

Gearbox for a Changing World

Planetary Gearbox

AB Precision Series

AB Series Compatible Motor Table

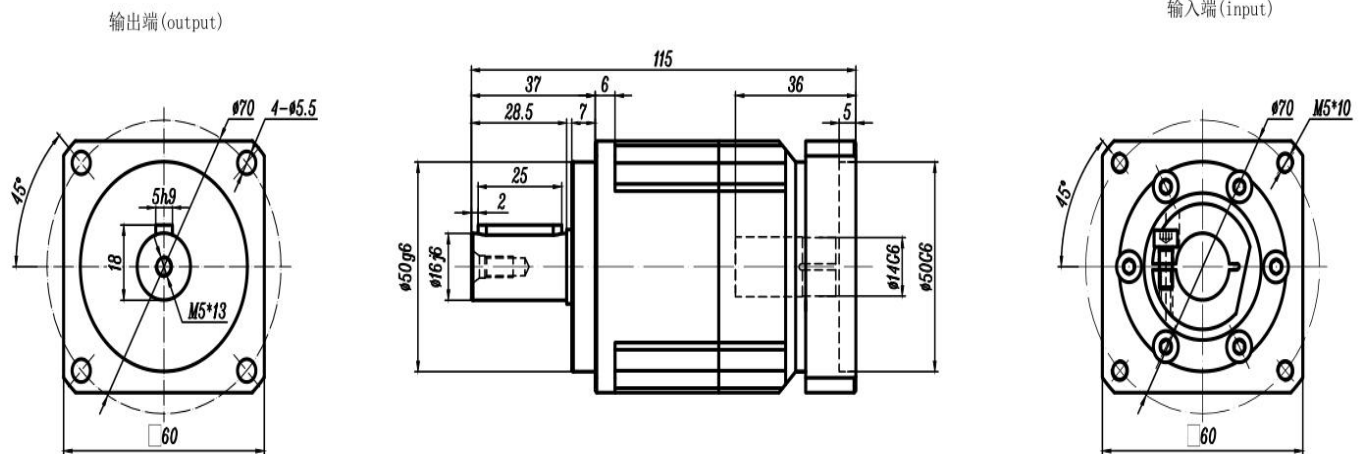
Type	Motor Frame Code	Power Rating	Output Shaft Diameter (S) & Length (LR) (mm)	Stage	Ratio	Backlash Class	Compatible Gearbox Model No.
AB060	F60	200W, 400W	Φ14 / 30	1-stage	3, 4, 5, 7, 10	≤5	AB060-C10604RS
AB090	F80	750W	Φ19 / 35	1-stage	3, 4, 5, 7, 10	≤5	AB090-C10807RS
AB090	F100	1kW, 2kW	Φ22 / 45	1-stage	3, 4, 5, 7, 10	≤5	AB090-C11010RS
AB115	F130	300W, 500W, 600W, 800W, 900W, 1kW, 1.3kW, 1.5kW, 1.8kW, 2kW	Φ22 / 55	1-stage	3, 4, 5, 7, 10	≤5	AB115-E11310RS AB115-E11315RS AB115-E11320RS AB060-C10604RS
AB060	F60	200W, 400W	Φ14 / 30	2-stage	12, 16, 20, 25, 35, 40,50,70,100	≤7	
AB090	F80	750W	Φ19 / 35	2-stage	12, 16, 20, 25, 35, 40,50,70,100	≤7	AB090-C10807RS
AB090	F100	1kW, 2kW	Φ22 / 45	2-stage	12, 16, 20, 25, 35, 40,50,70,100	≤7	AB090-C11010RS
AB115	F130	3kW	Φ22 / 55	2-stage	12, 16, 20, 25, 35, 40,50,70,100	≤7	AB115-E11310RS AB115-E11315RS AB115-E11320RS

