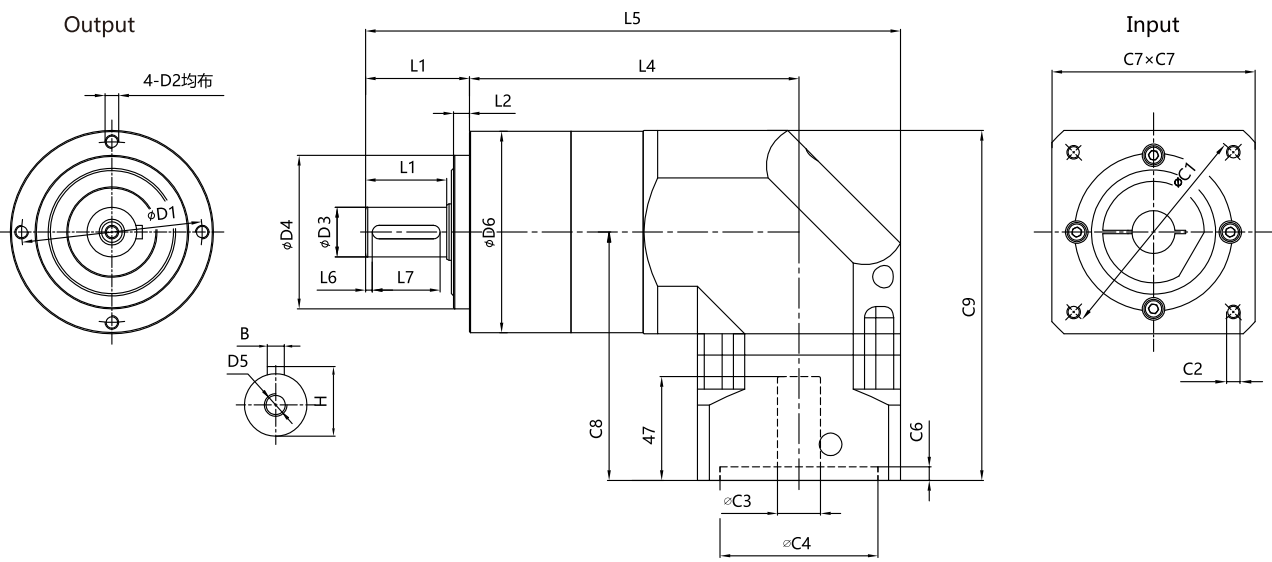
TAER060-L1																				
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3	※C4	※C5	※C6	※C7
Type I	52	M5	14	40	M5	60	27.5	3	23.5	95.5	153	20	3	70	M4	14	50	32	6	60

TAER090-L1



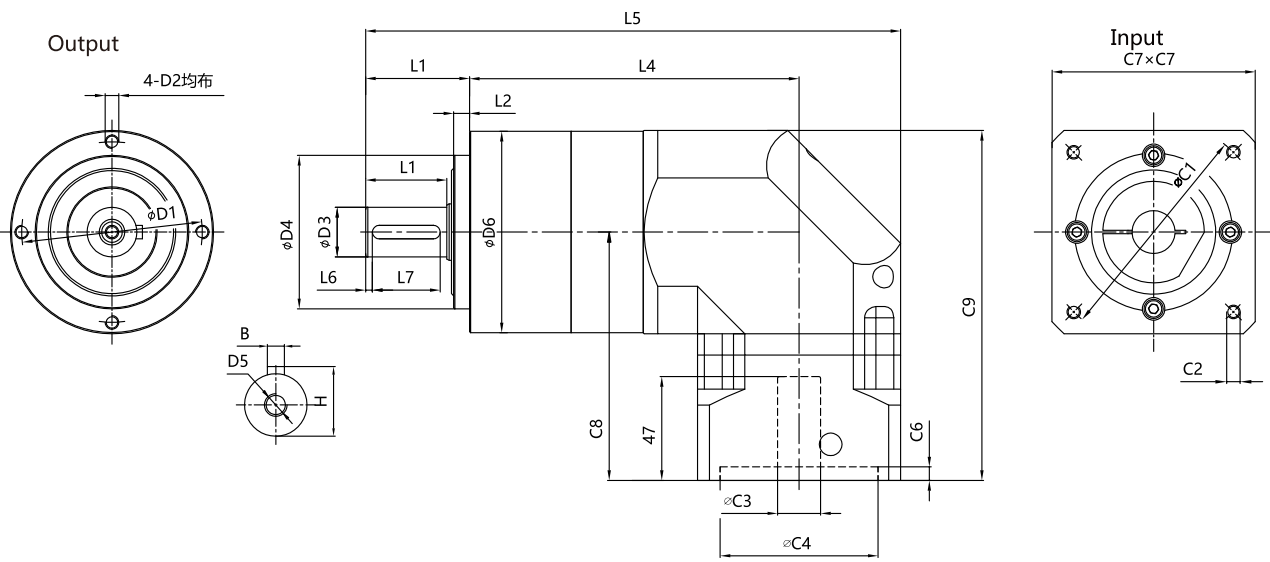
TAER090-L1																				
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3	※C4	※C5	※C6	※C7
Type I	70	M6	20	60	M8	90	40.5	3	36.5	120.5	206	30	3	90	M5	19	70	47.5	6	90

TAER060-L2



TAER060-L2																				
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3	※C4	※C5	※C6	※C7
Type I	52	M5	14	40	M5	60	27.5	3	23.5	115.5	173	20	3	70	M4	14	50	32	6	60

