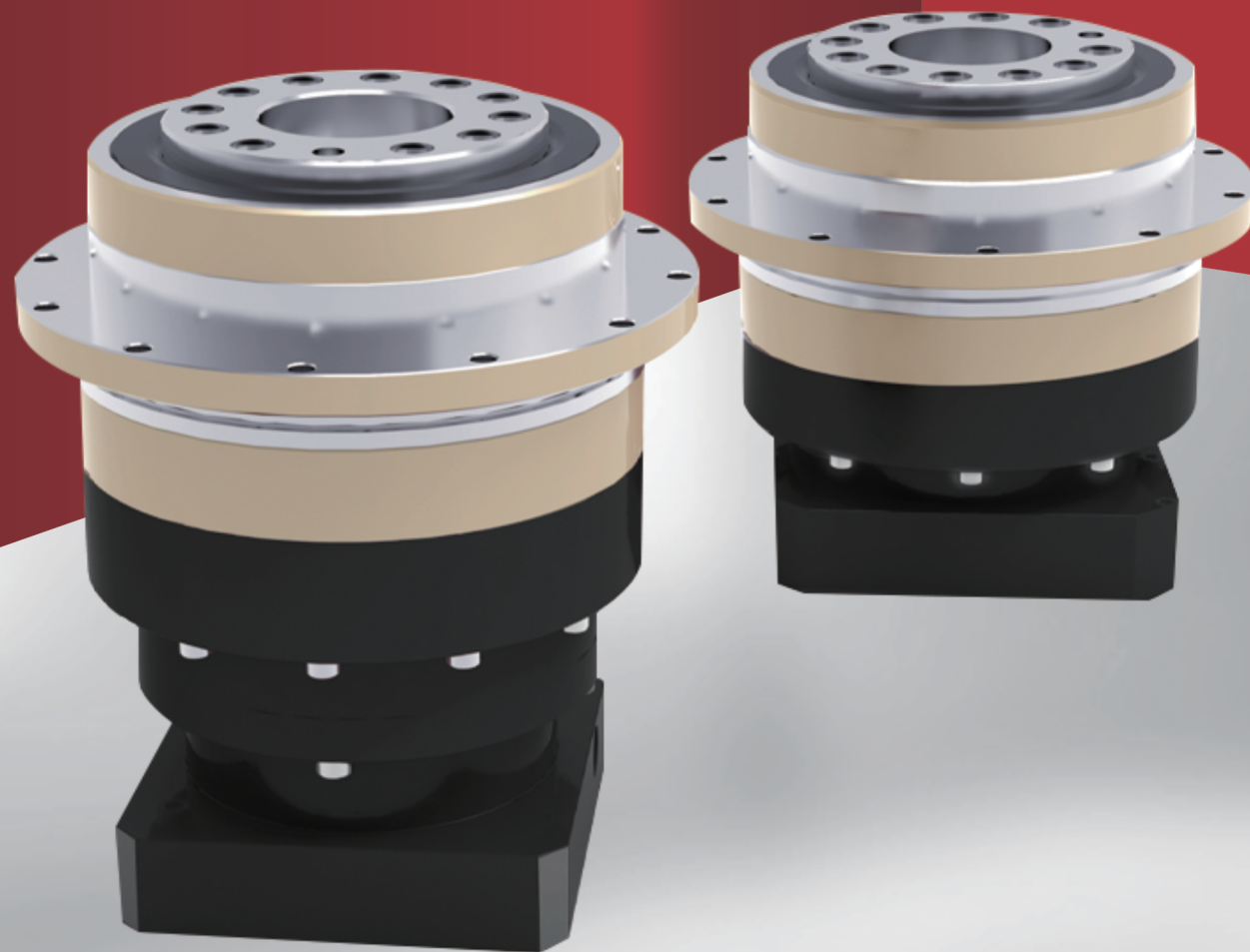


AD

High precision helical planetary reducer



GEAR BOX PERFORMANCE INFORMATION

Specification		Stages	Reduction Ratio 1	AD047	AD064	AD090	AD110	AD140	AD200	AD255
Rated output torque T2N	Nm	1	4	19	48	130	270	560	1,100	1,700
			5	22	60	160	330	650	1,200	2,000
			7	19	35	140	300	550	1,100	1,800
			8	17	35	120	260	500	1,000	1,600
			10	14	23	48	140	370	520	1,220
		2	20	19	48	130	270	560	1,100	1,700
			25	22	60	160	330	650	1,200	2,000
			35	22	60	160	330	650	1,200	2,000
			40	22	60	160	330	650	1,200	2,000
			50	22	60	160	330	650	1,200	2,000
			70	19	35	140	300	550	1,100	1,800
			100	14	23	48	140	370	520	1,220
Maximum output torque T2B	Nm	1,2	4~100	3 times rated output cabinet						
Rated input speed 1	rpm	1,2	4~100	5,000	5,000	4,000	4,000	3,000	3,000	2,000
Maximum 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	4~100	-	-	≤1	≤1	≤1	≤1	≤1
		2	4~10	-	-	-	≤3	≤3	≤3	≤3
Precision backlash P1	arcmin	1	20~100	≤3	≤3	≤3	≤3	≤3	≤3	≤3
		2	4~10	≤5	≤5	≤5	≤5	≤5	≤5	≤5
Standard backlash P2	arcmin	1	20~100	≤5	≤5	≤5	≤5	≤5	≤5	≤5
		2	4~10	≤7	≤7	≤7	≤7	≤7	≤7	≤7
Torsional rigidity	Nm/arcmin	1,2	20~100	7	13	31	82	151	440	1,006
Maximum bending moment M2KB ²	Nm	1,2	4~100	42.5	125	235	430	1,300	3,064	5,900
Permissible radial force F2B2	N	1,2	4~100	1,080	2,110	2,310	4,800	6,200	5,450	10,600
Service life	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
Use temperature	°C	1,2	4~100	-10°C~+90°C						
lubricating		1,2	4~100	Synthetic grease						
Protection level		1,2	4~100	IP65						
Installation direction		1,2	4~100	Any direction						
Noise level ($n_1=3000\text{rpm}$)	dB	1,2	4~100	≤56	≤58	≤60	≤63	≤65	≤67	≤70

Reducer moment of inertia

Specification		Stages	Reduction Ratio 1	AD047	AD064	AD090	AD110	AD140	AD200	AD255
Moment of inertia J _i	kg·cm ²	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
			8	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
		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

