

ADR

High precision helical planetary reducer



GEAR BOX PERFORMANCE INFORMATION

Specification		Stages	Reduction Ratio	ADR047	ADR064	ADR090	ADR110	ADR140	ADR200	ADR255
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
			14	-	35	140	300	550	1,100	1,800
		2	20	-	23	48	140	370	520	1,220
			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	22	60	160	330	650	1,200	2,000
			100	22	60	160	330	650	1,200	2,000
			140	-	-	140	300	550	1,100	1,800
			200	-	-	48	140	370	520	1,220
Maximum output torque T2B	Nm	1,2	4~200	3 times rated output cabinet						
Rated input speed <i>n</i> ₁	rpm	1,2	4~200	5,000	5,000	4,000	4,000	3,000	3,000	2,000
Maximum input speed <i>n</i> _{1B}	rpm	1,2	4~200	10,000	10,000	8,000	8,000	6,000	6,000	4,000
Ultra-precision backlash PO	arcmin	1	4~20	-	-	≤2	≤2	≤2	≤2	≤2
		2	20~200	-	-	≤4	≤4	≤4	≤4	≤4
Precision backlash P1	arcmin	1	4~20	≤4	≤4	≤4	≤4	≤4	≤4	≤4
		2	20~200	≤7	≤7	≤7	≤7	≤7	≤7	≤7
Standard backlash P2	arcmin	1	4~20	≤6	≤6	≤6	≤6	≤6	≤6	≤6
		2	20~200	≤9	≤9	≤9	≤9	≤9	≤9	≤9
Torsional rigidity		1,2	4~200	7	13	31	82	151	440	1,006
Maximum bending moment M2KB*	Nm	1,2	4~200	42.5	125	235	430	1,300	3,064	5,900
Permissible radial force F2B2	N	1,2	4~200	1,080	2,110	2,310	4,800	6,200	5,450	10,600
Service life	hr	1,2	4~200	30,000*						
Efficiency η	%	1	4~20	≥95%						
		2	20~200	≥92%						
weight	kg	1	4~20	1.1	2.1	5.9	10.5	21.9	50.9	85.4
		2	20~200	1.4	1.9	4.5	9.8	20.1	45.4	85.9
Use temperature	℃	1,2	4~200	-10℃~+90℃						
lubricating		1,2	4~200	Synthetic grease						
Protection level		1,2	4~200	IP65						
Installation direction		1,2	4~200	Any direction						
Noise level (n ₁ =3000rpm)	dB	1,2	4~200	≤61	≤63	≤65	≤68	≤70	≤72	≤74