TAER090-L2

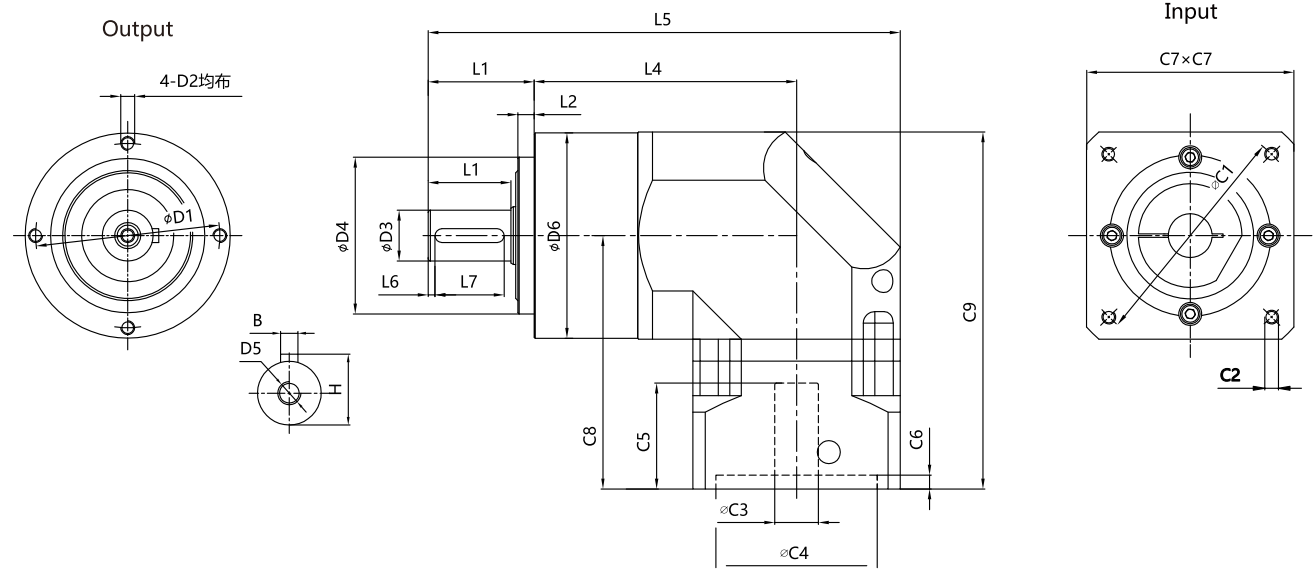


TAER090-L2																				
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3	※C4	※C5	※C6	※C7
Type I	70	M6	20	60	M8	90	40.5	3	36.5	148	233.5	30	3	90	M5	19	70	47.5	6	90

※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

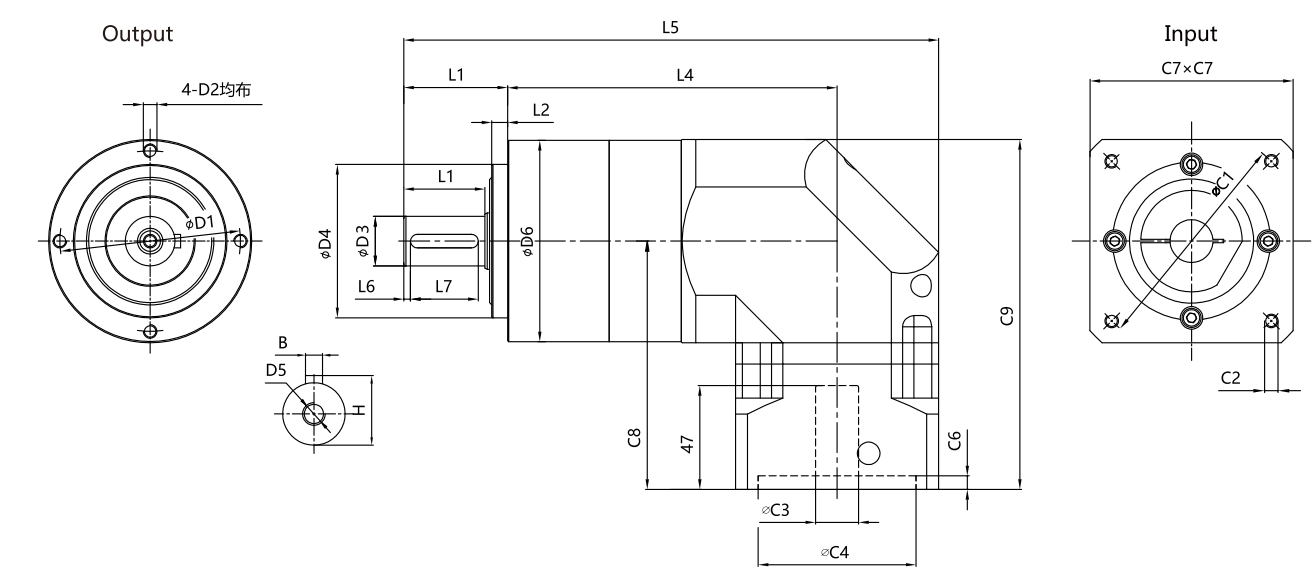
※Dimension can be customized according to the motor,if necessary,please contact us!
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TAER120-L1



TAER120-L1																								
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	108	M8	32	90	M12	125	65	12	51	135.5	253	40	5	145	M8	22	110	62.5	8	130	134	196.5	8	28
TypeII	108	M8	32	90	M12	125	65	12	51	135.5	253	40	5	145	M8	24	110	62.5	8	130	134	196.5	8	28

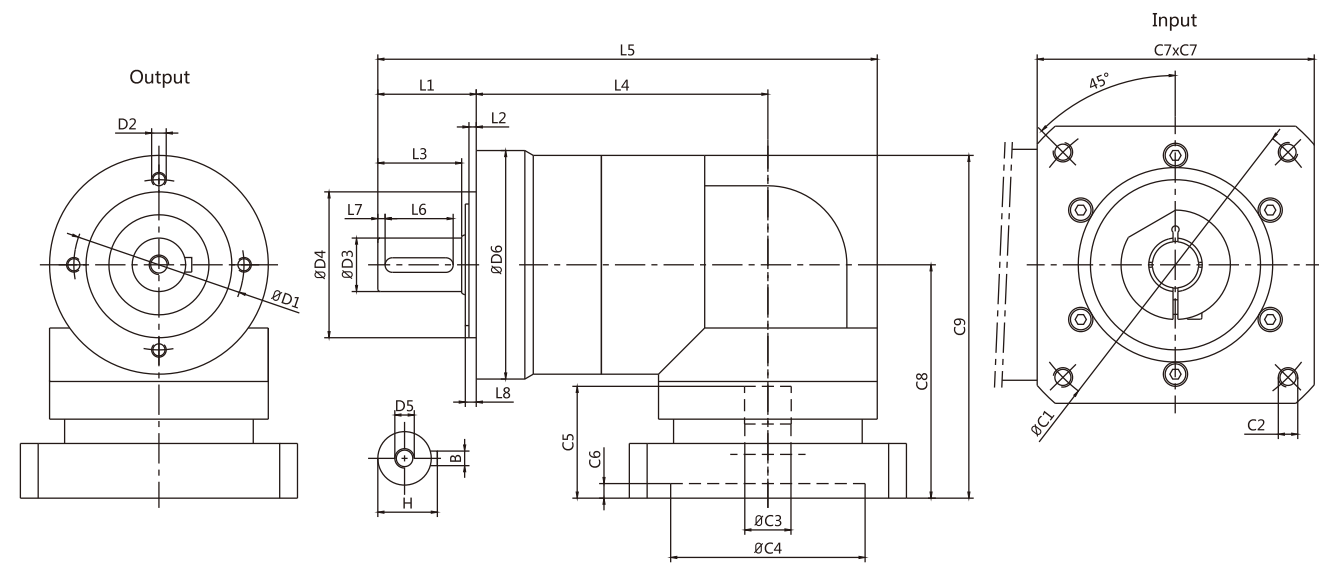
TAER120-L2



TAER120-L2																								
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	108	M8	32	90	M12	125	65	12	51	172.5	290	40	5	145	M8	22	110	62.5	8	130	134	196.5	8	28
TypeⅡ	108	M8	32	90	M12	125	65	12	51	172.5	290	40	5	145	M8	24	110	62.5	8	130	134	196.5	8	28

