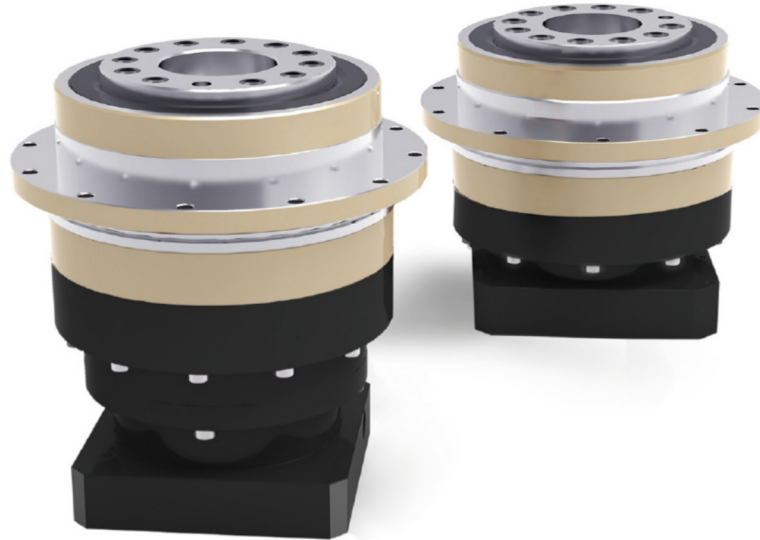
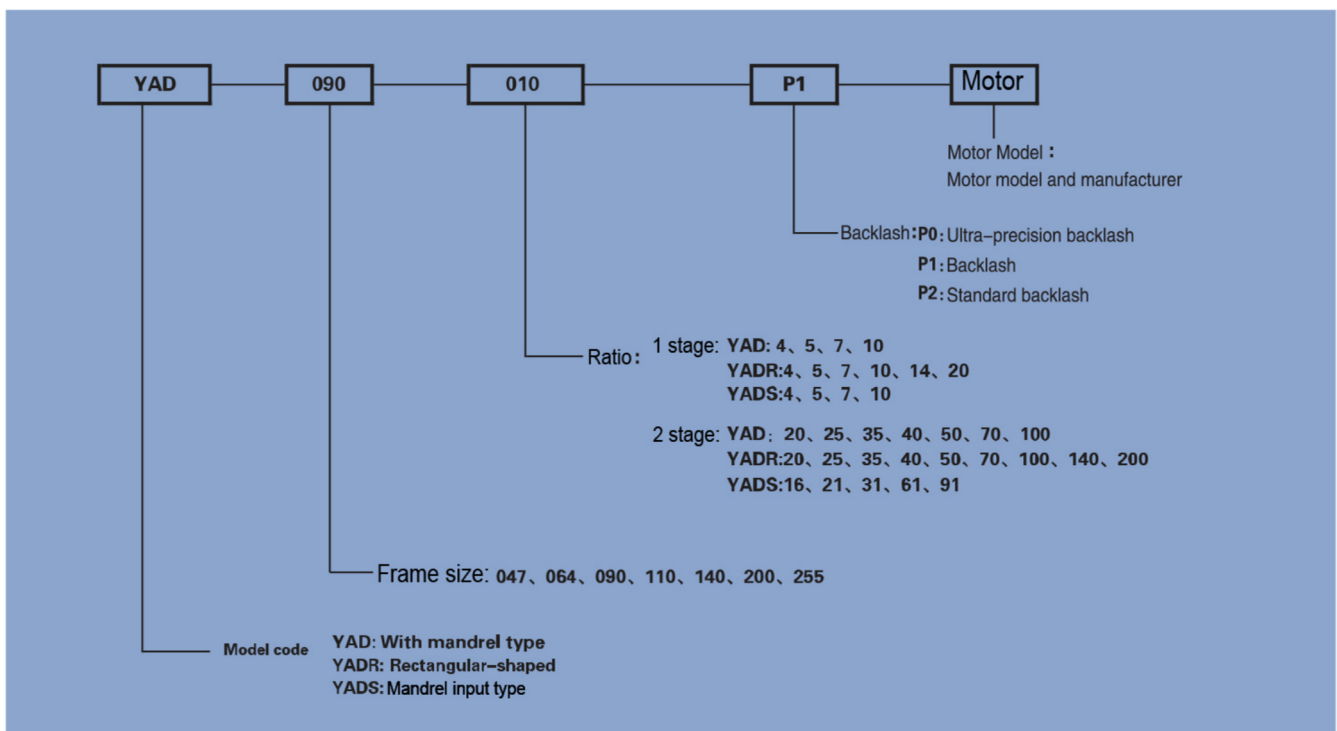




