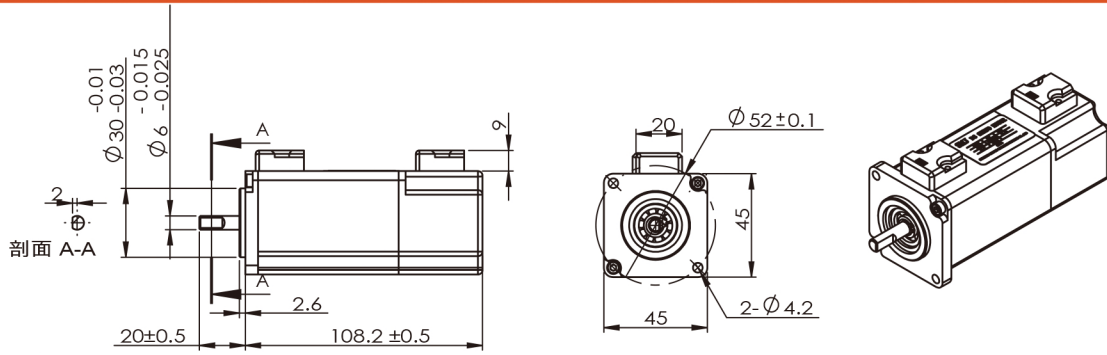


# SMP45 | Servo



## Motor Data

1	motor model		SMP4512	SMP4524	
2	nominal power	PR	57	84	W
3	nominal voltage	VT	12	24	V
4	nominal current	IR	8.5	7.5	A
5	instantaneous maximum current	IP	20	22.5	A
6	nominal speed	NR	3000	5000	rpm
7	maximum speed	NP	5000	5000	rpm
8	nominal torque	TR	0.18	0.16	Nm
9	peak torque	TP	0.42	0.48	Nm
10	torque constant	KT	0.0233		Nm / A
11	back EMF constant	Ke	2.44		V / Krpm
12	rotor inertia	J	0.34		Kg*cm <sup>2</sup>
13	terminal resistance	R	0.43		Ω
14	cogging and hysteresis torque	Tc Th	0		mNm
15	terminal inductance	L	30		μH
16	mechanical time constant	Tm	33		ms
17	electric time constant	Te	0.07		ms
18	number of pole pairs	2p	3		
19	weight of motor	W	0.62		Kg
20	encoder options		incremental (2500PPR) \ Absolute (17/33 bit)		
21	motor insulation class		class B		
22	protection class		IP64		
23	ambient temperature		-20~+40°C		

## Graph

A: Continuous Working Area  
B: Repeatedly Working Area