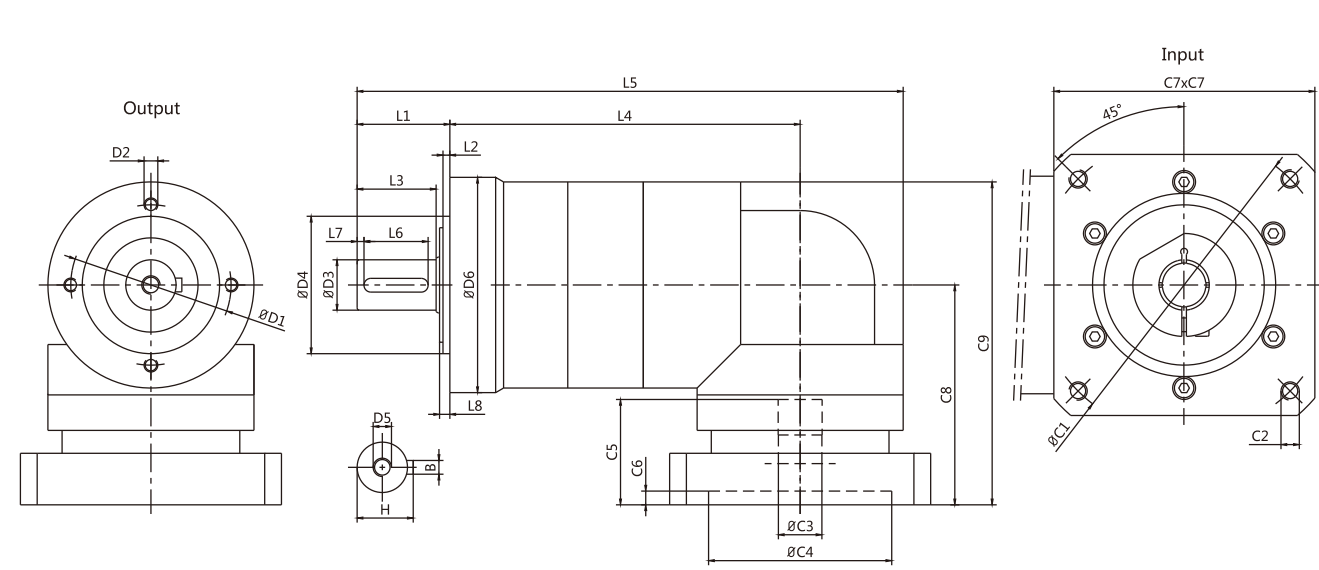
※Dimension can be customized according to the motor,if necessary,please contact us!
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TAER140-L1



		TAER140-L1																							
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	140	M10	40	120	M16	155	97	12	82	185.5	357.5	65	5	13.5	200	M12	35	114.3	81.5	8	180	167	242	12	43

TAER140-L2



		TAER140-L2																							
Dimension	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	※C1	※C2	※C3	※C4	※C5	※C6	※C7	C8	C9	B	H
Type I	140	M10	40	120	M16	155	97	12	82	227	399	65	5	13.5	200	M12	35	114.3	81.5	8	180	167	242	12	43

※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TAER060																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	35	40	45	40	30	35	45	45	40	40	40	45	40	30	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	5000														
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	10000														
扭转刚性	Torsional Rigidity	Nm/arcmin	5														
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	1300														
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	550														
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)														
噪音值	Noise	dB	≤70 (输入转速=3000rpm、空载、距离1M②)														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils														
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	0.16	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	
标准背隙 P2	Standard Backlash P2	arcmin	≤8									≤10					
效率 η	Efficiency η	%	≥93%									≥90%					

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TAER090																		
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100		
额定输出扭矩 T_{2N}	Nominal Output Torque T_{2N}	Nm	100	110	125	110	80	100	110	125	110	125	110	125	110	80		
急停扭矩 T_{2NOT}	Emergency Stop Torque T_{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque															
额定输入转速 n_{1N}	Nominal Input Speed n_{1N}	rpm	4000															
最大输入转速 n_{1B}	Max. Input Speed n_{1B}	rpm	8000															
扭转刚性	Torsional Rigidity	Nm/arcmin	11															
容许径向力 F_{2rB}	Max. Radial Load F_{2rB}	N	2800															
容许轴向力 F_{2aB}	Max. Axial Load F_{2aB}	N	1000															
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)															
噪音值	Noise	dB	≤70 (输入转速=3000rpm、空载、距离1M②)															
使用温度	Operating Temp	℃	-10 ~ +90															
防护等级	Degree of Reducer Protection		IP65															
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils															
转动惯量 J_1	Mass Moments of Inertia J_1	kg·cm ²	0.61	0.48	0.47	0.45	0.44	0.47	0.47	0.47	0.44	0.45	0.44	0.44	0.13	0.13		
标准背隙 P2	Standard Backlash P2	arcmin	≤8							≤10								
效率 η	Efficiency η	%	≥93%							≥90%								

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TAER120																	
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100	
额定输出扭矩 T_{2N}	Nominal Output Torque T_{2N}	Nm	170	220	250	200	180	170	220	250	220	200	220	250	200	180	
急停扭矩 T_{2NOT}	Emergency Stop Torque T_{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque														
额定输入转速 n_{1N}	Nominal Input Speed n_{1N}	rpm	4000														
最大输入转速 n_{1B}	Max. Input Speed n_{1B}	rpm	8000														
扭转刚性	Torsional Rigidity	Nm/arcmin	18														
容许径向力 F_{2rB}	Max. Radial Load F_{2rB}	N	5200														
容许轴向力 F_{2aB}	Max. Axial Load F_{2aB}	N	2300														
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)														
噪音值	Noise	dB	≤72 (输入转速=3000rpm、空载、距离1M②)														
使用温度	Operating Temp	℃	-10 ~ +90														
防护等级	Degree of Reducer Protection		IP65														
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils														
转动惯量 J_1	Mass Moments of Inertia J_1	kg·cm ²	3.25	2.74	2.71	2.62	2.57	2.71	2.71	2.71	2.57	2.62	2.57	2.57	0.44	0.44	
标准背隙 P2	Standard Backlash P2	arcmin	≤8									≤10					
效率 η	Efficiency η	%	≥93%									≥90%					