YAD Series



Model Type mark



Reducer performance data

Specification	Stage	Ratio	YAD047	YAD064	YAD090	YAD110	YAD140	YAD200	YAD255				
Rated output torque T_{2N}	1	4	19	48	130	270	560	1,100	1,700				
		5	22	60	160	330	650	1,200	2,000				
		7	19	50	140	300	550	1,100	1,800				
		10	14	40	100	230	450	900	1,500				
	Nm	2	20	19	48	130	270	560	1,100	1,700			
			25	22	60	160	330	650	1,200	2,000			
			35	19	50	140	300	550	1,100	1,800			
			40	19	48	130	270	560	1,100	1,700			
			50	22	60	160	330	650	1,200	2,000			
			70	19	50	140	300	550	1,100	1,800			
			100	14	40	100	230	450	900	1,500			
			16	19	48	130	270	560	1,100	1,700			
			21	22	60	160	330	650	1,200	2,000			
			31	19	50	140	300	550	1,100	1,800			
			61	19	50	140	300	550	1,100	1,800			
			91	14	40	100	230	450	900	1,500			
			The maximum output torque T_{2B}	Nm	1,2	Three times than rated output torque							
			Rated input speed n_{1N}	rpm	1,2	4~100	5,000	5,000	4,000	4,000	3,000	3,000	2,000
Max. input speed n_{1B}	rpm	1,2	4~100	10,000	10,000	8,000	8,000	6,000	6,000	4,000			
Ultra-precision backlash PO	arcmin	1	4~10	-	-	≤1	≤1	≤1	≤1	≤1			
		2	20~100	-	-	≤3	≤3	≤3	≤3	≤3			
Precision Backlash P1	arcmin	1	4~10	≤3	≤3	≤3	≤3	≤3	≤3	≤3			
		2	20~100	≤5	≤5	≤5	≤5	≤5	≤5	≤5			
Standard Backlash P2	arcmin	1	4~10	≤5	≤5	≤5	≤5	≤5	≤5	≤5			
		2	20~100	≤7	≤7	≤7	≤7	≤7	≤7	≤7			
Torsional stiffness M_{2KB}^2	Nm/arcmin	1,2	4~100	7	13	31	82	151	440	1,006			
The maximum bending torque	Nm	1,2	4~100	42.5	125	235	430	1,300	3,064	5,900			
Permissible axial force F_{2B}^2	N	1,2	4~100	1,080	2,110	2,310	4,800	6,200	5,450	10,600			
Lifetime	hr	1,2	4~100	30,000*									
Efficiency η	%	1	4~10	≥97%									
		2	20~100	≥94%									
Weight	kg	1	4~10	0.7	1.2	3.0	5.6	11.9	31.6	56.1			
		2	20~100	1.0	1.6	3.7	7.3	15.9	36.9	70.4			
			16~91	1.0	1.4	3.5	6.5	15.5	34.2	67.2			
Temperature	°C	1,2	4~100	-10°C~+90°C									
Lubricating		1,2	4~100	(NYOGEL 792D)									
Protection class		1,2	4~100	IP65									
Mounting Direction		1,2	4~100	Any direction									
Noise level ($n_1=3,000\text{rpm}$)	dB	1,2	4~100	≤56	≤58	≤60	≤63	≤65	≤67	≤70			

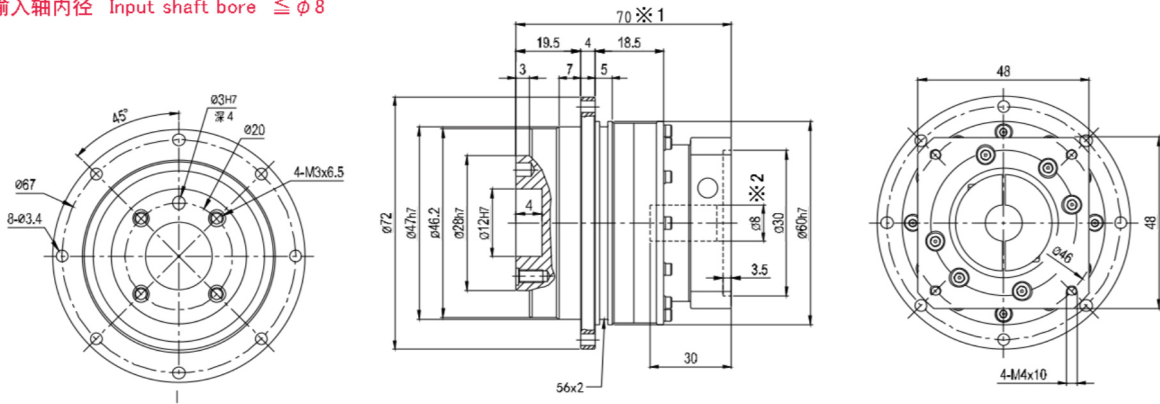
Specification	Stage	Ratio	YAD047	YAD064	YAD090	YAD110	YAD140	YAD200	YAD255	
Moment of inertia J_1	1	4	0.03	0.14	0.51	2.87	7.54	25.03	58.31	
		5	0.03	0.13	0.47	2.71	7.42	23.29	53.27	
		7	0.03	0.13	0.45	2.62	7.14	22.48	50.97	
		10	0.03	0.13	0.44	2.57	7.03	22.51	50.56	
	kg · cm ²	2	20	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			25	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			35	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			40	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			50	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			70	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			100	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			16	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			21	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			31	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			61	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			91	0.03	0.03	0.13	0.44	2.57	7.03	22.51



