

SB04 Servo Motor Brake

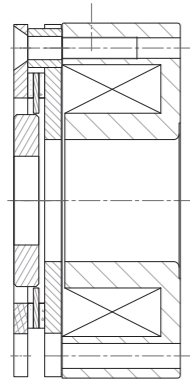
Product Overview

SUNSO SB04 Brake is a new design spring-applied brake for servo motor. Its main purpose is to make the machine stop with precisely & instantly. This slim designed brake can match many kinds of motion machines' braking requirement.



Its major features are:

- Compact structure without large installation space
- Module design and Installation easily
- Operation with silent
- Total new design for servo motor with rapidly & stably braking
- The brake coil is covered and encircled by epoxy resin, while mechanical parts are also galvanized so that the brake can be operated in non-ventilation area.

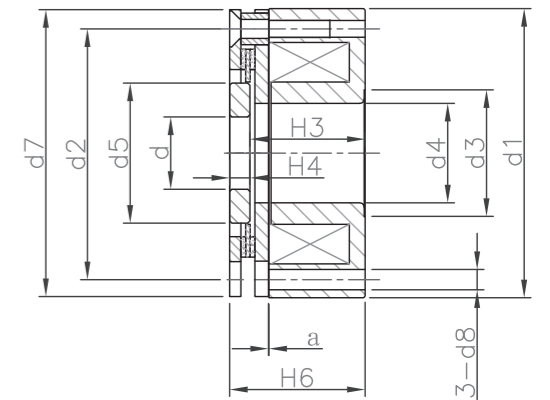
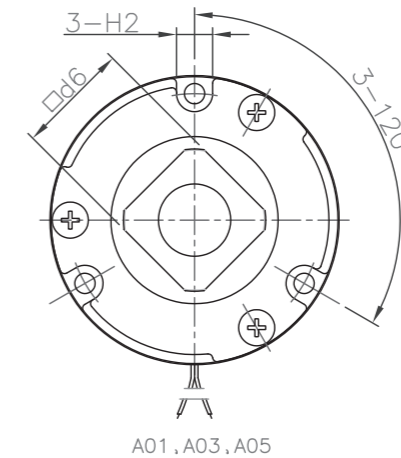
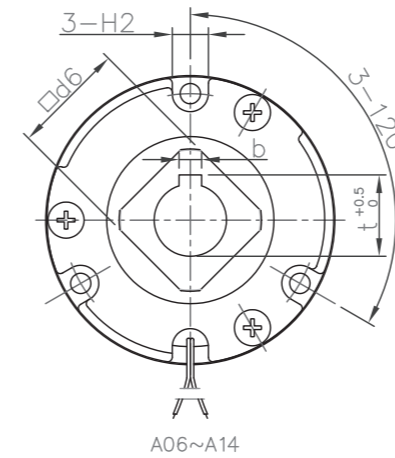
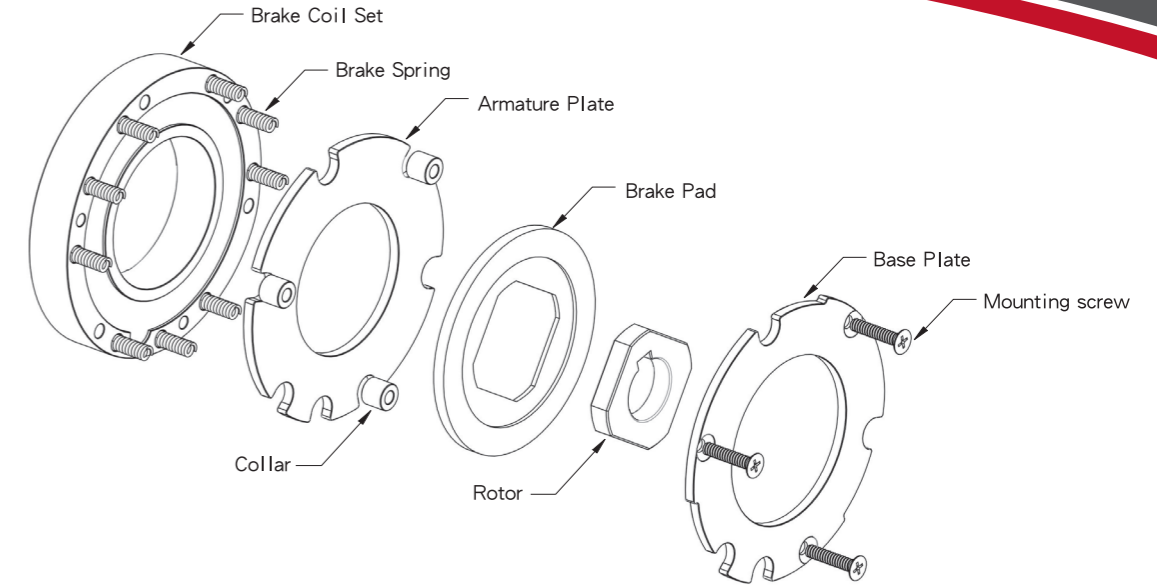