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TAER140																		
速比	Ratio		3	4	5	7	10	15	20	25	30	35	40	50	70	100		
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	342	542	650	550	450	342	542	650	600	550	542	650	550	450		
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque															
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	3000															
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	6000															
扭转刚性	Torsional Rigidity	Nm/arcmin	50															
容许径向力 F _{2rB}	Max. Radial Load F _{2rB}	N	9400															
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	4700															
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)															
噪音值	Noise	dB	≤75 (输入转速=3000rpm、空载、距离1M②)															
使用温度	Operating Temp	℃	-10 ~ +90															
防护等级	Degree of Reducer Protection		IP65															
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils															
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	9.21	7.54	7.42	7.14	7.03	7.42	7.42	7.42	7.03	7.14	7.03	7.03	2.57	2.57		
标准背隙 P2	Standard Backlash P2	arcmin	≤8							≤10								
效率 η	Efficiency η	%	≥93%							≥90%								

- ① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

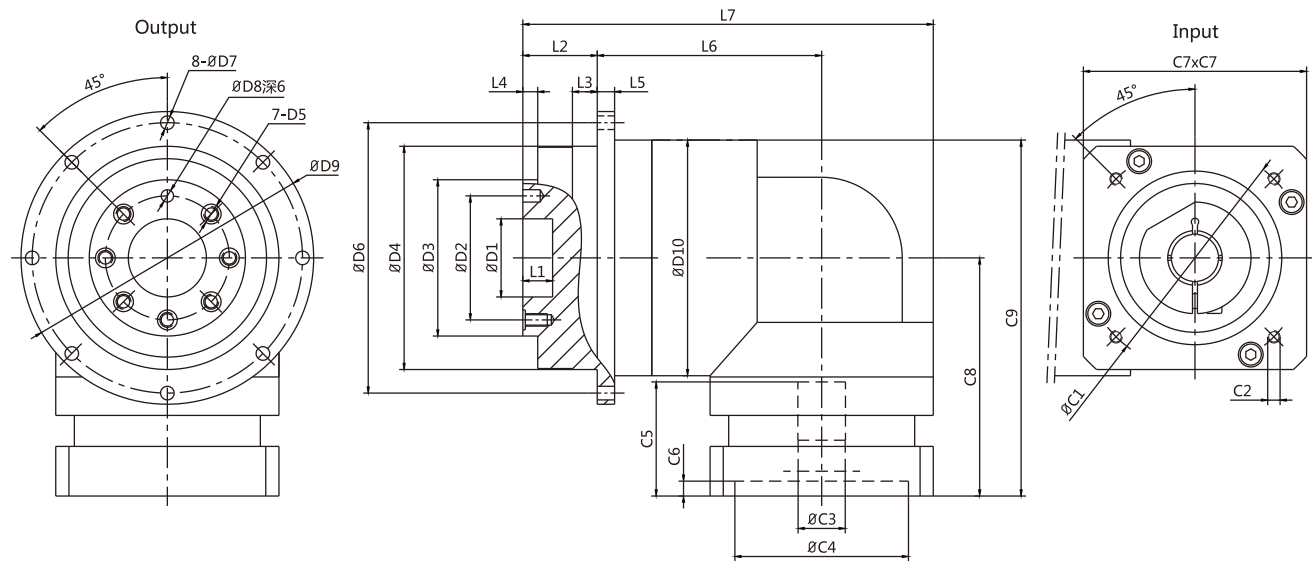
TADR Series

- **低噪音**：采用螺旋齿轮设计，实现了减速机的顺畅、安静运转。
- **高刚性、高负载**：法兰盘式输出，并采用跨距式双支撑角接触球轴承设计，大大提高了减速机刚性和负载能力。
- **高效率**：单段可达 93% 以上，双段可达 90% 以上。
- **免维护**：油脂磨耗低，可终身润滑。
- **密封效果好**：润滑油脂具有高粘度、不易分离的特性，并采用 IP65 防护等级，确保无润滑油脂泄漏。
- **节省空间**：转角壳体采用一体式设计，既能保证减速机运转之精度又能节省安装空间。
- **适用性广**：适用于任意型式伺服电机。

- **Low Noise**: The use of helical gear design, to achieve a smooth, quiet operation of the reducer.
- **High Rigidity, High Load**: Flange-type output, and the use of large span double support angular contact ball bearings design, which improves the rigidity and load capacity of the reducer.
- **High Efficiency**: 1-Stage up to 93% or more, 2-Stage up to 90% or more.
- **Maintenance-Free**: Low grease wear, can be lifetime lubrication.
- **Sealing Effect Is Good**: Lubricating grease with high viscosity, not easy to separate the characteristics, ip65 protection class to ensure that no grease leakage.
- **Space Saving**: Right angle housing with integrated design, both to ensure the accuracy of the reducer operation can save space.
- **Wide Applicability**: Applicable to any type of servo motor.

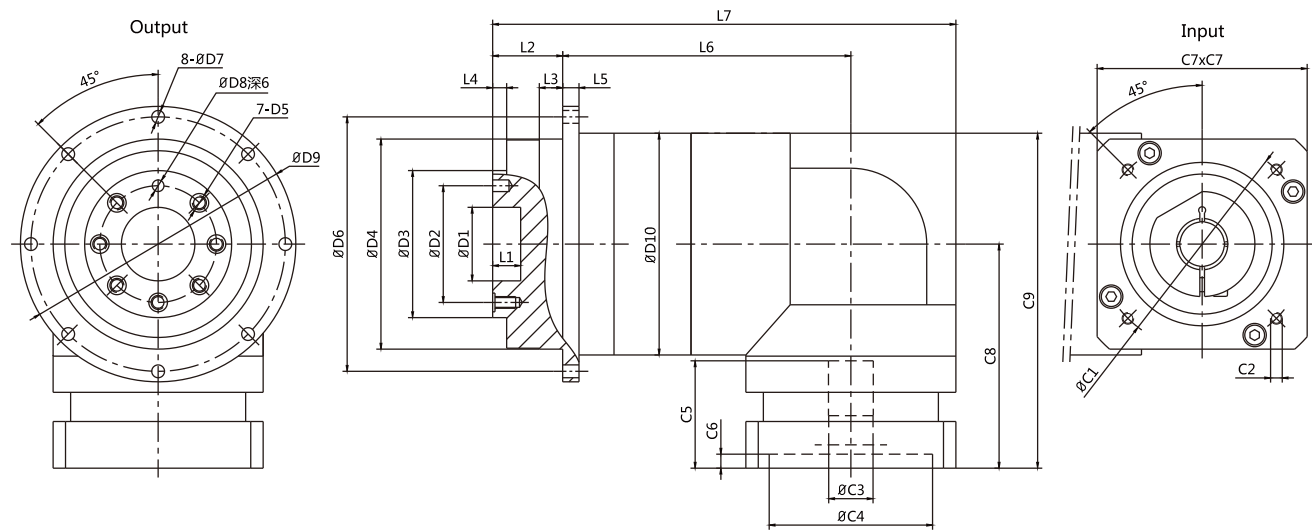


TADR060-L1



TADR060-L1																				
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3
Type I	20	31.5	40	64	M5	79	4.5	5	86	70	8	19.5	8	3	4	71	125.5	70	M4	14
TypeII	20	31.5	40	64	M5	79	4.5	5	86	70	8	19.5	8	3	4	71	125.5	90	M5	19