YAD 外形尺寸图表 / OUTLINE DIMENSION SHEET

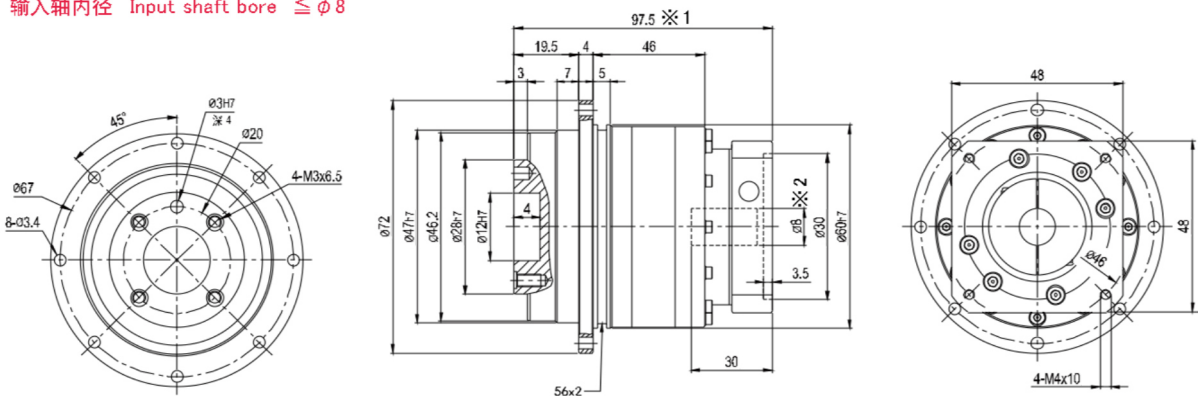
YAD-047-L1

输入轴内径 Input shaft bore $\leq \phi 8$



YAD-047-L2

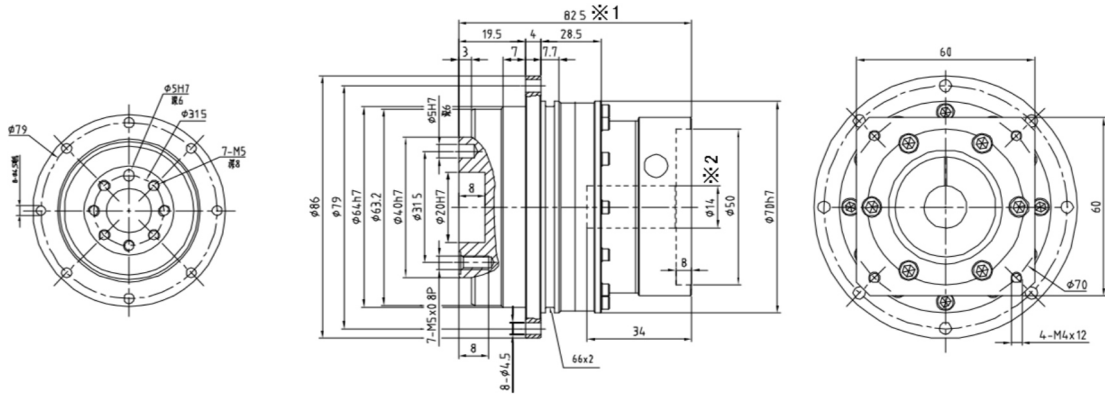
输入轴内径 Input shaft bore $\leq \phi 8$



- ※ 1 视安装马达的不同而有所差异。
- ※ 2 马达轴径与输入轴径不同时，可插入轴套。
- ※ 1 Length will vary depending on motor.
- ※ 2 Bushing will be inserted to adapt to motor shaft.

