PMQ

Permanent Magnet Quadrupole



Vacuum-compatible, kinematically-adjustable lattices *(shown above)* are useful for variable source and exit parameters. Each PMQ can be longitudinally adjusted with <5 µm resolution and the entire lattice can be adjusted in up to six degrees of freedom. Optional motorization is available for the utmost versatility.

Advanced applications of high-brightness electron beams demand that the beams be focused to extremely small sizes. Electromagnetic quadrupoles' focusing fields that are not strong enough to give the short focal lengths needed for these applications, especially in low energy systems afflicted with space-charge effects and excessive energy spread.

RadiaBeam's PMQs are a cost-effective solution for these demanding applications.

Bores as small as a few millimeters, gradients up to several hundred Tesla/meter, and lengths of tens of centimeters are possible. 10⁻⁷ torr vacuum compatibility is standard but UHV compatibility is an option.





Other options are available upon request. Please contact us or visit our website for purchasing information.