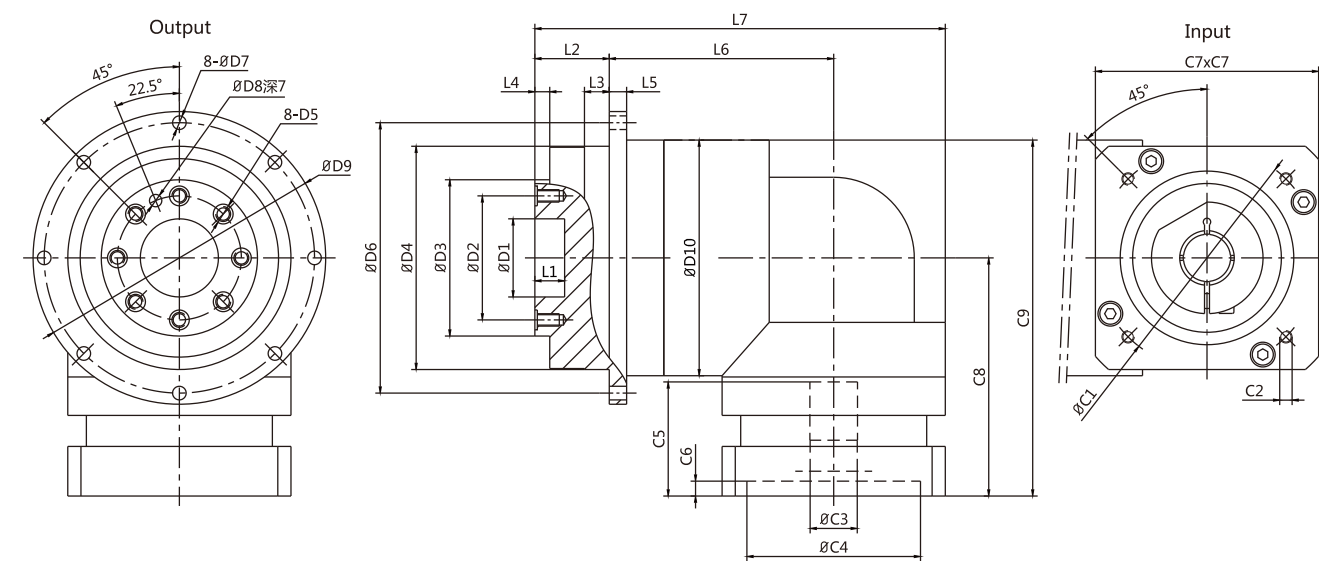
TADR060-L2



TADR060-L2																				
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3
Type I	20	31.5	40	64	M5	79	4.5	5	86	70	8	19.5	8	3	4	94.5	149	70	M4	14
TypeII	20	31.5	40	64	M5	79	4.5	5	86	70	8	19.5	8	3	4	94.5	149	70	M4	11

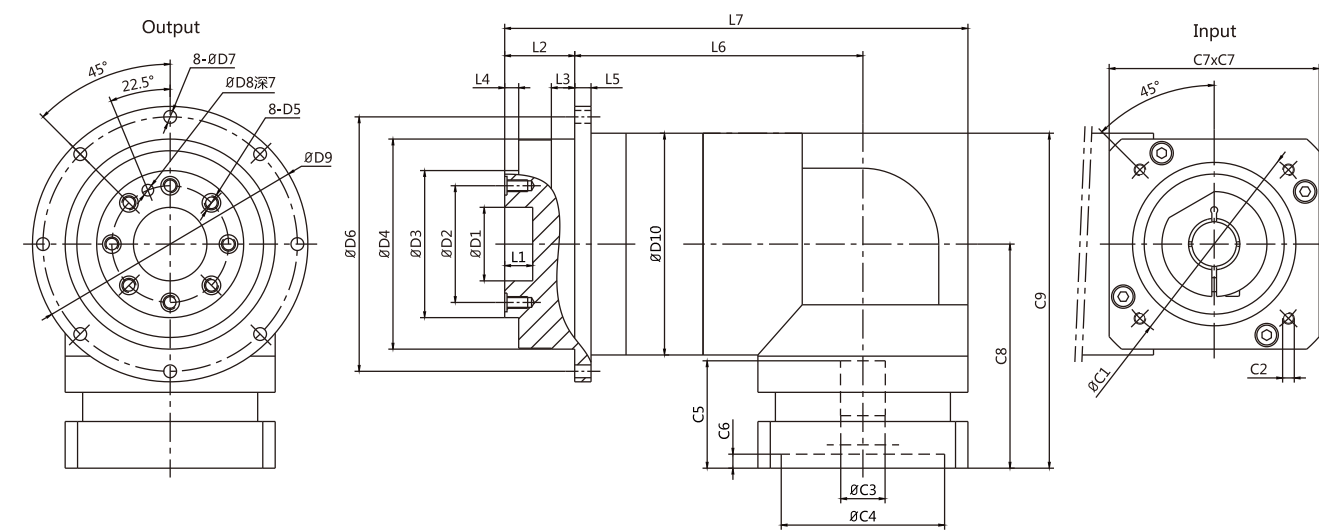
※Dimension can be customized according to the motor,if necessary,please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TADR090-L1



TADR090-L1																				
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3
Type I	31.5	50	63	90	M6	109	5.5	6	118	95	12	30	10	6	7	102	179.5	90	M5	19
TypeII	31.5	50	63	90	M6	109	5.5	6	118	95	12	30	10	6	7	102	179.5	145	M8	19
TypeIII	31.5	50	63	90	M6	109	5.5	6	118	95	12	30	10	6	7	102	179.5	145	M8	22
TypeIV	31.5	50	63	90	M6	109	5.5	6	118	95	12	30	10	6	7	102	179.5	145	M8	24