Reducer moment of inertia

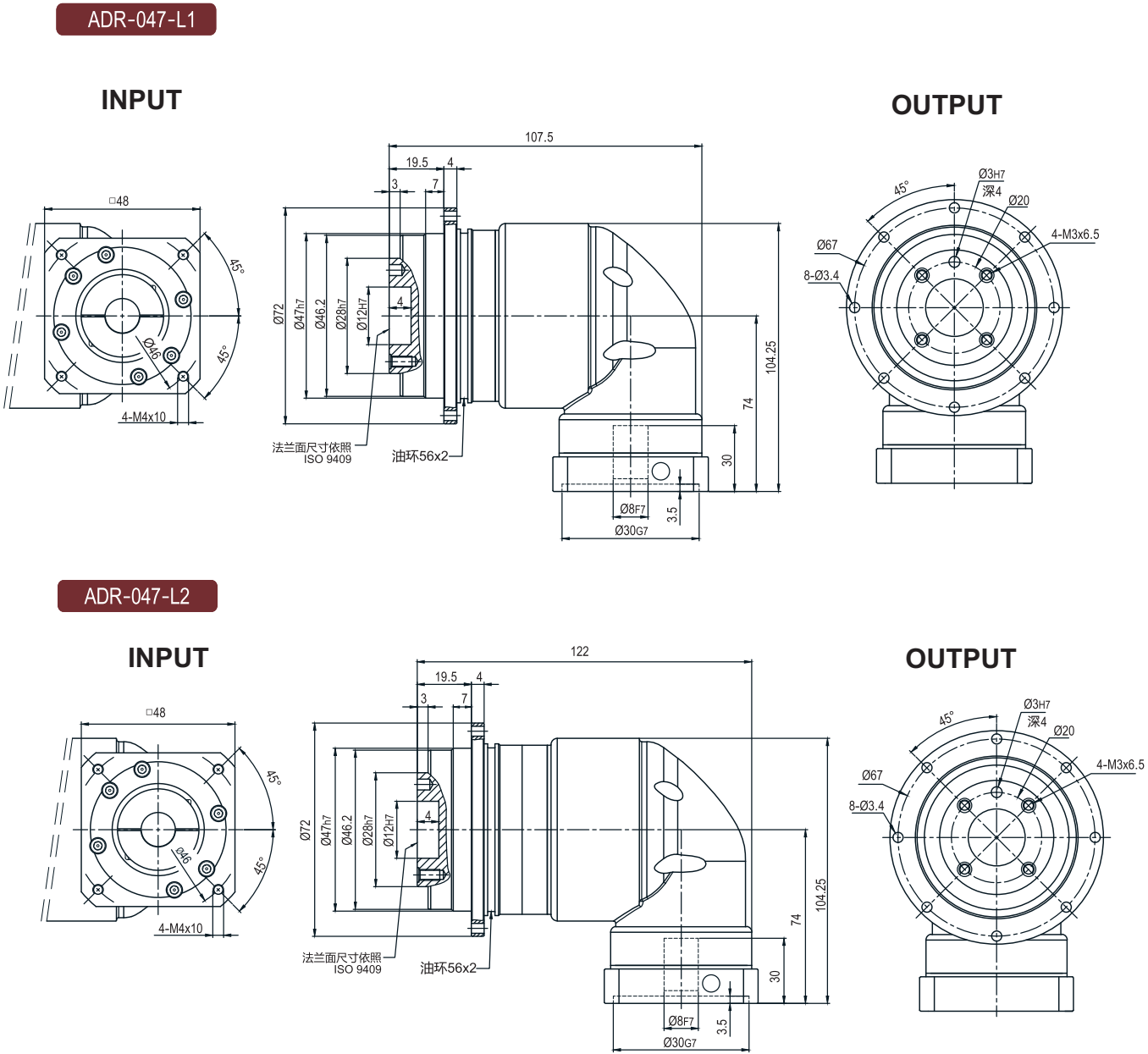
Specification		Stages	Reduction Ratio	ADR047	ADR064	ADR090	ADR110	ADR140	ADR200	ADR255
Moment of inertia J _i	kg·cm ²	1	4~10	0.09	0.35	2.25	6.84	23.4	68.9	135.4
			14	—	0.07	1.87	6.25	21.8	65.6	119.8
			20	—	0.07	1.87	6.25	21.8	65.6	119.8
		2	20~100	0.09	0.09	0.35	2.25	6.84	23.4	68.9
			140~200	—	—	0.31	1.87	6.25	21.8	65.6

