

DC Solar Powered Pumps



The Megas line of DC Solar powered pumps are rugged, reliable, repairable, and built with simplicity in mind. They have a low cost of ownership and a high level of versatility. Pumps can be custom designed to your specifications if needed. Our application support and in-house engineering teams can assist in finding the appropriate fit for any needed use, as they have vast knowledge in upstream oil and gas applications. They are eager to assist with proven solutions and dedicated technical support. We know that's important to you; that's why it's important to us.

Features:

- Simplistic, modular design
- Low friction drive system
- Robust, stainless steel eccentric and bearings
- Oil impregnated bronze bushings
- MAOP Up To 6000 PSI



Megas solar motor casing with single head



Megas Solar Pump set up on skid

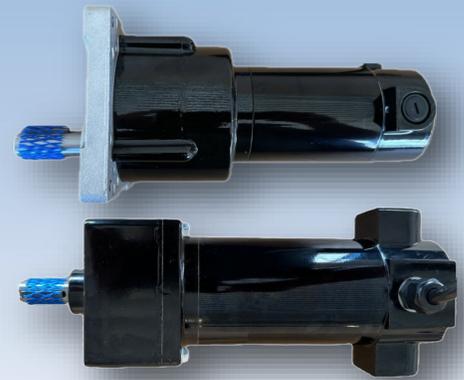
Benefits:

- Ease of on-site installation, retrofit, modification and repair
 - Packing and plunger changes are easy with minimal tools and downtime
- High motor efficiency
- Smooth, quiet operation
- Longer field life

Pump Options

Motor and Controls:

- Continuous run, variable speed control
- Intermittent run control
 - Ambient temperature override
 - 0/5V Input override
- Input voltages (motor and controls)
 - 12V DC
 - 24V DC
- Class 1, Division 2 Hazardous Location available
- High Torque(12G) and High Efficiency Motors(12E)
- The Model 12E High Efficiency Motor allows for a more reasonable solar system in many applications
 - Greatly reduced mechanical losses
 - Outperforms the Model 12G Solar Pump at all low pressures extremely efficiently
- Model 12G designed specifically for **high pressure** applications in 12VDC
- See chart below for maximum pressure ratings per motor



12E (Top) and 12G (Bottom) Motors

Plunger Size	Model 12E	Model 12G
	Maximum Pressure (PSI)	Maximum Pressure (PSI)
3/16"	5,000	6,000
1/4"	2,500	5,000
3/8"	1,250	2,500
1/2"	750	1,250

**All applications are unique, consult your sales reps for data driven motor and control recommendations*



Options Continued

Power, Enclosures and Mounting:

- Various solar array and battery class configurations
- Single and dual battery enclosures
- Pole mount packages
- Skid mount packages

**Tailored packaging and mounting design available*

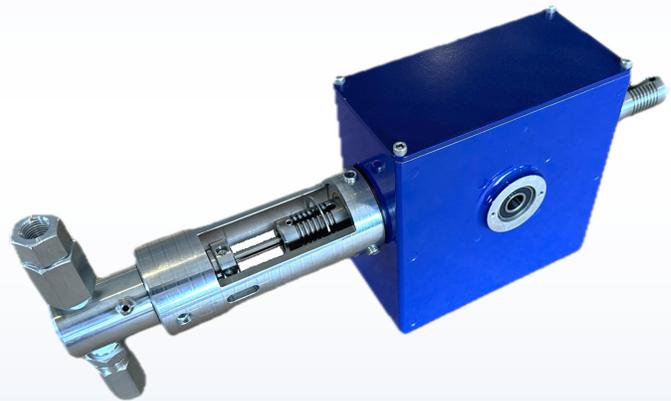
**Custom configurations available. Contact support with application specifics, desired control scenarios and an MSDS for a data driven recommendation.*



Streamlined controls inside battery box

Fluid Ends:

- Plungers: 3/16", 1/4", 3/8" and 1/2" in Single, Dual, Triple or Quad Head configurations available
- Independent, Stroke Limiting feature available for flowrate flexibility.
- V Ring Packing: AFLAS/TFE, Viton/TFE
- Seal Options (Packing Gland Adapter): ETP, UHMWPE, FFKM, TFE/Carbon/Graphite



Flowrate adjusts via circlip

Materials of Construction



303 Stainless Steel drive system

- Pump Housing: Coated aluminum
- Drive System: 303 SST
- Wear Parts: Oil impregnated bronze
- Wetted Parts: 316 SST
- Plungers: 17-4 SST or ceramic coated
- Check Balls: 316 SST or carbide
- Check Seats: TFE



How to Order

DC Solar Pump Sample Code:

<u>1</u>	<u>2</u>	-	<u>3</u>	-	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	-	<u>8</u>	<u>9</u>	<u>10</u>
	1	-	12E	-	A	A	4	S	-	A	0	B

*In the above example, a Fixed, On/Off-Efficiency,- Single Head, AFLAS/TFE, 1/4", Stainless Plunger,- Single Battery Enclosure, with No Battery, 100 Watt unit has been ordered.

1	<u>Stroke</u>	<u>Code</u>
	Fixed	(blank)
	Adjustable	ADJ
2	<u>Controller</u>	<u>Code</u>
	Continuous Run	CR
	On/Off	1
3	<u>Motor</u>	<u>Code</u>
	Efficiency	12E
	High Torque	12G
	12V Brushless	12X
	24V Brushless	24X
4	<u># Heads</u>	<u>Code</u>
	Single	A
	Dual	B
	Triple	C
	Quad	D
5	<u>Packing Material</u>	<u>Code</u>
	Aflas/TFE	A
	Viton/TFE	V
	Adapter Seal	S
6	<u>Plunger Size</u>	<u>Code</u>
	3/16	3
	1/4	4
	3/8	6
	1/2	8

7	<u>Plunger Material.</u>	<u>Code</u>
	Stainless	S
	Ceramic	C
8	<u>Batty. Enclosure</u>	<u>Code</u>
	Single	A
	Dual	B
9	<u># Batteries</u>	<u>Code</u>
	None	0
	1	1
	2	2
10	<u>Solar Wattage</u>	<u>Code</u>
	60	A
	100	B
	150	C
	200	D
	300	E