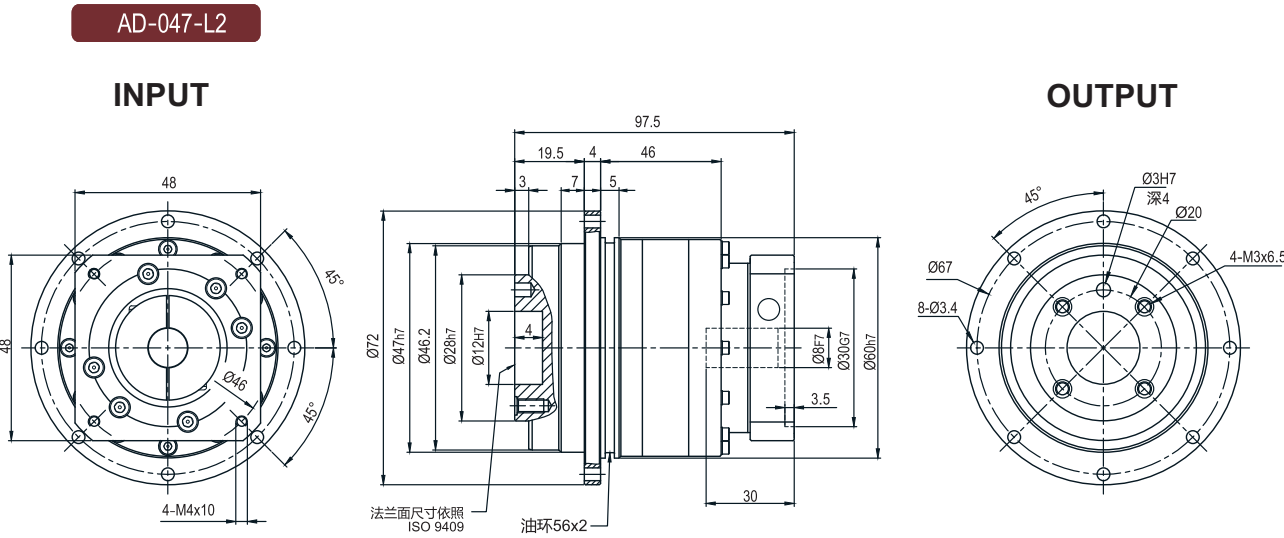
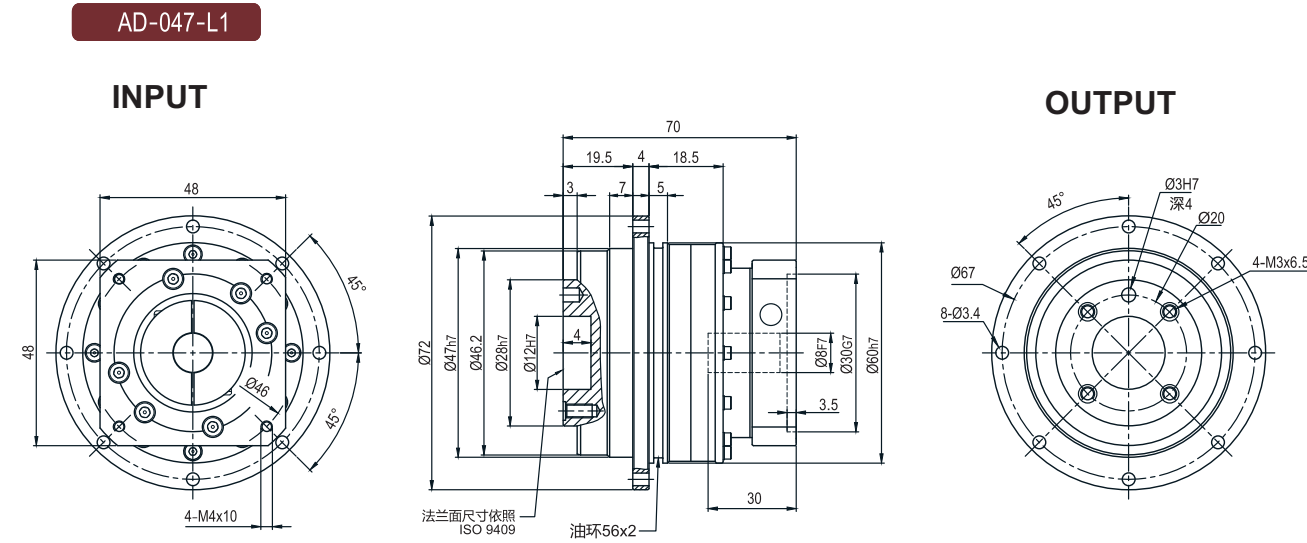
1. Reduction ratio ($i=N_{in}/N_{out}$)

*Continuous operation reduces service life by half.

