HAS Hybrid Actuation System

Active tracking solutions for Solar Tracking



Customer Value Proposition:

Reinvented Active Solar Tracking by the use of Parker's Hybrid Actuation System (HAS) actuators. Controllability of electromechanical actuators with the power density, resistive force capabilities and longer life as found on traditional hydraulic systems offering robust, long lasting tracking solutions for solar power.

Parker HAS actuators offer low cost, ease of maintenance and durable choice for large and small arrays.

Hybrid hydraulics achieve exceptional economies of scale, with the ability to move over a megawatt from a single point. Serviceability is built into the design that can be serviced on site. Simple line of use replacement ability allows for quick change out in the field.

Contact Information:

Parker Hannifin Corporation

Cylinder Division

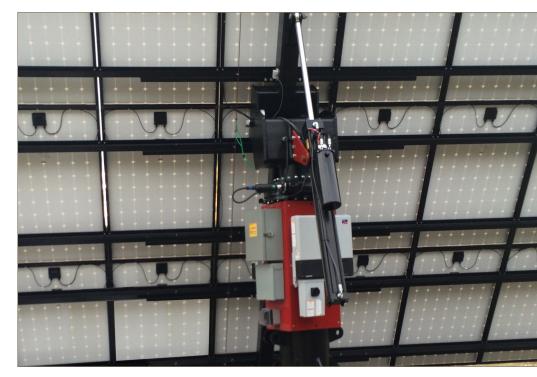
500 South Wolf Road

Des Plaines, IL 60016

phone 847 298 2400 fax 800 892 1008 cylmktg@parker.com

www.parker.com/cylinder





Product Features:

- Simple two wire operation
- AC and DC supply voltages available
- Low amp draw, 50% duty cycle, high efficiency tracking solutions
- No hydraulic hoses, no hydraulic power unit, self contained system
- High locked hold force to withstand wind gusts
- No reduction in life commonly found with screw-type actuators when loaded

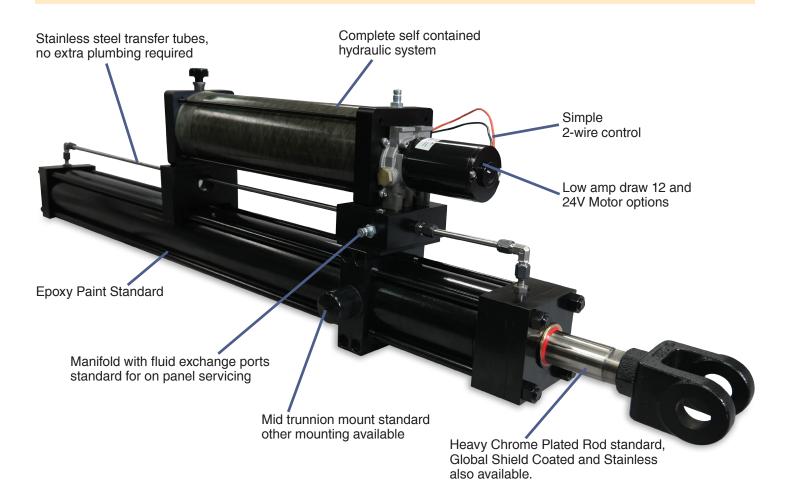
- Modular system allows for various traditional cylinder mounting configurations and stroke lengths
- Surface preparation for outdoor installations
- Heavy chrome plated rods with optional Global Shield[™] rod coating, stainless steel rods for extreme corrosion prevention
- Available with IntellinderTM
 continuous feedback or end of
 stroke, stroke to go switch options

HAS Hybrid Actuation System Actuators

Ideal for residential, commercial or utility tracking applications such as:

- Photovoltaics (PV)
- Concentrated solar power (CSP)

- Heliostat
- · Push-pull dual actuator systems



General Specifications (Sensor)

Bore		*Model No	**Push Force (typical)		Locked Force Rating		Amp Draw (typical)	Amp Draw Peak
Inch	mm		LBF	KN	LBF	KN	***Amps	***Amps
2.00	51	2.00 XX HAS XX	1571	7	9425	42	3.5	12
2.50	64	2.50 XX HAS XX	2454	11	14726	66	3.5	12
3.25	83	3.25 XX HAS XX	4148	19	24887	112	3.5	12
4.00	102	4.00 XX HAS XX	6283	28	37699	169	3.5	12
5.00	128	5.00 XX HAS XX	9817	44	58905	264	3.5	12
6.00	153	6.00 XX HAS XX	14137	63	84823	380	3.5	12
8.00	204	8.00 XX HAS XX	25133	113	150796	676	3.5	12

^{*} Consult Factory for sizing, complete model number; various stroke lengths and custom configurations available

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^{**} Increase in force will result in higher amp draw up to locked force rating

^{***} Rating on 0.100 series pump