

PM SERIES PERMANENT MAGNET BRAKE

MOBILE X-RAY CART



PROBLEM

A global medical imaging systems manufacturer needed a reliable electric holding brake solution for use on its newest mobile X-ray cart. The machine has many vertical, horizontal and pivot movements including a collapsible tower, travel tube and scanning head that a technician adjusts around the patient during set up. Once the ideal positions for each section are established, the brakes are used to hold the cart and each component in place to ensure crisp, accurate imaging.

SOLUTION

The customer had explored the use of mechanical holding solutions that were not very user-friendly. Ultimately, they contacted Warner Electric and shared specific measurements that had been taken to identify how much force was needed to hold the device at each of the movement locations. Warner engineers recommended the use of modified PM Series permanent magnet brakes with different braking forces to meet the machine's various holding requirements.

The easy-to-use permanent magnet brake is released on-demand by the operator/medical tech when positioning the X-ray scanner. Once in position, the operator simply releases the switch to re-engage the brake and hold the device stationary.

Warner Electric was able to quickly supply brakes for customer testing and then meet the customer's tight delivery schedule requirements for this very time-sensitive project. Warner's permanent magnet brake technology is ideal for use in medical equipment applications due to the minimal backlash, high torque-to-size ratio, ease of installation and use, and generally low cost in production volumes.

HIGHLIGHTS

- Modified PM permanent magnet brake
- Shear force: .5 lbs. and up
- Brake is scalable to deliver higher holding shear force
- Quiet operation for medical applications
- No friction wear

Regal Rexnord

Contact us: 1-800-825-9050

warnerelectric.com | regalrexnord.com

The proper selection and application of products and components, including assuring that the product is safe for its intended use, are the responsibility of the customer. To view our Application Considerations, please visit <https://www.regalrexnord.com/Application-Considerations>.

To view our Standard Terms and Conditions of Sale, please visit <https://www.regalrexnord.com/Terms-and-Conditions-of-Sale>.

"Regal Rexnord" is not indicative of legal entity. Refer to product purchase documentation for the applicable legal entity. Regal Rexnord and Warner Electric are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

© 3/2018, 2024 Regal Rexnord Corporation, All Rights Reserved. Form# P-8528-WE