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

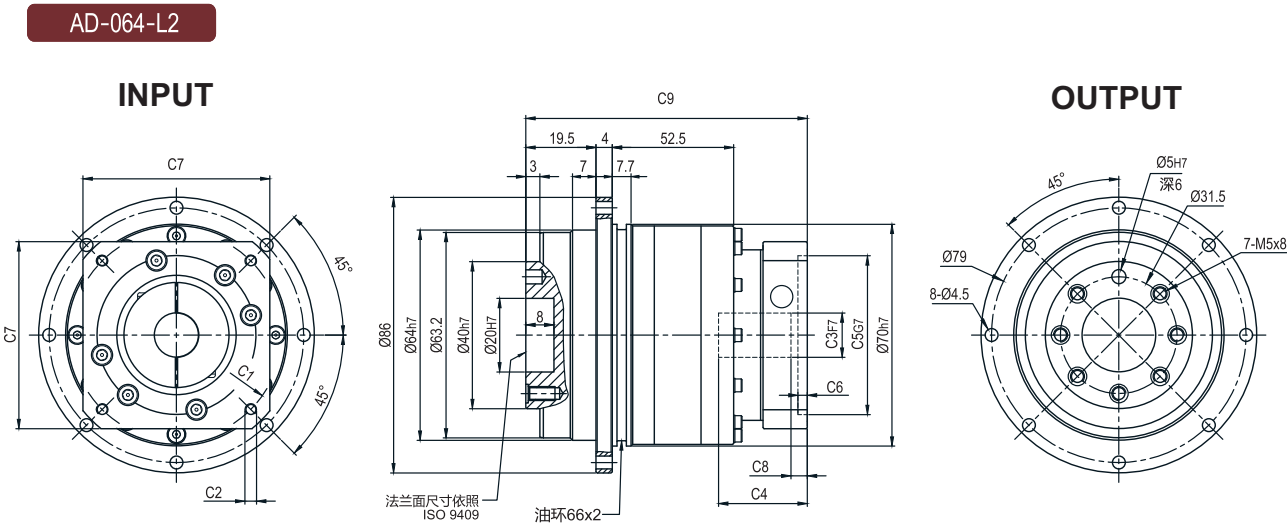
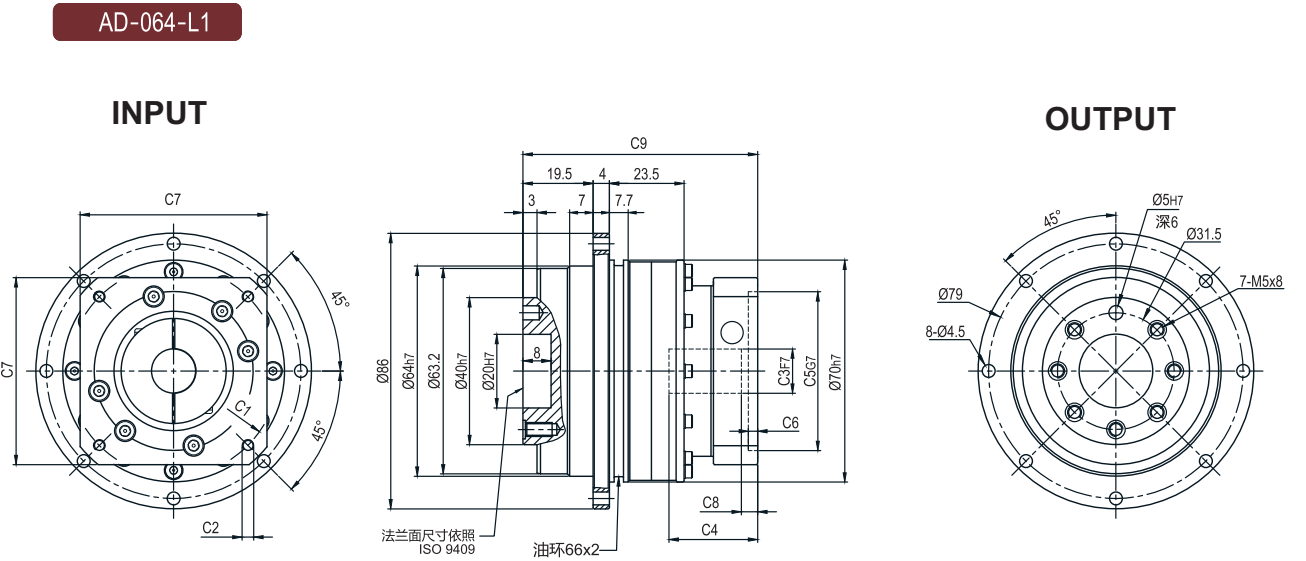
High-precision Helical Planetary Gear Reducer

OUTLINE DIMENSION SHEET



*The input motor connection plate dimensions can be customized according to customer requirements.