Specifications

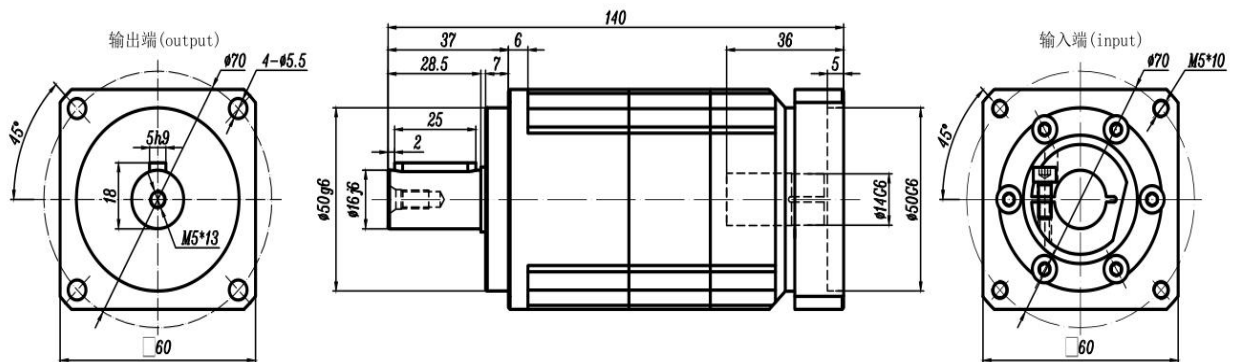
Items	Unit	Stage	Ratio	60	90	115
Rated Output Torque	N-m	1	3	35	80	220
			4	50	125	300
			5	50	125	300
			7	50	125	300
			10	35	80	220
		2	16	50	125	300
			20	50	125	300
			25	50	125	300
			35	50	125	300
			40	50	125	300
			50	50	125	300
			70	50	125	300
100	35	80	220			
Max. Acceleration Torque	N-m	1,2	3 ~ 100	2 Times of Rated Output Torque		
Max. Output Torque	N-m	1,2	3 ~ 100	3 Times of Rated Output Torque		
Rated Input Speed	rpm	1,2	3 ~ 100	4,000	4,000	3,500
Max. Input Speed	rpm	1,2	3 ~ 100	8,000	6,000	6,000
Backlash	arcmin	1	3 ~ 10	<=5		
	arcmin	2	16 ~ 100	<=7		
Torsional Rigidity	N-m/arcmin	1,2	3 ~ 100	7	14	25
Max. Radial Force	N	1,2	3 ~ 100	1,200	2,450	4,400
Max. Axial Force	N	1,2	3 ~ 100	1,050	2,200	4,000
Service Life	hr	1,2	3 ~ 100	>20,000		
Efficiency	%	1	3 ~ 10	97	97	97
		2	16 ~ 100	94	94	94
Operating Temperature		1,2	3 ~ 100	- 20°C ~ +90°C		
Lubrication		1,2	3 ~ 100	Synthetic Grease		
Protection Class		1,2	3 ~ 100	IP65		
Mounting Position		1,2	3 ~ 100	Any		
Noise Level	dB	1	3 ~ 10	≤60	≤65	≤68
		2	16 ~ 100	≤60	≤65	≤68
Weight ±2%	kg	1	3 ~ 10	1.3	3.1	7.2
		2	16 ~ 100	1.8	5.2	10.2
Mass Moment of Inertia	kg.cm2	1	3	0.16	0.61	3.25
			4	0.14	0.48	2.74
			5	0.13	0.47	2.71
			7	0.13	0.45	2.62
		2	10	0.13	0.44	2.57
			16	0.13	0.47	2.71
			20~50	0.13	0.45	2.57
			70~100	0.13	0.13	0.44