1. Reduction ratio (i=Nin/Nout)
*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

INPUT



INPUT



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

INPUT



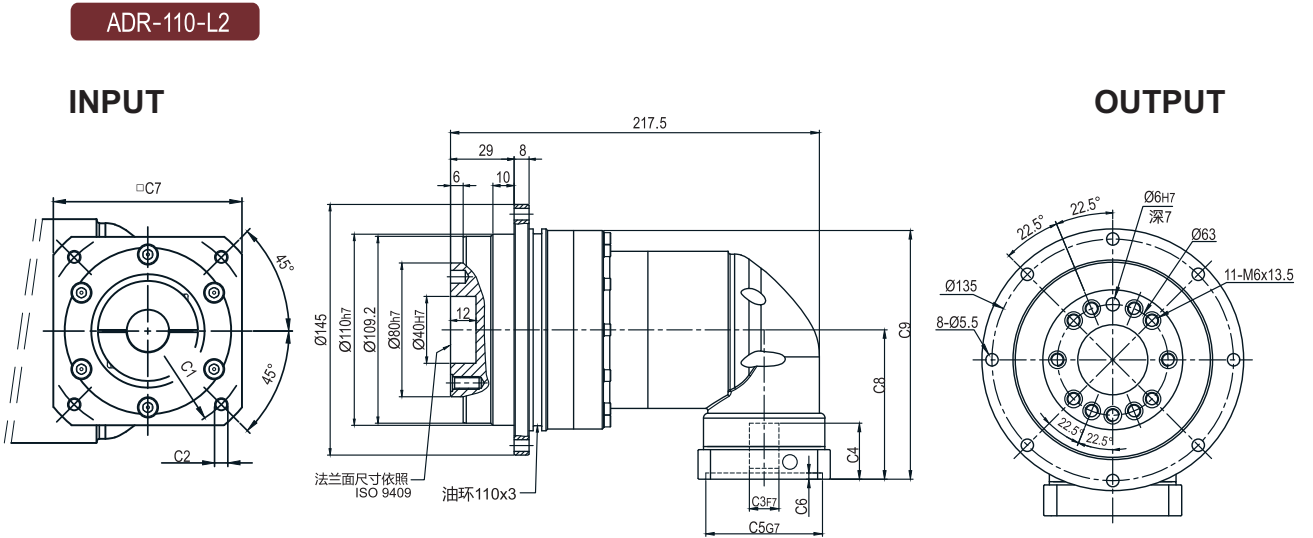
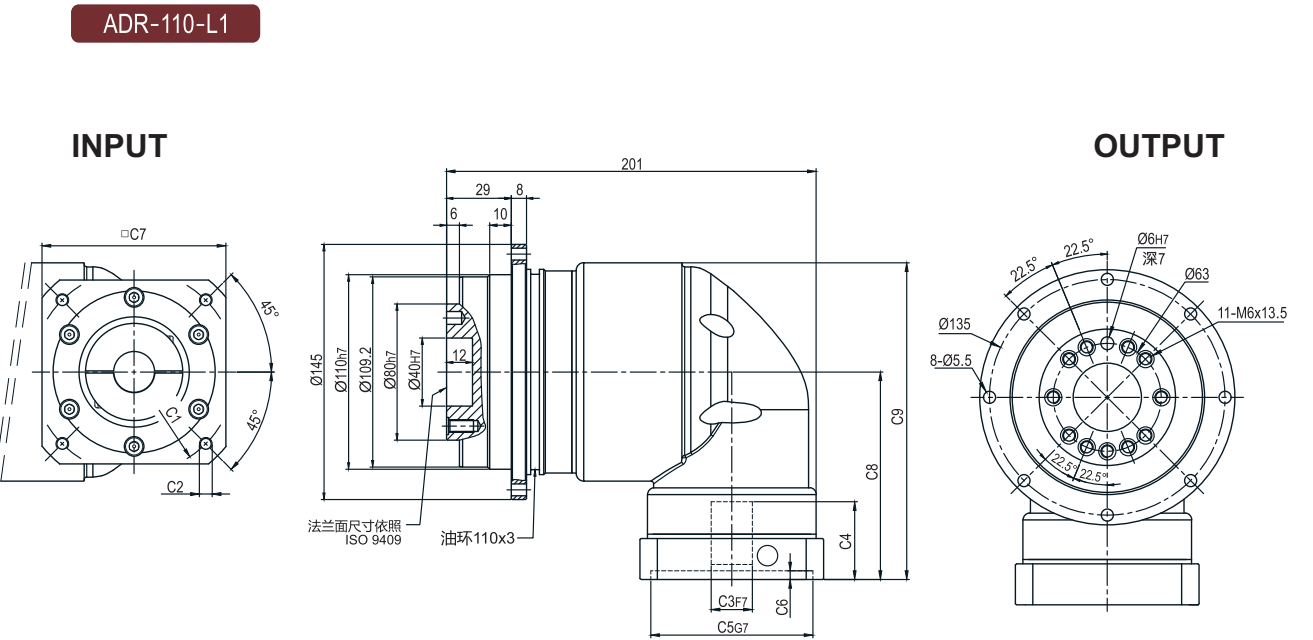
INPUT