OUTLINE DIMENSION SHEET

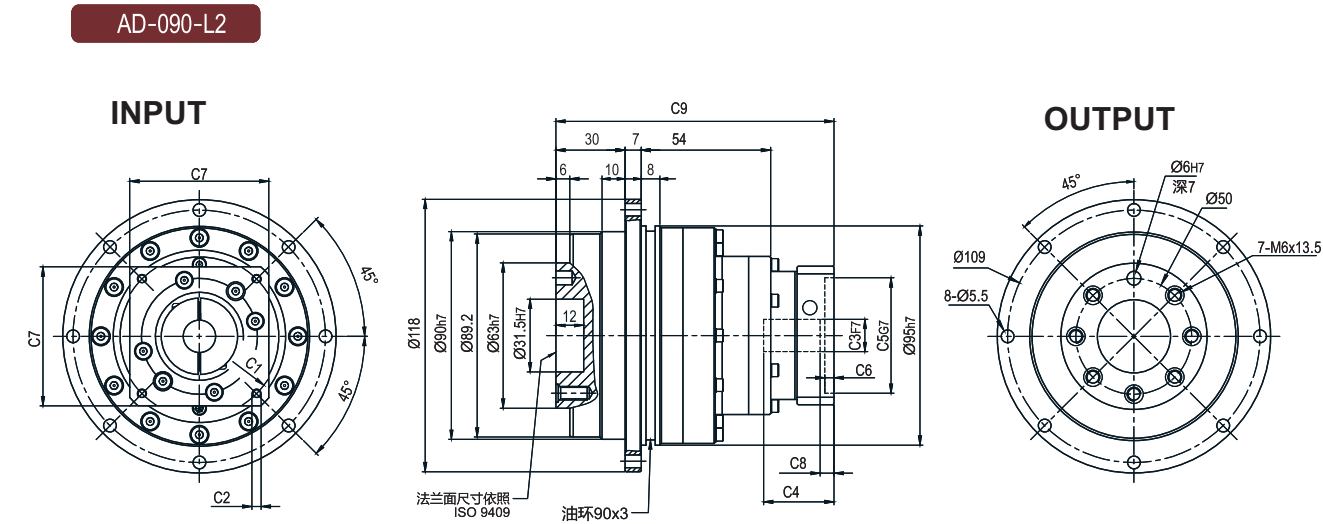
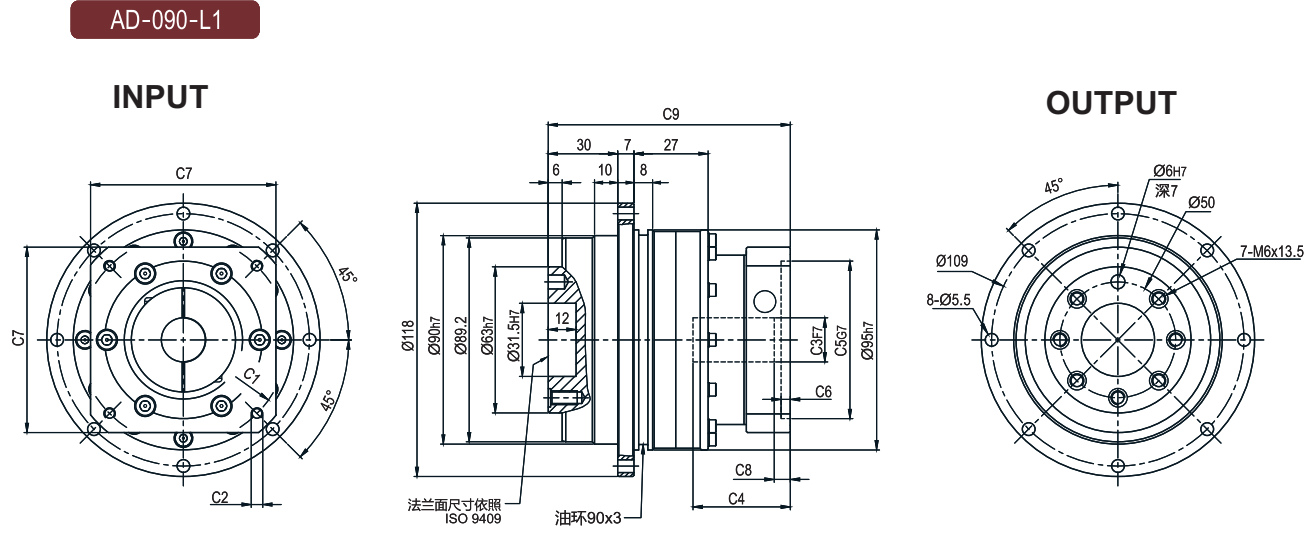


