


NEW

I N T R O D U C I N G

Permanent Magnet Electrically Released Brake (PMB)

Customized permanent magnet braking solutions

Matrix extends and miniaturizes custom-engineered permanent magnet braking solutions

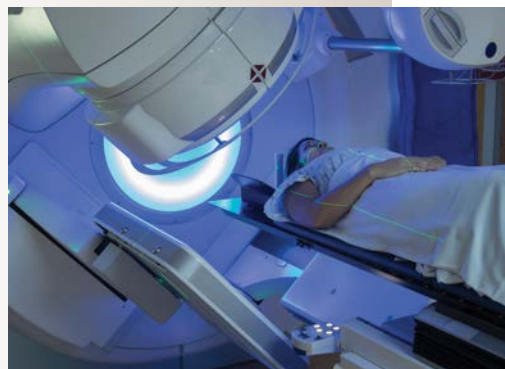
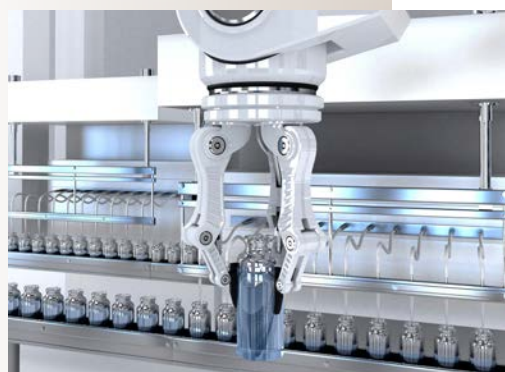
Matrix, a leader in advanced servo motor braking solutions, has expanded its range of bespoke permanent magnet brakes by creating new designs specifically for very small motor applications. The new designs provide high torque braking solutions for motor diameters less than 30mm. Matrix PMBs are an ideal alternative solution for spring-applied brakes (SMB) where installation space and backlash are limited.

Features

- Custom-engineered solutions with variable diameter / length / torque from Ø10 to 400mm and 0.1 to 1000Nm
- Backlash free at full given nominal brake torque
- Contact free giving no drag, no wear and quiet braking
- Very quick and reliable response time
- Torque control and soft braking solution
- High rated torque with limited space constraint, up to double torque vs spring-applied brakes for less than 30mm diameter brakes
- In-house component manufacture facilitates the ability to support full drive integration with customized bearing, encoder recess and mounting pattern
- Application representative testing with dynamic torque rating and energy braking capability

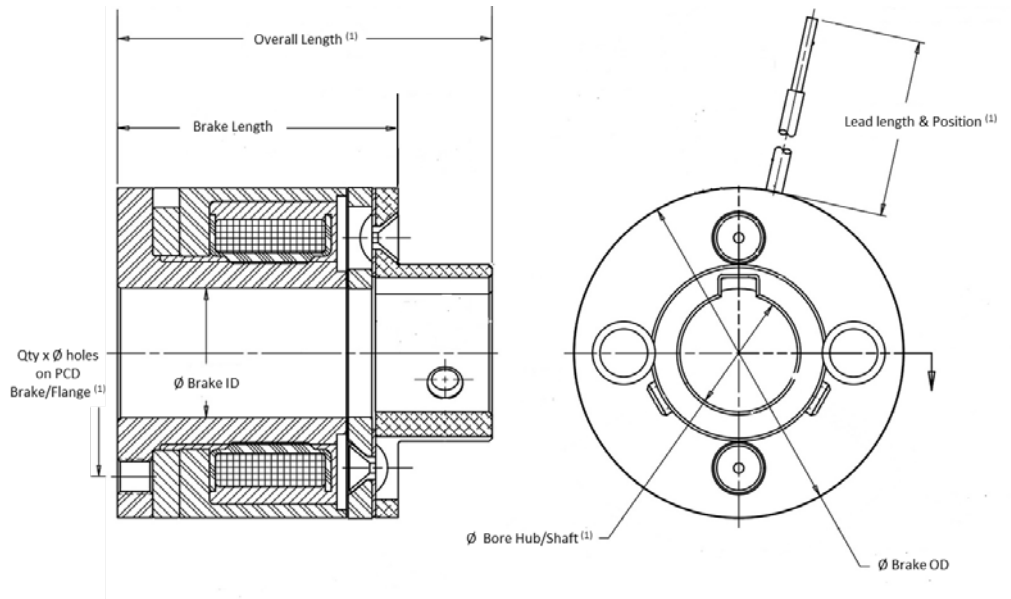
Typical Applications

- Servo Motor & Micromotor
- Medical
- Factory Automation & Robotics
- Material Handling & Lifting Equipment
- Transportation
- Safety





Permanent Magnet Electrically Released Brake (PMB)



Torque, Power, Dimension and Weight

Model No.	Static Torque (Nm)	Rated Power (W) ⁽²⁾	Brake Length ⁽²⁾	Overall Length (mm) ⁽¹⁾	Brake OD Outer Diameter (mm)	Brake ID Inner Diameter (mm)	Brake Weight (g)
PMB019	0.20	5.5	25.0	29.0	19.0	5.0	40
PMB028	0.40	4.5	24.0	32.0	28.0	11.0	80
PMB050	1.50	10.0	27.5	32.0	50.0	12.0	270
PMB063	3.00	13.5	28.0	35.0	63.0	15.0	450

⁽¹⁾ Bespoke mounting PCD, length calculation, screw types and encoder adaptation solutions to achieve optimized drive solution, consult Matrix International Assistance

⁽²⁾ Power based on 24VDC Voltage; For other voltages, consult Matrix International Assistance

