Huco Dynatork 3 Air Motors for Hazardous Applications

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Huco® Dynatork

An Altra Industrial Motion Company

Huco Dynatork 3 Air Motors

Bring efficiency, performance and versatility to hazardous application areas

Designed for efficient, spark-free operation, the Dynatork 3 air motor offers simplicity and high performance even under harsh duty cycles.

When you require a low-cost, efficient and reliable motor for applications in a sensitive environment, the Dynatork 3 air motor from Huco presents an optimum solution. Designed for efficient, spark-free operation, the Dynatork 3 air motor offers simplicity and high performance even under harsh duty cycles. Affordable, compact and easy to maintain, Dynatork 3 air motors are utilized in the wood, hydrocarbon, paper, paint, food processing and stealth industries.

The immediate benefit of selecting an air motor is that it offers spark-free operation without resorting to an expensive shielded ATEX-rated electric motor. In hazardous environments, it's important to reduce the risk of sparks wherever possible, so specifying a motor that operates entirely on compressed air is the recommended and most cost-effective solution. As a result, the Dynatork 3 air motor is compliant for use in ATEX Zone 1 applications.

The Dynatork 3 air motor incorporates Huco's unique free-floating piston technology, which minimizes air leakage past the piston. This ensures that the vast majority of the energy present in the compressed air is converted into motion, resulting in air consumption up to 80% less than an equivalent vane air motor. This, of course, translates into substantial energy savings for end users, even during heavy operation.

Air is supplied at up to 100 psi to each of the three pistons through an integral rotary valve, providing maximum torque from start-up. The motor can also be fitted with torque sensors to provide closed-loop feedback for accurate position control without the need for expensive electronic controls.

The advantage of such construction is obvious during operations that require stop/start applications under load. If an AC or DC motor is held by a brake, the motor risks burnout within a very short timeframe. However, an air motor will simply stop and then seamlessly operate again when the brake is released. With no components that can be damaged, an air motor can be started, stopped and restarted with no debilitating effects upon the device itself. These properties mean that the motor can be utilized in indexing operations, offering precision and control of motion required for such applications.

Ease of maintenance and installation are also offered by Dynatork 3 air motors. The motor is lightweight, allowing it to be moved easily for installation and maintenance work. Disconnecting the device from the air supply is also straightforward, minimizing maintenance costs and reducing downtime. Furthermore, due to its small footprint, the Dynatork 3 air motor saves space within the application area, especially when compared to an electric alternative that may require a bulky gearbox, enclosure or variable speed drive.

The motor can be specified in aluminium, stainless steel or acetal versions. Stainless steel or acetal housings are particularly suited to environments where regular wash-downs are required. With its high resistance to caustic acids and chlorinated sanitizers, acetal is perfectly adapted for use in food and beverage processing.

Dynatork air motors can also be supplied using non-magnetic materials suitable for applications where magnetic fields and electro-magnetic interference are concerns. No electricity is required, which makes the motor an ideal selection for MRI scanners, operations underwater or in stealth applications where the minimizing of signals is of paramount importance to avoid detection. For more specialized applications, Huco recommends consulting with its engineering team to develop a customized solution.

Flexible, reliable and cost effective – the line of Huco Dynatork 3 air motors offers a speed range up to 800 rpm and torques up to 15 Nm without gear reduction.

About Altra Industrial Motion

Altra Industrial Motion (NASDAQ:AIMC) is a leading multi-national designer, producer and marketer of a wide range of electromechanical power transmission products. The company brings together strong brands covering over 40 product lines with production facilities in nine countries.

Altra's leading brands include Ameridrives Couplings, Bauer Gear Motor, Bibby Turboflex, Boston Gear, Delroyd Worm Gear, Formsprag Clutch, Guardian Couplings, Huco, Industrial Clutch, Inertia Dynamics, Kilian, Lamiflex Couplings, Marland Clutch, Matrix, Nuttall Gear, Stieber Clutch, Stromag, Svendborg Brakes, TB Wood's, Twiflex Limited, Warner Electric, Warner Linear and Wichita Clutch. For information on any of these technology leaders, visit www.AltraMotion.com or call 815-389-3771.

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