

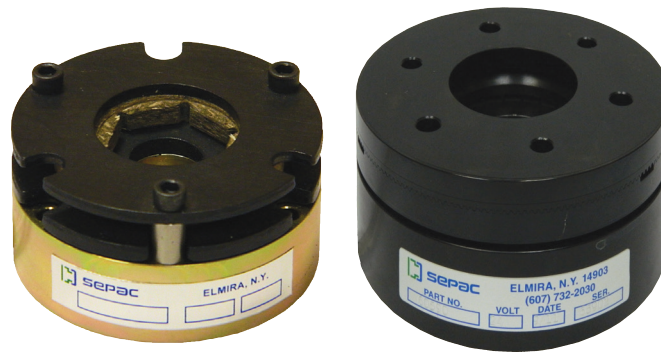
Friction Brakes vs. Tooth Brakes: Which is Right for You?

Your new actuator design needs a spring-applied brake (sometimes referred to as “fail-safe”).

What are your choices? How large will your space claim be? Well, it depends on what the brake will be expected to do.

For a holding brake that will never or very rarely be subjected to a dynamic stopping event, a SEPAC spring engaged tooth brake, or SETB, will provide the smallest and lightest solution.

For applications that involve frequent dynamic stopping events, a SEPAC spring engaged friction brake, or SEB, would be the preferred choice. Systems that require high energy stopping will naturally result in wear of the friction components, but with the large variety of materials that are available today SEPAC’s engineering team will have the ability to match your requirements of life and performance.



Examples of SEB Series friction brakes (far left photo) and SETB Series tooth brakes (left photo) are compared in the chart below.

	Model Type	Static Holding Torque (in-lbs)	Approximate O.D. (in)	Approximate Mass (lbs)	Approximate Watts to Release
#1	SEB	2.0	1.4	0.3	3.7
	SETB	2.0	0.9	0.2	3.0
#2	SEB	24	2.2	1.2	4.5
	SETB	24	1.6	0.6	3.8
#3	SEB	240	5.0	12	45
	SETB	240	2.9	4.0	25
#4	SEB	3000	9.0	55	135
	SETB	3000	5.3	19	60

Another important factor to consider is life expectancy. The static torque of a SEB friction brake may degrade over time and the friction material may require periodic burnishing which generally does not occur with static braking applications.

On the other hand a SETB or tooth brake’s torque will not fall below the rated value for this type of application.



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