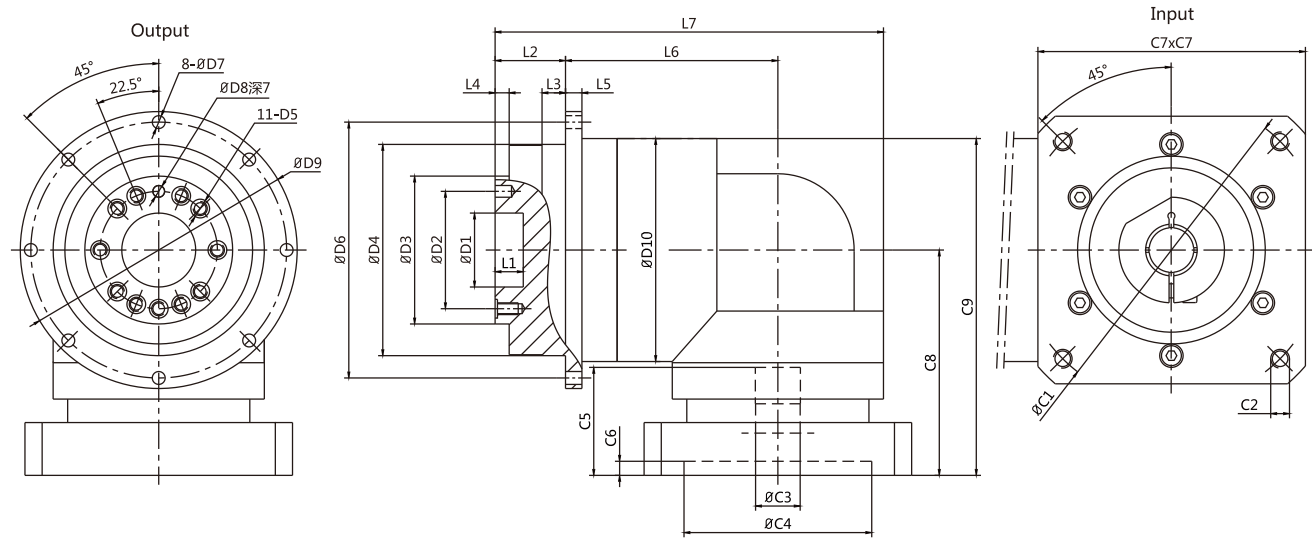
TADR090-L2



TADR090-L2																				
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3
Type I	31.5	50	63	90	M6	109	5.5	6	118	95	12	30	10	6	7	130	207.5	90	M5	19
TypeII	31.5	50	63	90	M6	109	5.5	6	118	95	12	30	10	6	7	130	207.5	70	M4	14

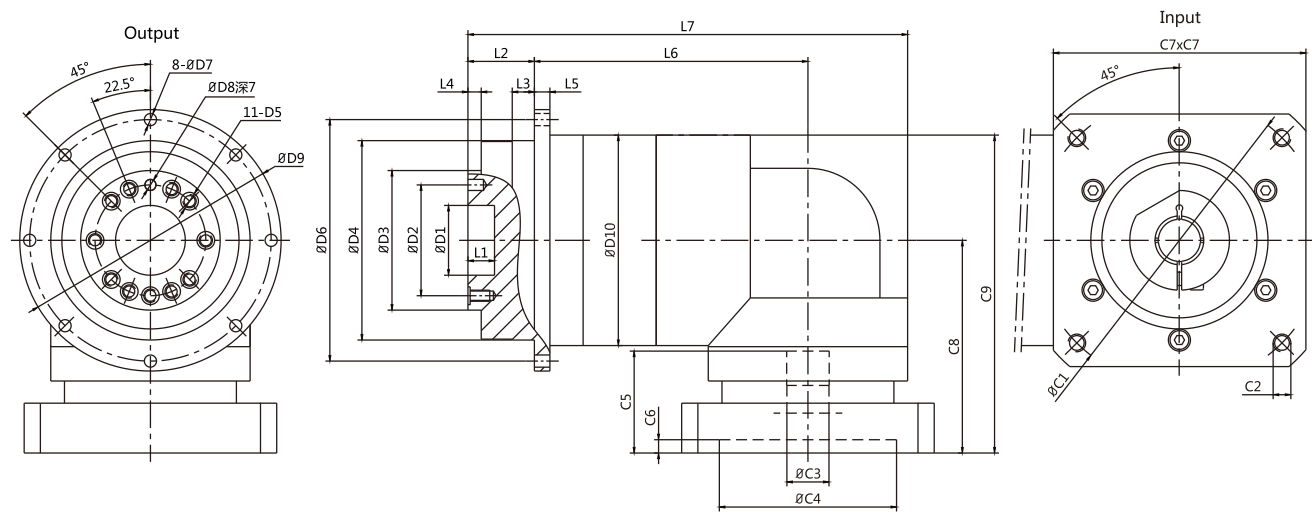
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带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TADR120-L1



TADR120-L1																				
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3
Type I	40	63	80	110	M6	135	5.5	6	145	115	13	29	8	7	8	130	216.5	145	M8	22
Type II	40	63	80	110	M6	135	5.5	6	145	115	13	29	8	7	8	130	216.5	145	M8	24

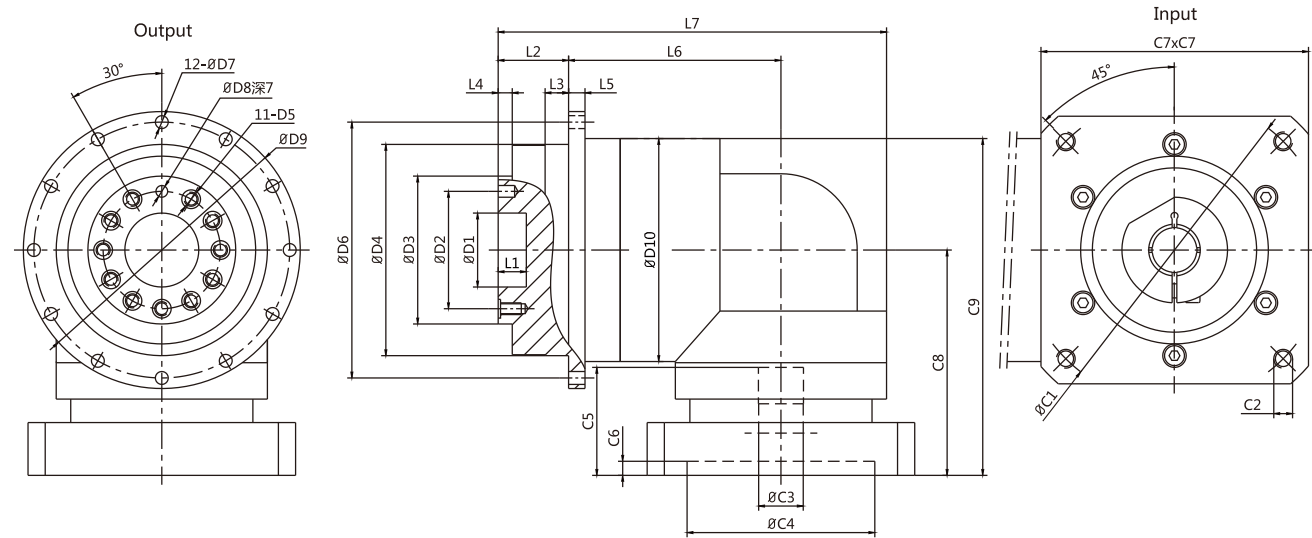
TADR120-L2



TADR120-L2																				
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3
Type I	40	63	80	110	M6	135	5.5	6	145	115	13	29	8	7	8	161	247.5	145	M8	22
Type II	40	63	80	110	M6	135	5.5	6	145	115	13	29	8	7	8	161	247.5	145	M8	24
Type III	40	63	80	110	M6	135	5.5	6	145	115	13	29	8	7	8	161	247.5	90	M5	19