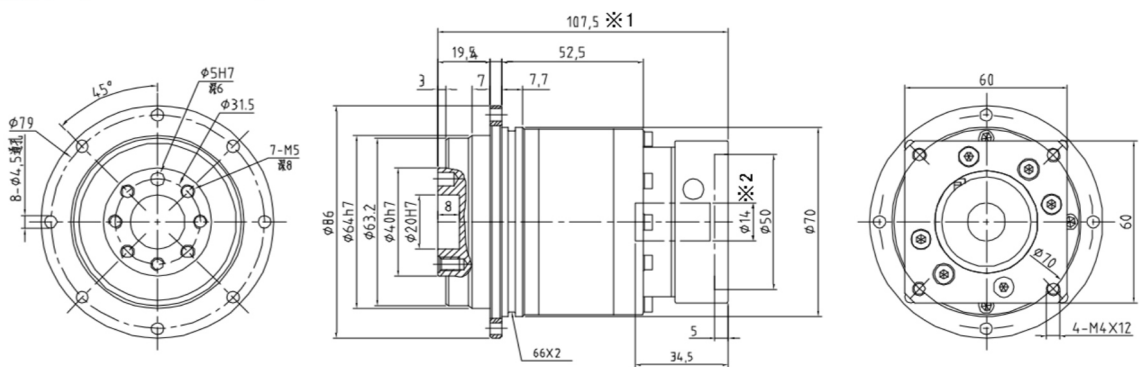
YAD-064-L1

输入轴内径 Input shaft bore $\leq \phi 14$



YAD-064-L2

输入轴内径 Input shaft bore $\leq \phi 14$



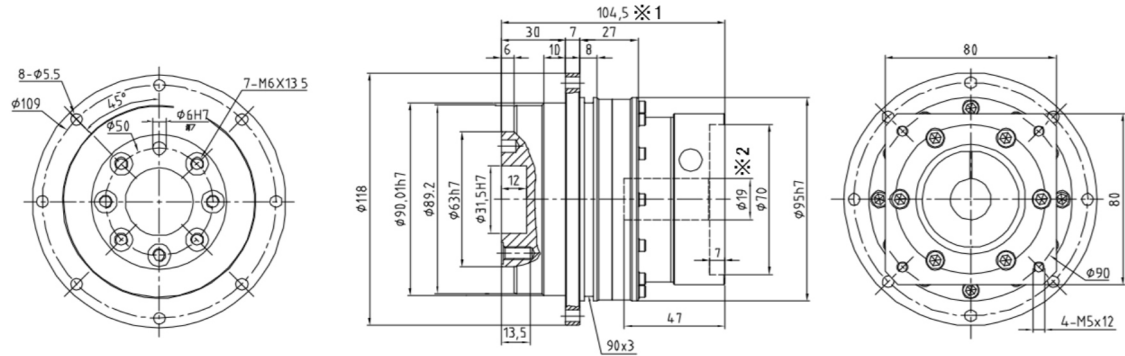
- ※1 视安装马达的不同而有所差异。
- ※2 马达轴径与输入轴径不同时，可插入轴套。
- ※1 Length will vary depending on motor.
- ※2 Bushing will be inserted to adapt to motor shaft.