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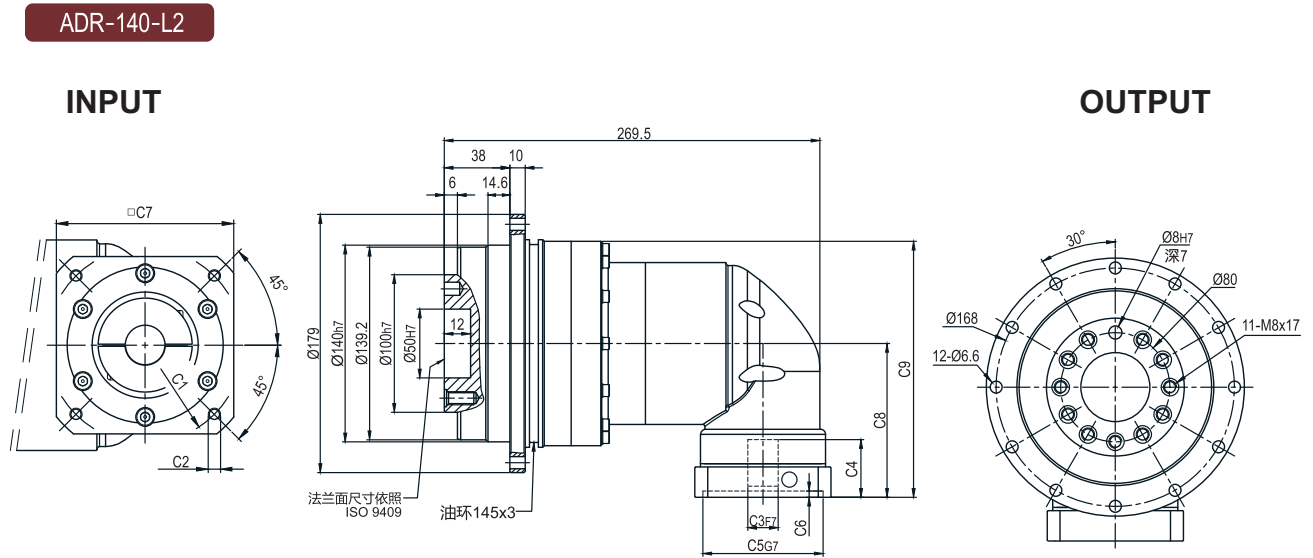
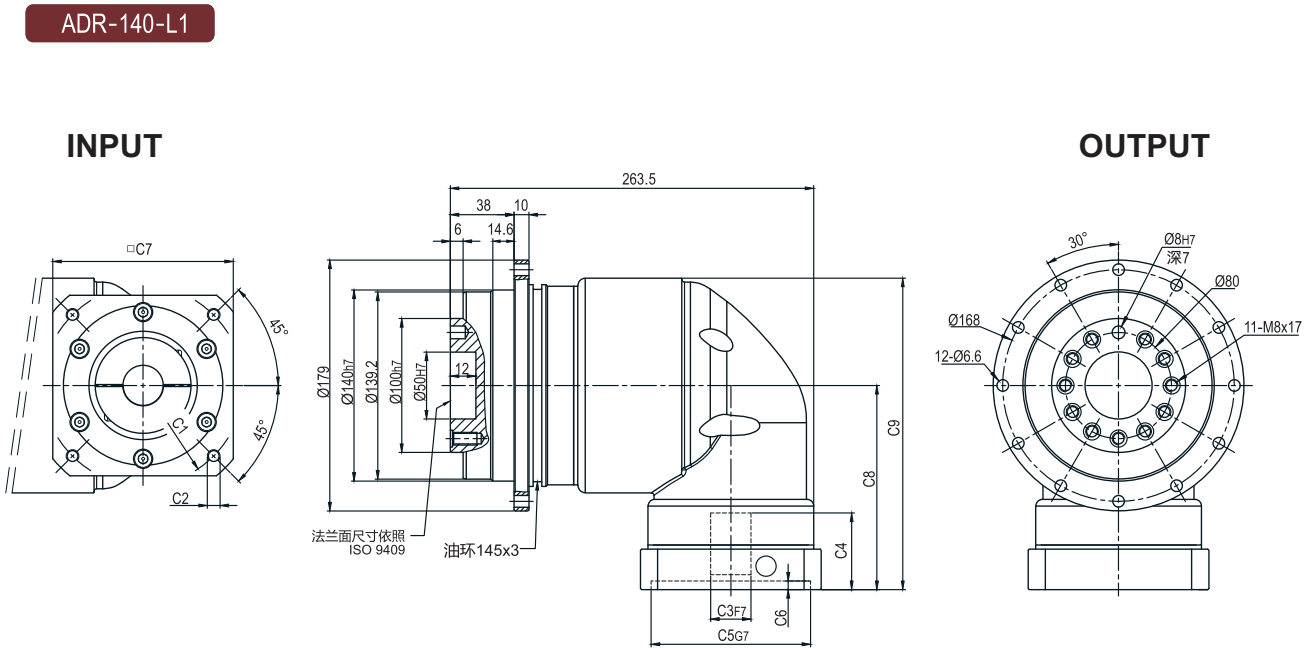
OUTLINE DIMENSION SHEET



Size	C1	C2	C3	C4	C5	C6	C7	C8	C9
ADR-110-L1	Ø145	4-M8x25	Ø19,Ø22,Ø24	60	Ø110	8	130	144	209
ADR-110-L2	Ø90	4-M5x12, 4-M6x14	Ø19	44	Ø70	7	80	111.5	170.5
	Ø100	4-M6x14	Ø16	44	Ø80	7	86	111.5	170.5

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OUTLINE DIMENSION SHEET



Size	C1	C2	C3	C4	C5	C6	C7	C8	C9
ADR-140-L1	Ø145	4-M8x25	Ø22,Ø24	60	Ø110	8	130	164.5	245.5
	Ø165	4-M10x25	Ø28	60	Ø130	6	142	164.5	245.5
ADR-140-L2	Ø145	4-M8x25	Ø19,Ø22,Ø24	60	Ø110	8	130	144	219

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OUTLINE DIMENSION SHEET

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