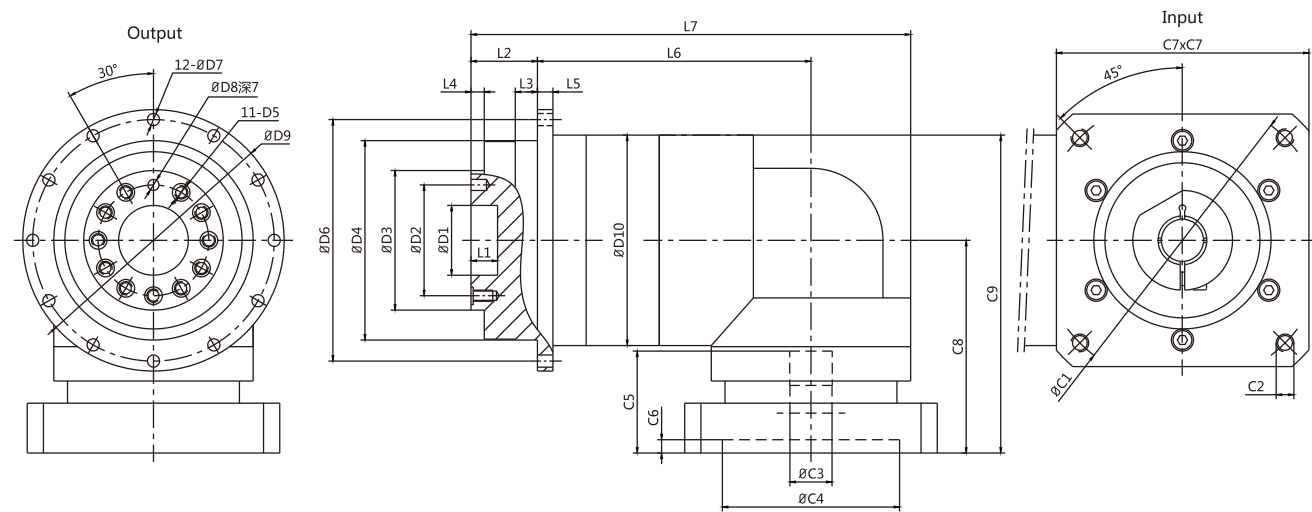
※Dimension can be customized according to the motor, if necessary, please contact us!
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TADR140-L1



TADR140-L1																				
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3
Type I	50	80	100	140	M8	168	6.5	8	179	152.5	12	38	14.5	7.5	10	142.5	256.5	200	M12	35
Type II	50	80	100	140	M8	168	6.5	8	179	152.5	12	38	14.5	7.5	10	142.5	256.5	200	M12	35

TADR140-L2



TADR140-L2																				
Dimension	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	L1	L2	L3	L4	L5	L6	L7	※C1	※C2	※C3
Type I	50	80	100	140	M8	168	6.5	8	179	152.5	12	38	14.5	7.5	10	180	294	200	M12	35
Type II	50	80	100	140	M8	168	6.5	8	179	152.5	12	38	14.5	7.5	10	180	294	145	M8	22
Type III	50	80	100	140	M8	168	6.5	8	179	152.5	12	38	14.5	7.5	10	180	294	145	M8	24

※Dimension can be customized according to the motor, if necessary, please contact us!
带※尺寸可根据客户电机实际尺寸定制，如有需要，请联系我们！

TADR060														
速比	Ratio		4	5	7	10	20	25	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	48	60	50	40	48	60	50	48	60	50	40	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque											
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	5000											
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	10000											
扭转刚性	Torsional Rigidity	Nm/arcmin	13											
最大弯曲力矩 M _{2KB}	Max. Bending moment M _{2KB}	Nm	125											
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	2110											
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)											
噪音值	Noise	dB	≤70 (输入转速=3000rpm、空载、距离1M②)											
使用温度	Operating Temp	℃	-10 ~ +90											
防护等级	Degree of Reducer Protection		IP65											
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils											
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	
标准背隙 P2	Standard Backlash P2	arcmin	≤8				≤10							
效率 η	Efficiency η	%	≥93%				≥90%							

① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TADR120														
速比	Ratio		4	5	7	10	20	25	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	270	330	300	230	270	330	300	270	330	300	230	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque											
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	4000											
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	8000											
扭转刚性	Torsional Rigidity	Nm/arcmin	82											
最大弯曲力矩 M _{2KB}	Max. Bending moment M _{2KB}	Nm	430											
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	4800											
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)											
噪音值	Noise	dB	≤72 (输入转速=3000rpm、空载、距离1M②)											
使用温度	Operating Temp	℃	-10 ~ +90											
防护等级	Degree of Reducer Protection		IP65											
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils											
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	2.74	2.71	2.62	2.57	2.71	2.71	2.62	2.57	2.57	0.44	0.44	
标准背隙 P2	Standard Backlash P2	arcmin	≤8				≤10							
效率 η	Efficiency η	%	≥93%				≥90%							

① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TADR090														
速比	Ratio		4	5	7	10	20	25	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	130	160	140	100	130	160	140	130	160	140	100	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque											
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	4000											
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	8000											
扭转刚性	Torsional Rigidity	Nm/arcmin	31											
最大弯曲力矩 M _{2KB}	Max. Bending moment M _{2KB}	Nm	235											
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	2310											
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)											
噪音值	Noise	dB	≤70 (输入转速=3000rpm、空载、距离1M②)											
使用温度	Operating Temp	℃	-10 ~ +90											
防护等级	Degree of Reducer Protection		IP65											
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils											
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	0.48	0.47	0.45	0.44	0.47	0.47	0.47	0.44	0.44	0.13	0.13	
标准背隙 P2	Standard Backlash P2	arcmin	≤8				≤10							
效率 η	Efficiency η	%	≥93%				≥90%							

① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

TADR140														
速比	Ratio		4	5	7	10	20	25	35	40	50	70	100	
额定输出扭矩 T _{2N}	Nominal Output Torque T _{2N}	Nm	560	650	550	450	560	650	550	560	650	550	450	
急停扭矩 T _{2NOT}	Emergency Stop Torque T _{2NOT}	Nm	2.5倍额定输出扭矩 2.5 times of Nominal Output Torque											
额定输入转速 n _{1N}	Nominal Input Speed n _{1N}	rpm	3000											
最大输入转速 n _{1B}	Max. Input Speed n _{1B}	rpm	6000											
扭转刚性	Torsional Rigidity	Nm/arcmin	151											
最大弯曲力矩 M _{2KB}	Max. Bending moment M _{2KB}	Nm	1300											
容许轴向力 F _{2aB}	Max. Axial Load F _{2aB}	N	6200											
使用寿命	Service Life	hr	20000 (连续运转寿命减半①)											
噪音值	Noise	dB	≤75 (输入转速=3000rpm、空载、距离1M②)											
使用温度	Operating Temp	℃	-10 ~ +90											
防护等级	Degree of Reducer Protection		IP65											
润滑	Lubrication		合成润滑油脂 (终身润滑) Synthetic lubrication oils											
转动惯量 J ₁	Mass Moments of Inertia J ₁	kg·cm ²	7.54	7.42	7.14	7.03	7.42	7.42	7.14	7.03	7.03	2.57	2.57	
标准背隙 P2	Standard Backlash P2	arcmin	≤8				≤10							
效率 η	Efficiency η	%	≥93%				≥90%							

① Half-life under continuous operation mode.
② Reducer under no-load mode,input speed is 3000,the value which Noise Measurement machine get at one meter away postion.

使用注意事项 Precautions For Use

- 1 合理选用减速机，超功率选型将导致减速机损坏。
Select the reasonable reducer, damage of reducer may happen if choosen a reducer beyond the right power.
- 2 安装减速机时，请勿使用铁锤敲击减速机本体，避免影响运转精度。
During the set up of reducer, please do not use the hammer hitting the reducer body, in case of impacting the accuracy during running.
- 3 减速机运转状态下不可将手或其他异物置于旋转轴上，小心人体受伤。
Under the running status of reducer, do not put the hands or other objects on the rotarying shaft, in case of injury.
- 4 运转过程中出现异响、异常震动，请终止运行并联系我们，我们会给予解决方案。
Any uncommon sound / nosie or uncommon vibration, please stop the reducer running and contact us, we will provide the best solution.
- 5 不要擅自拆解减速机，再组装时无法保证性能如初。
Do not disassemble the reducer, no guarantee on performance after reassembling.
- 6 启动减速机时应逐步启动，不要立即将负载提至最高，应逐步增加。
Start the reducer step by step, do not lift the loader to the upper limit.
- 7 避免将减速机置于极端恶劣环境之下，如有可能，尽量给予减速机防护措施，以延长使用寿命。
To extend the life of reducer, please do not put the reducer in bad environment.

表 I 夹套螺丝锁紧扭力

Table I Motor Lock Sleeve Screw Tightening Torque

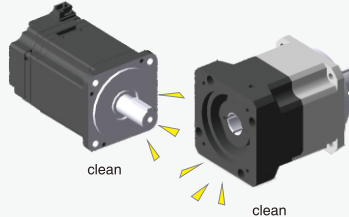
减速机规格 Reducer Specifications	螺丝规格 Screw Size	六角头规格 Hexagon Head Size	扭力值 (12.9级螺丝) Strength 12.9 Tightening Torque	
		mm	Nm	In-lbs
040-Series	M4	3	4.9	44
060 Series	M5	4	9.8	87
090 Series	M6	5	17	151
120/140 Series	M8	6	41	364
180 Series	M10	8	80	709
220 Series	M12	10	139	1232

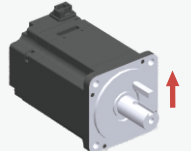
表II 马达螺丝锁紧扭力

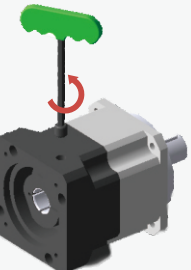
TableII Motor Mounting Screw Tightening Torque

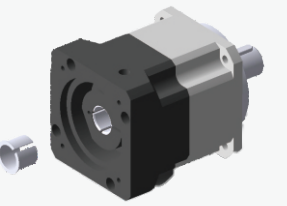
螺丝规格 Screw Size	六角头规格 Hexagon Head Size	扭力值 (12.9级螺丝) Strength 12.9 Tightening Torque	
	mm	Nm	In-lbs
M3	2.5	2.1	19
M4	3	4.9	44
M5	4	9.8	87
M6	5	17	151
M8	6	41	364
M10	8	80	709
M12	10	139	1232

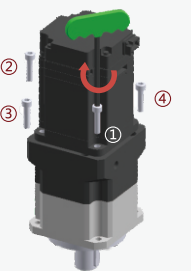
安装说明 Mounting Instruction

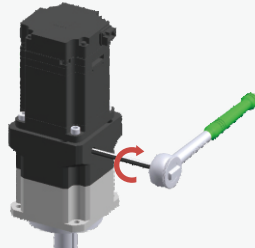
- 1 

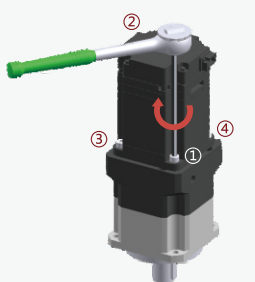
核对马达与减速机型号是否正确，并将安装面擦拭干净。
Double-check the motor and reducer size, Clean the mounting surface.
- 2 

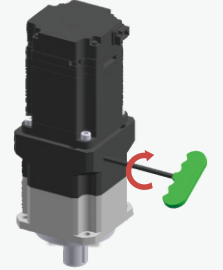
取下马达轴键。
Remove motor key.
- 3 

将螺堵取出，转动马达夹套，直到夹套螺丝对准侧螺栓孔。
Remove plug screw, turn the motor lock sleeve until the sleeve screw is aligned to the side bolt hole.
- 4 

检查输入孔尺寸，并将输入孔擦拭干净。如有必要，请装上轴套。
Inspect and clean input hole size, insert shaft sleeve if necessary.
- 5 

直立装入马达，按①~④顺序将螺丝锁上。
Insert the motor vertically and tighten the mounting screws in the order of ①~④.
- 6 

参照表 I 扭力值，用扭力扳手将马达夹套螺丝锁紧。
Refer to Table I Torque and tighten the motor lock sleeve screw with a torque wrench.
- 7 

参照表II扭力值，按①~④顺序，用扭力扳手将螺丝锁紧。
Refer to the torque in Table II and use the torque wrench to tighten the mounting screws in the order of ①~④.
- 8 

锁回螺堵。
Tighten back the plug screw.