YAD 外形尺寸图表 / OUTLINE DIMENSION SHEET

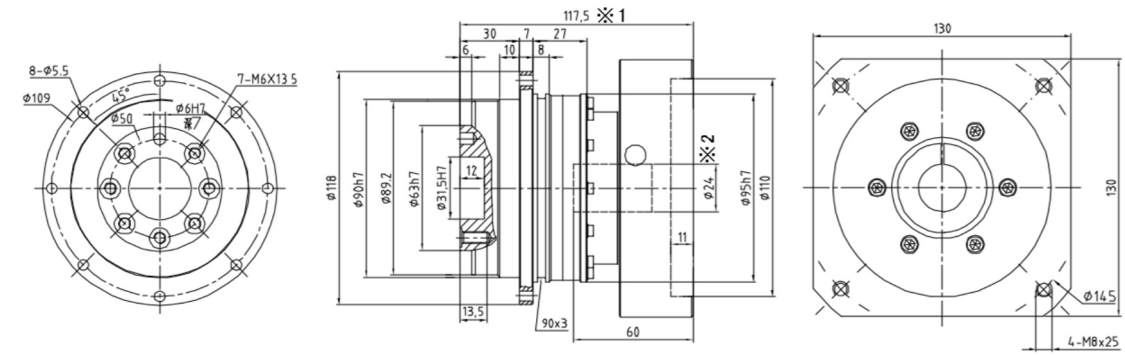
YAD-090-L1

输入轴内径 Input shaft bore $\leq \phi 19$



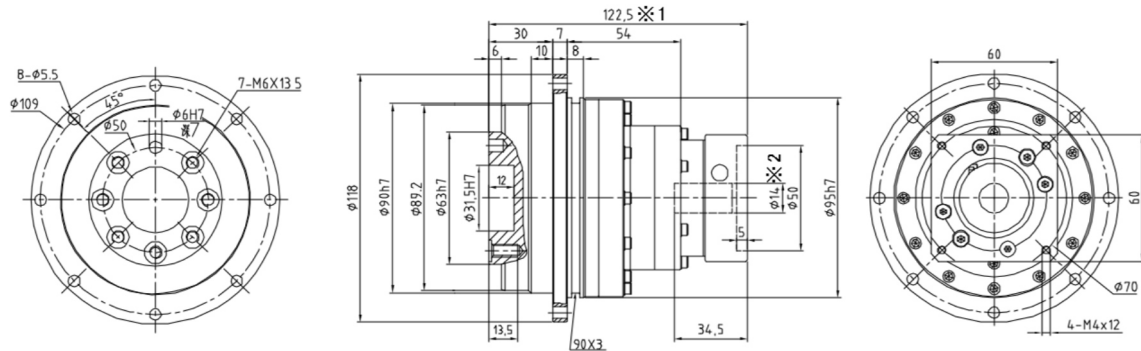
YAD-090-L1

输入轴内径 Input shaft bore $\leq \phi 24$



YAD-090-L2

输入轴内径 Input shaft bore $\leq \phi 14$



※1 视安装马达的不同而有所差异。

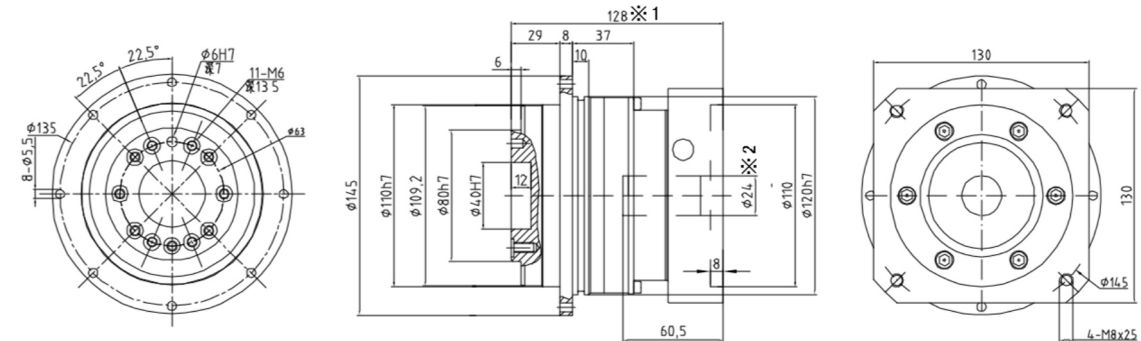
※2 马达轴径与输入轴径不同时，可插入轴套。

※1 Length will vary depending on motor.

※2 Bushing will be inserted to adapt to motor shaft.