Size	C1	C2	C3	C4	C5	C6	C7	C8	C9
AD-064-L1	70	4-M4x10, 4-M5x12	11, 14	34.5	50	5	60	7	81.5
AD-064-L2									107.5

*C1~C7 are the dimensions of the metric standard motor connection plate, which can be customized according to customer requirements.

High-precision Helical Planetary Gear Reducer

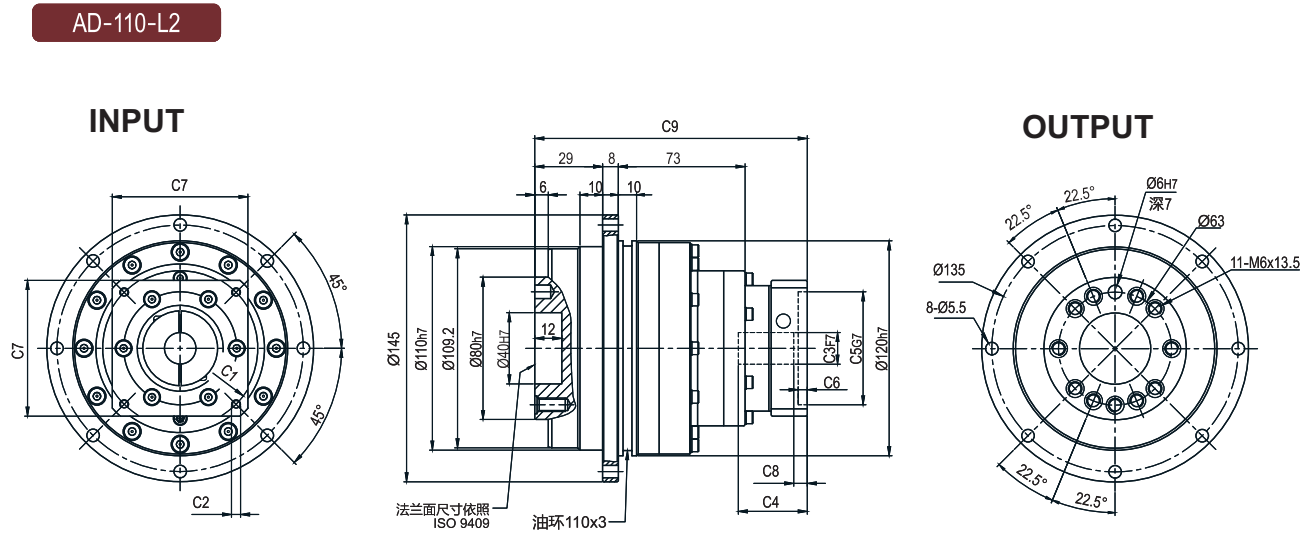
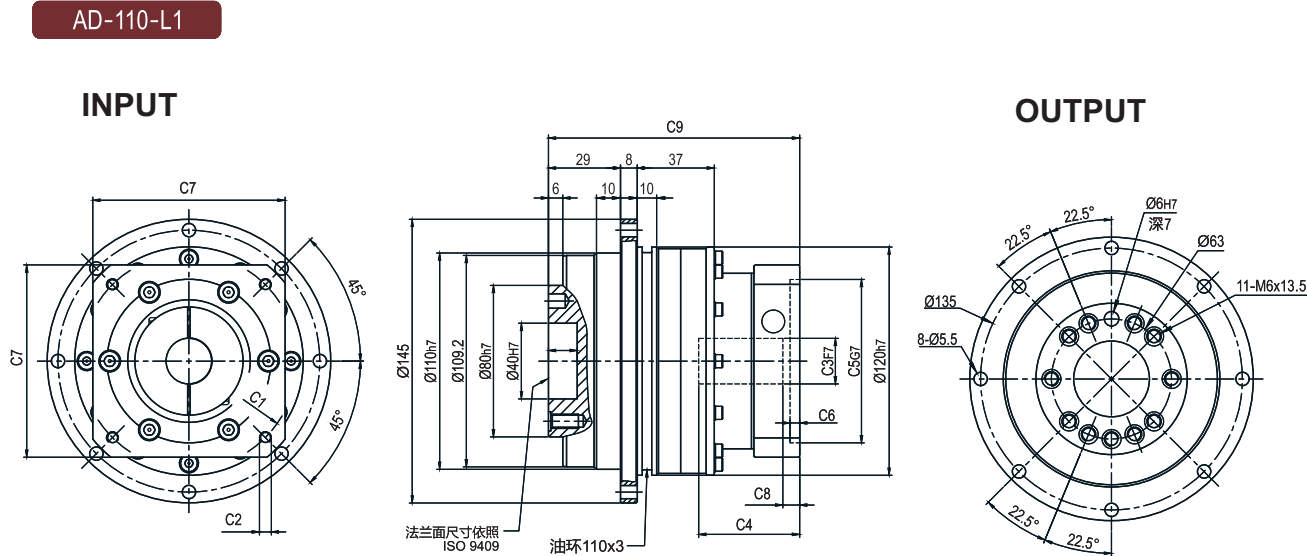
OUTLINE DIMENSION SHEET