Dimensions

AB060 1-stage: Motor: ECMA- C10604RS

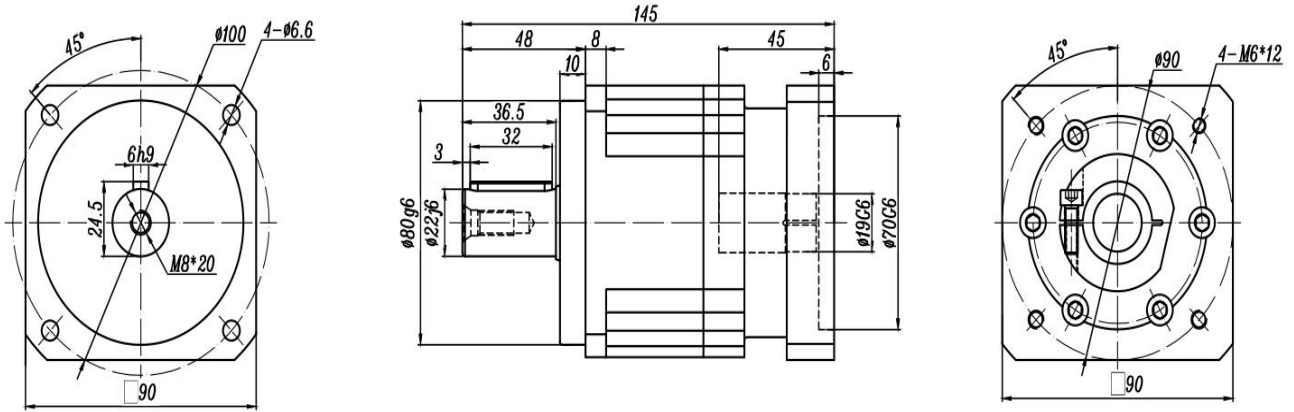


AB060 2-stage: Motor: ECMA- C10604RS



Dimensions

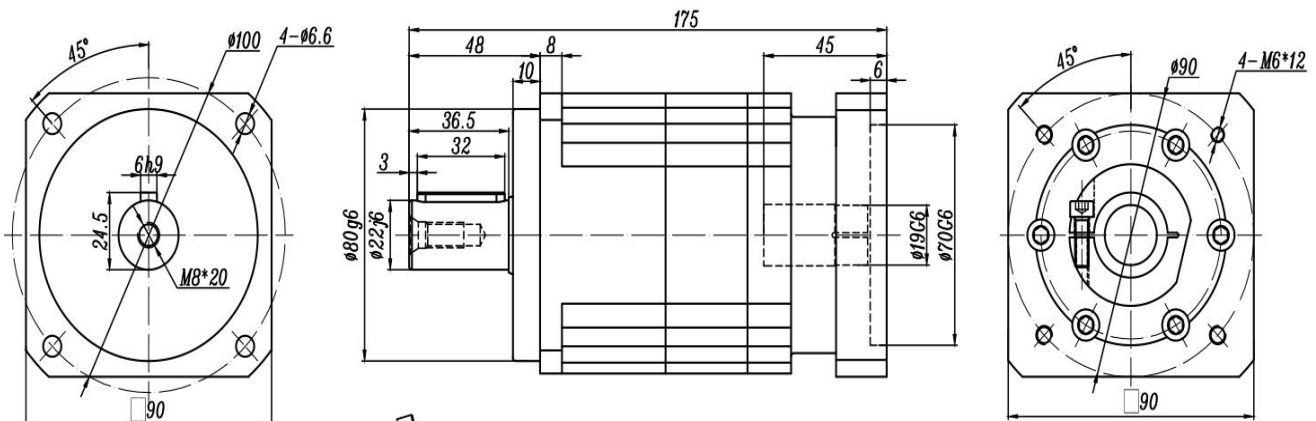
AB090 1-stage: Motor: ECMA-C10807RS



AB090 2-stage: ECMA-C10807RS

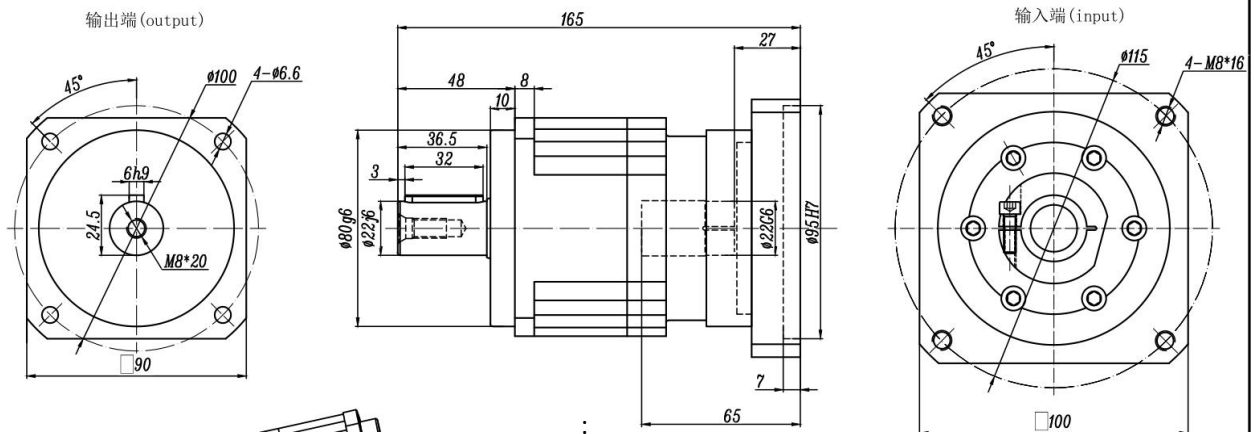
输出端(output)

输入端(input)