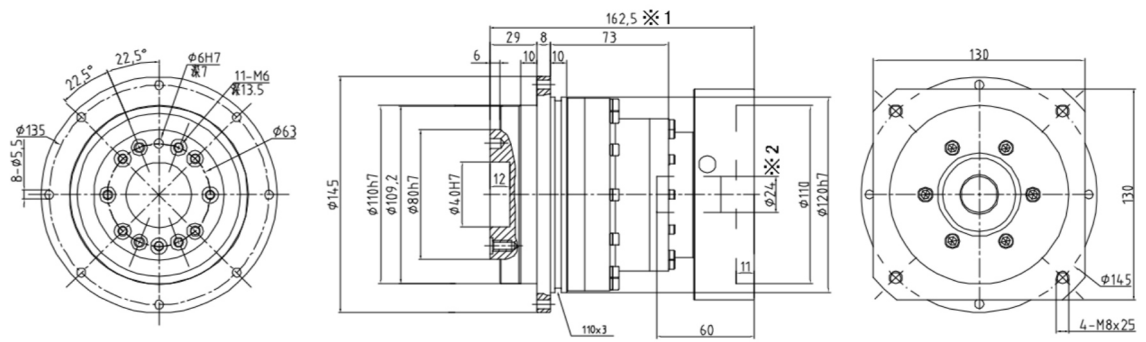
YAD-110-L1

输入轴内径 Input shaft bore $\leq \phi 24$



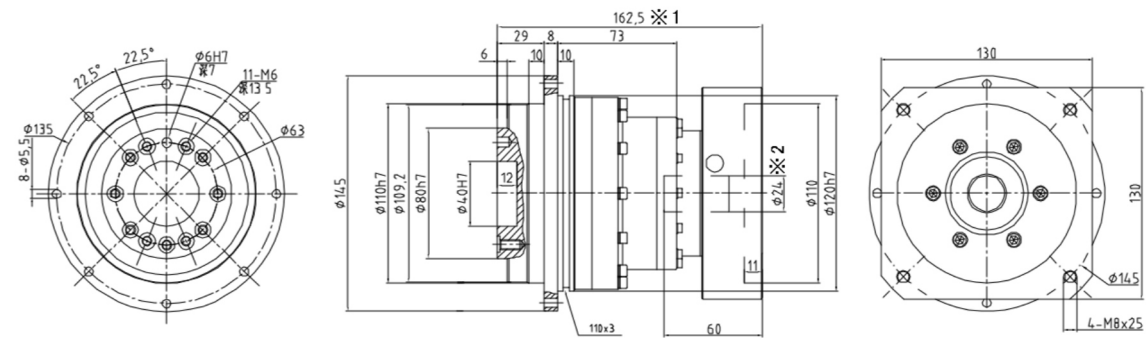
YAD-110-L2

输入轴内径 Input shaft bore $\leq \phi 19$



YAD-110-L2

输入轴内径 Input shaft bore $\leq \phi 24$



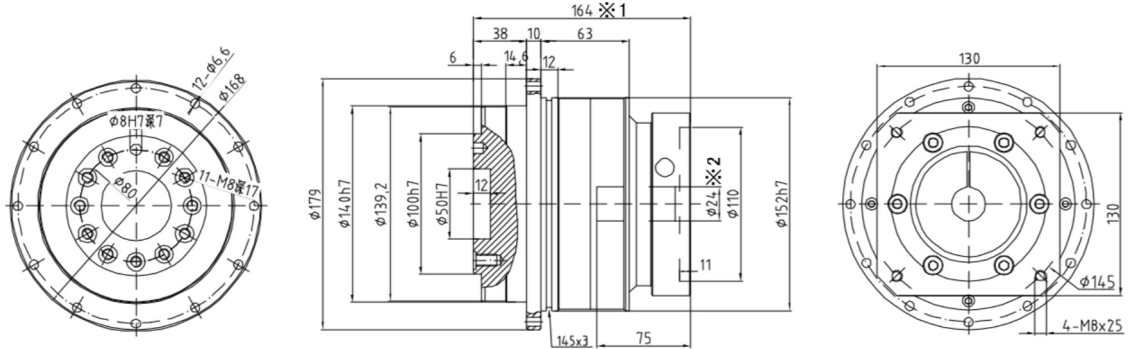
- ※1 视安装马达的不同而有所差异。
- ※2 马达轴径与输入轴径不同时,可插入轴套。
- ※1 Length will vary depending on motor.
- ※2 Bushing will be inserted to adapt to motor shaft.