Size	C1	C2	C3	C4	C5	C6	C7	C8	C9
AD-090-L1	Ø90	4-M5x12, 4-M6x12	Ø19	46	Ø70	6	80	7.5	103.5
	Ø145	4-M8x25	Ø19, Ø22, Ø24	60	Ø110	11	130	20.5	117.5
AD-090-L2	Ø70	4-M4x10, 4-M5x12	Ø11, Ø14	34.5	Ø50	5	60	7	122.5

*C1~C7 are the dimensions of the metric standard motor connection plate, which can be customized according to customer requirements.

OUTLINE DIMENSION SHEET



Size	C1	C2	C3	C4	C5	C6	C7	C8	C9
AD-110-L1	Ø145	4-M8x25	Ø19, Ø22, Ø24	64	Ø110	11	130	19	135
	Ø90	4-M5x12, 4-M6x12	Ø19	47	Ø70	7	80	8.5	149.5
AD-110-L2	Ø145	4-M8x25	Ø19, Ø22, Ø24	60	Ø110	11	130	20.5	162.5

*C1~C7 are the dimensions of the metric standard motor connection plate, which can be customized according to customer requirements.

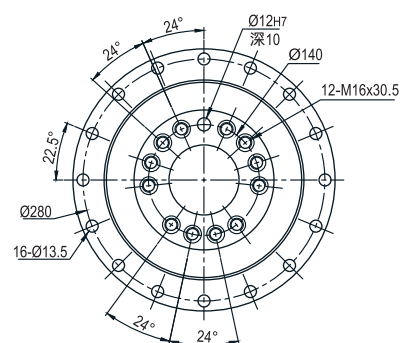
OUTLINE DIMENSION SHEET

INPUT

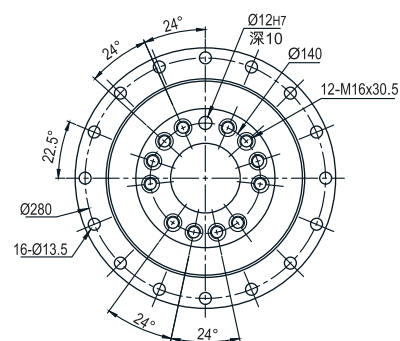


OUTLINE DIMENSION SHEET

INPUT



INPUT



*C1~C7 are the dimensions of the metric standard motor connection plate, which can be customized according to customer requirements.