Series XFC

Wind Turbine Pitch Control Cylinder



Customer Value Proposition:

Parker is the leader in multimedia pitch control solutions. When applications require an electromechanical system, Series XFC is the answer. As a close-coupled servo motor/mechanical drive assembly, it is a perfect alternative in a non-hydraulic system.



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Product Features:

- Dynamic Load Holding
- Very Low Starting and Running Friction
- High Accuracy Movement
- Steel Construction
- Multiple Cylinder Position Matching Through Common Control
- High Quality, Fully Sealed Design

- Minimized Service Cost from Less Parts and No Fluids
- High Power Density with High Efficiency
- Manufactured in the USA and Europe



Parker Series XFC

Parker is pleased to introduce a new level of Electric High Thrust cylinders featuring roller screw drive technology – Series XFC.

The Series XFC Extreme Force Electromechanical Cylinder is designed to provide heavy machine builders a high force electromechanical solution offering long life, minimal maintenance and low operating costs while maintaining structural rigidity. All this while still providing world class customer service and industry leading delivery times.

As a worldwide leader in fluid power cylinder products, Parker has combined the best of both worlds into one unique product. All of the benefits of electromechanical control and cleanliness combined with the structural rigidity and durability of a traditional hydraulic tie-rod cylinder.

Flexibility & Programmability:

In applications where high loads and/or high speed motion are required, roller screws offer a very attractive solution. Servo Motors and controls feature simplified programming with auto-tuning capabilities reducing installation start up time and expenses.

Electro-mechanical control systems utilizing servo motor technology provide infinite programmability along with some advantages

Frame Size	XFC075	XFC090	XFC115	XFC140	XFC165	XFC190
Continuous Thrust	20	34	54	80	120	178
kN (lbs)	(4500)	(7,500)	(12,000)	(17,500)	(26,500)	(40,000)
Maximum Thrust kN (lbs)	40	68	108	160	240	356
	(9,000)	(15,000)	(24,000)	(35,000)	(53,000)	(80,000)
Maximum Speed mm/sec (in/sec)	1,016	712	548	444	712	568
	(40)	(28)	(21)	(17)	(28)	(22)
Maximum Acceleration mm/sec² (in/sec²)	19,600 (773)	19,600 (773)	19,600 (773)	19,600 (773)	19,600 (773)	19,600 (773)
Maximum Stroke mm (in)	2,000	2,000	2,000	2,000	2,000	2,000
	(78.75)	(78.75)	(78.75)	(78.75)	(78.75)	(78.75)

not easily obtainable with other solutions such as multiple move profiles, adjustable acceleration and deceleration, force control, and absolute positioning capabilities. These features allow the system to be easily adaptable to changing application conditions and performance requirements with minimal modification.

Maintenance & Installation:

Roller screw cylinder systems require little or no maintenance when compared to their fluid power alternatives while still delivering long life and high performance. Due to the small number of components required for a complete system the commissioning time required for operation is significantly reduced. This allows system builders to quickly install, troubleshoot, and test system capabilities faster and more reliably than other alternatives.

Environmental Considerations:

With electro-mechanical system technology, fluid leaks, filter changes, and air bleeding are a thing of the past. Simply mount the cylinder, plug in the cables, download a program and you are up and running in record time.

Anti-Rotation:

Due to the steel round body cylinder design, internal antirotation of the thrust tube is not available in Series XFC Cylinders. Applications must be designed to prevent thrust tube rotation during operation.

Parker's Capabilities:

With Hydraulic, Pneumatic, and now Electro-mechanical technologies Parker can provide the best solution for a specific application regardless of requirements with an unmatched offering of cylinder products to more than 100 industrial markets worldwide.

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