YAD 外形尺寸图表 / OUTLINE DIMENSION SHEET

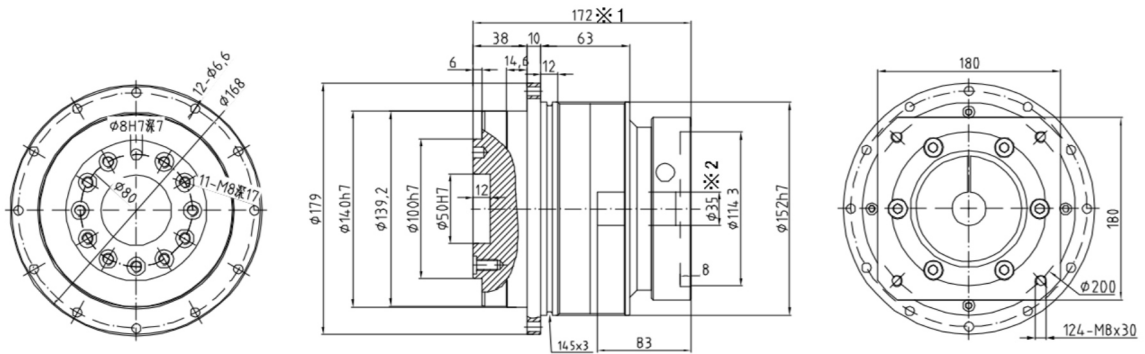
YAD-140-L1

输入轴内径 Input shaft bore $\leq \phi 24$



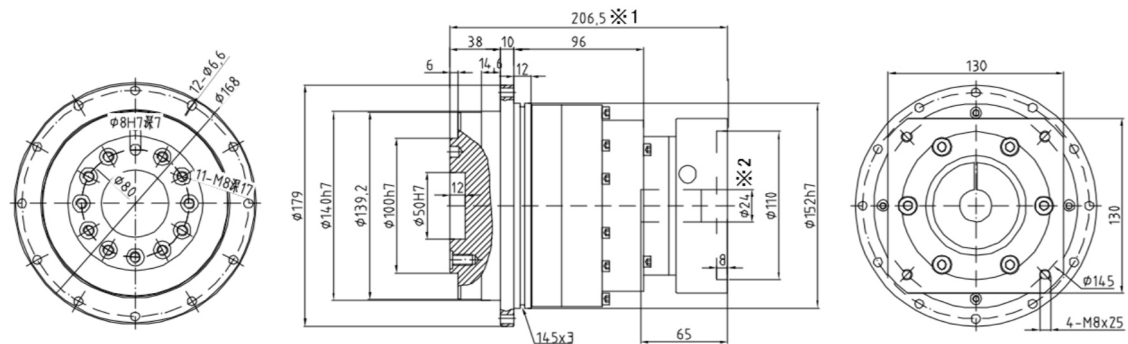
YAD-140-L2

输入轴内径 Input shaft bore $\leq \phi 35$



YAD-140-L2

输入轴内径 Input shaft bore $\leq \phi 24$



※1 视安装马达的不同而有所差异。

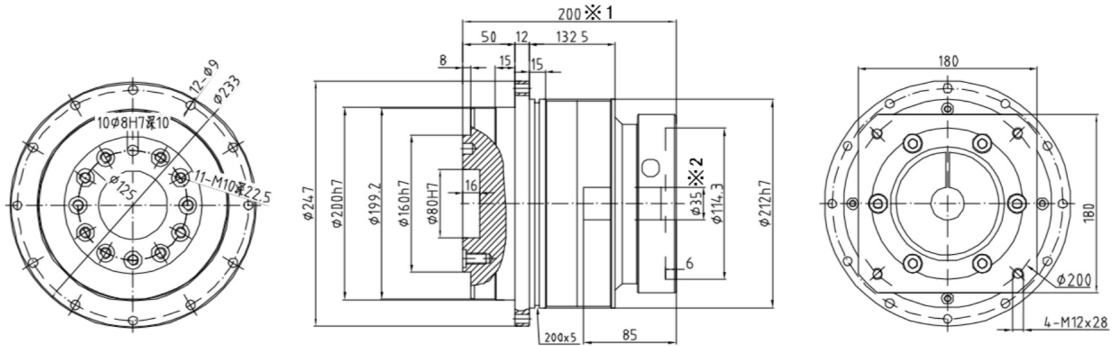
※2 马达轴径与输入轴径不同时，可插入轴套。

※1 Length will vary depending on motor.

※2 Bushing will be inserted to adapt to motor shaft.