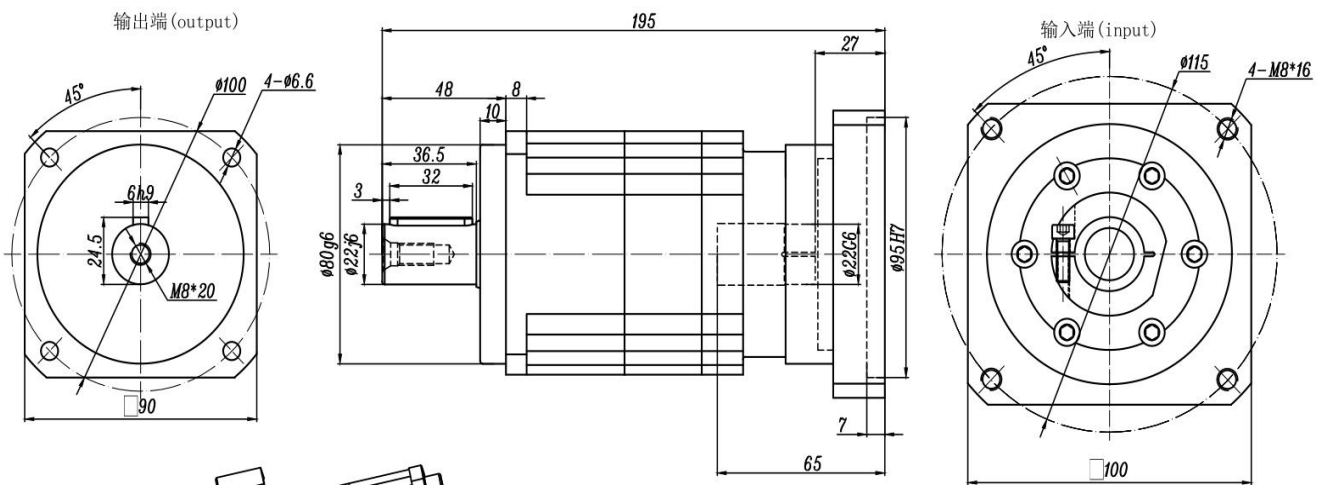


Dimensions

AB090 1-stage:ECMA-C11010RS



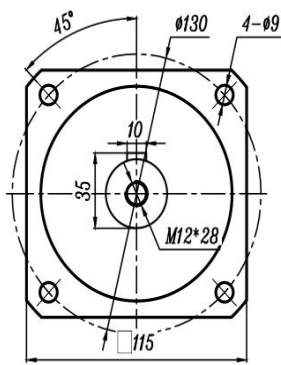
AB090 2-stage:ECMA-C11010RS



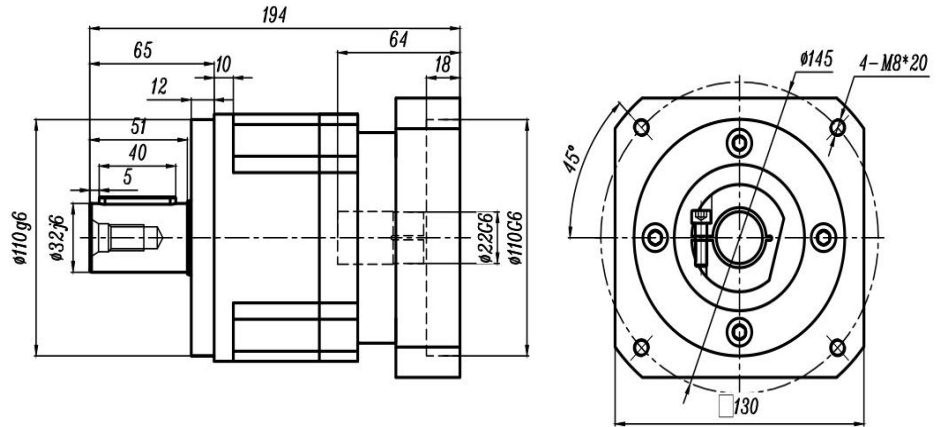
Dimensions

AB115 1-stage:Motor:ECMA-E11310RS, ECMA-E11315RS, ECMA-E11320RS

输入端(input)

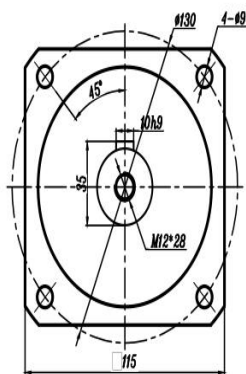


输出端(output)

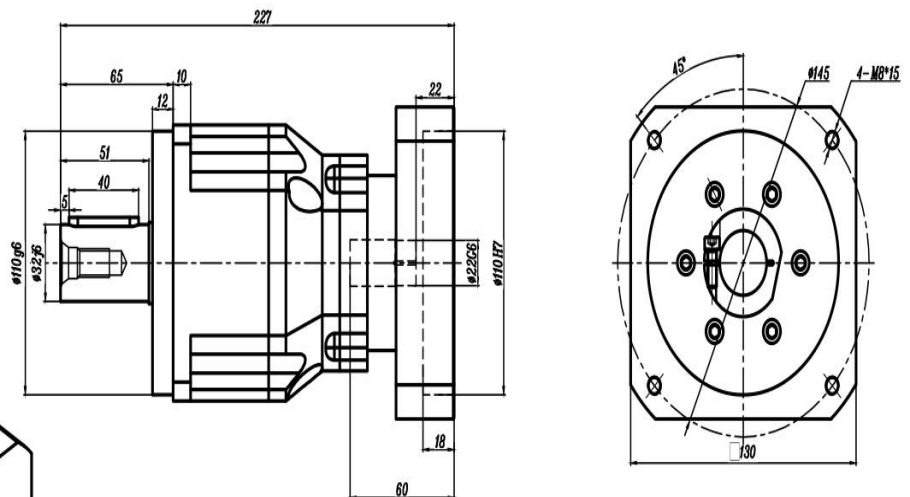


AB115 2-stage:Motor:ECMA-E11310RS, ECMA-E11315RS, ECMA-E11320RS

输入端(input)



输出端(output)



Installation Instructions

Assembling the Planetary Gearbox with Motor



01

Confirm the compatibility of motor model and gearbox spec and clean the mounting surface



02

Remove the motor key



03

Check the motor shaft size (Insert the bushing into the input bore if necessary)



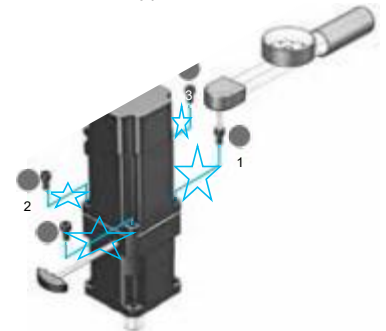
04

M3 x P 0.5



05

12.9



06

58

Remove the plug into the adapter plate. Loosen the set collar with a torque wrench and align with the bolt

Vertically insert motor from the gearbox



07

Tighten the set collar bolt with the torque wrench



08

Assemble with the screw plug