Brake Working Principle

When the power is connected to the brake coil, it sucks the armature plate because of the excitation effect so that causes the brake springs are compressed. Now, the brake pad with the motor shaft is released and can be free rotation.

As power is off, the excitation effect is disappeared and then cause armature plate pushing & holding the brake pad through the compressed brake springs. Therefore, the brake pad located between the armature plate and base plate with the motor shaft is stopped by means of frictions.

Structure



Dimensions

Model : SB04 ※Based on customers' application requirements, the customization can be available.

Unit: mm

Series	A01	A03	A05	A06	A08	A10	A12	A14
d1	33	48	64	83.5	93.5	123.5	137.5	167.5
d2	26.5	42	56	76	85	115	130	158
d3	16	26	28	NA	NA	NA	NA	NA
d4	9	14	22	47	49	62	65	80
d5	14	23	31	42	42	55	62	74
d6	12	19	25	35	35	45	50	60
d7	32.5	47.5	63.5	82	92	122	136	166
d8	3.4	3.4	4.5	4.5	4.5	4.5	4.5	5.5
H2	7	8	8	9	10	9.5	12	12
H3	26	26	25.5	17	19	14.6	15.4	16
H4	4	4	4.5	7	7	9	9	9
H6	31	31	31	26	28	26	27	27
a	0.15	0.15	0.15	0.15	0.15	0.15	0.20	0.20
d	8.5	11	16	20	20	24	24	28
b	NA	NA	NA	6	6	8	8	8
t	NA	NA	NA	22.5	22.5	27	27	31

Technical Data

Model : SB04 ※Based on customers' application requirements, the customization can be available.

Series	A01	A03	A05	A06	A08	A10	A12	A14
Static Friction Torque (N.M)	0.25	1.2	2.3	4.5	11	15	28	36
Coil (at 20°C)	Voltage (V)	24	24	24	24	24	24	24
	Power (W)	6.1	7.2	8.0	17.6	19.4	21.5	23.7
	Current (A)	0.254	0.300	0.333	0.73	0.81	0.90	1.00
	Resistance (Ω)	92	78	70	31	28	25	24
Insulation Class	F	F	F	F	F	F	F	F
Max. Rotation Speed (RPM)	6000	6000	6000	5000	5000	5000	5000	3600
Moment of Inertia of Rotation Parts (J·kg.m ²)	1.38X10 ⁻⁷	1.2X10 ⁻⁶	3.8X10 ⁻⁶	2.4X10 ⁻⁵	3.5X10 ⁻⁵	1.2X10 ⁻⁴	2.0X10 ⁻⁴	4.6X10 ⁻⁴
Total Brake Works (J)	3000	17000	40000	2.0X10 ⁵	2.0X10 ⁵	2.2X10 ⁵	2.5X10 ⁵	3.0X10 ⁵
Suction Time of Amarture Plate (S)	0.035	0.050	0.060	0.05	0.08	0.11	0.12	0.12
Release Time of Amarture Plate (S)	0.020	0.020	0.020	0.02	0.02	0.05	0.03	0.03
Weight (kg)	0.12	0.33	0.55	1.0	1.3	1.5	2.5	3.3