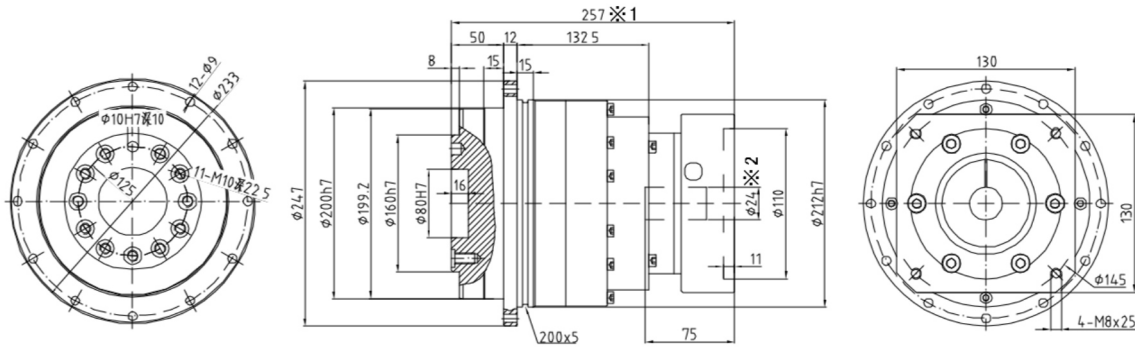
YAD-200-L1

输入轴内径 Input shaft bore $\leq \phi 35$



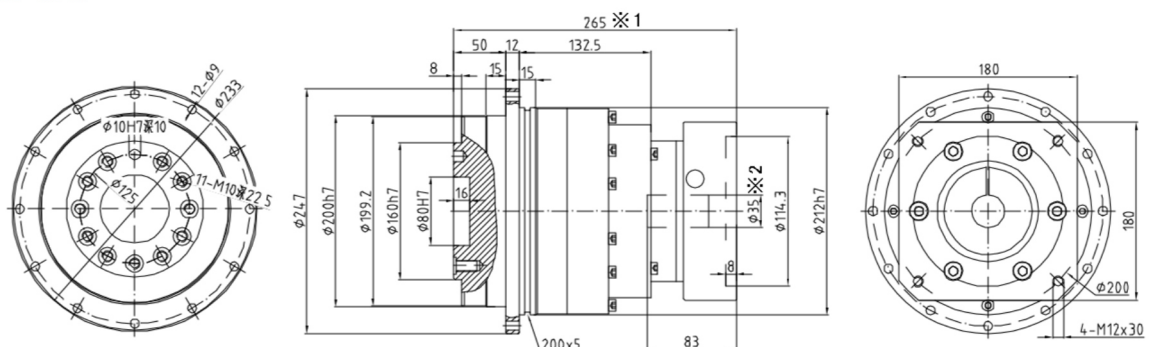
YAD-200-L2

输入轴内径 Input shaft bore $\leq \phi 24$



YAD-200-L2

输入轴内径 Input shaft bore $\leq \phi 35$



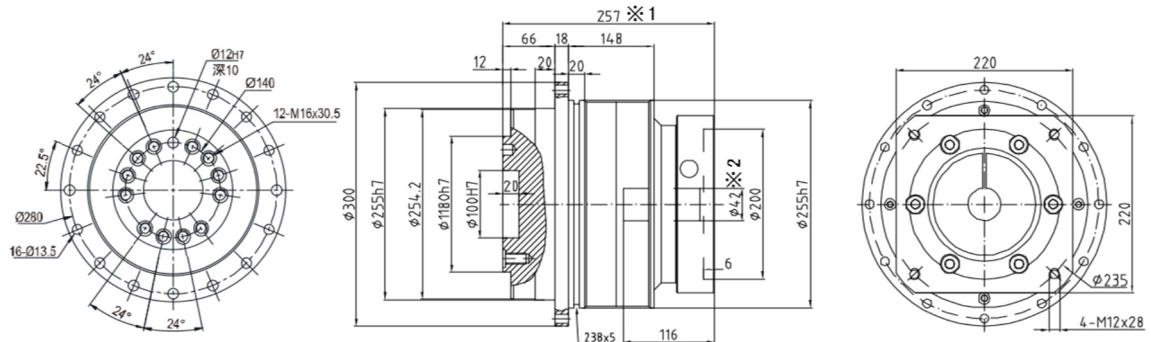
- ※1 视安装马达的不同而有所差异。
- ※2 马达轴径与输入轴径不同时,可插入轴套。
- ※1 Length will vary depending on motor.
- ※2 Bushing will be inserted to adapt to motor shaft.



YAD 外形尺寸圖表 / OUTLINE DIMENSION SHEET

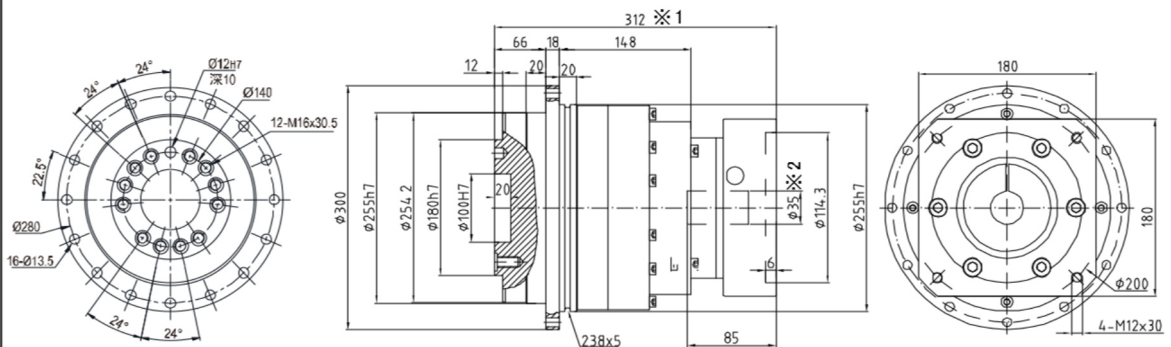
YAD-255-L1

输入轴内径 Input shaft bore $\leq \phi 42$



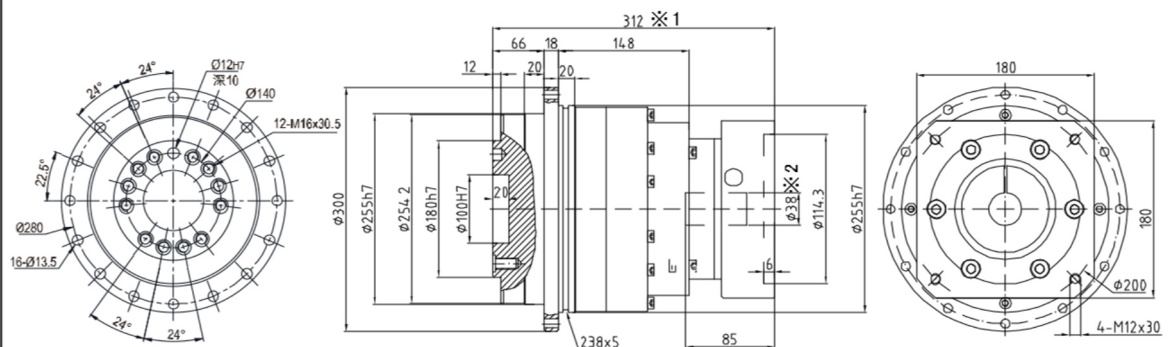
YAD-255-L2

输入轴内径 Input shaft bore $\leq \phi 35$



YAD-255-L2

输入轴内径 Input shaft bore $\leq \phi 38$



※1 视安装马达的不同而有所差异。

※2 马达轴径与输入轴径不同时，可插入轴套。

※1 Length will vary depending on motor.

※2 Bushing will be inserted to adapt to motor shaft.