

POW-R STEER® EPAS Actuator

Electric Power-Assisted Steering Actuator with Integrated Electronics
Speed- or steering-based assist, and kickback damping control

Allied Motion’s POW-R STEER Electric Power-Assisted Steering (EPAS) actuator comes complete with a low-cogging torque, permanent magnet synchronous motor, non-contacting torque sensor and integrated controller and motor power electronics.

Feature and function programming during the OEM development process is easy with our PC based, graphical user interface (GUI).

Simple installation and interfacing means you are able to have your steering system up and running faster.

Our worm reduction plus Space Vector Pulse Width Modulation (SVPWM) motor control means that operation is smooth and quiet.

Low inductance windings and high energy magnet option enable very fast response times, high steering torque assist and greater power density.

Torque control parameters include: Basic Assist as a function of vehicle speed, assist as a function of steering speed, and kickback damping control.

Applications for the POW-R STEER include marine, agricultural, recreational sport vehicles, construction equipment, material handling equipment, and autonomous transporter vehicles.

Features & Benefits

- Integral electronics and software simplifies wiring and minimizes vehicle space claim
- CAN programming and diagnostics for easy set-up and monitoring
- PC-based GUI enables easier actuator characterization and setup during development
- Aluminum die-cast housings for robustness and mechanical protection
- Splined input and output shafts for uniform torque transfer and loading
- Piloted mount with bolt retention to ease assembly
- Kickback damping and worm drive reduction for smooth, quiet operation
- Low-cog, low ripple torque motor for exceptional steering smoothness
- Long life brushless motor driven by efficient, integrated space-vector PWM controller
- Long life non-contacting steering torque sensor

Options

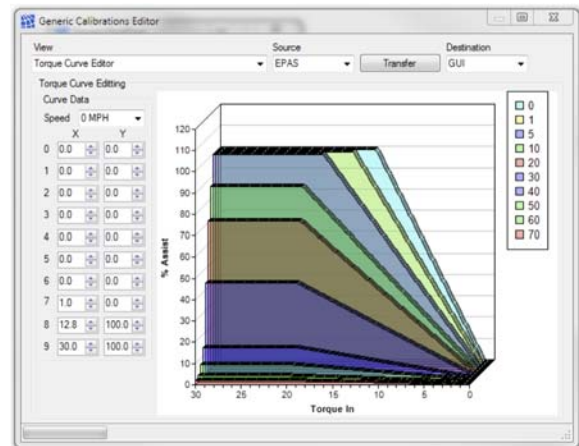
- Alternate system voltage designs
- Alternate mechanical and electrical vehicle interfaces



- Complete compact electronic power-assist steering actuator
- Torque assist ratio of 0.88 Nm/A (0.65 lb-ft/A) and output speed assist up to 650 deg/sec
- Rugged die-cast housing, splined shafts and IP67 sealing
- Integrated control electronics and software including CAN 2.0B

Specifications

	PS-1265
Operating Supply Voltage	9 - 16 VDC
Min Operating Temperature	-40 Deg C
Max Operating Temperature	+85 Deg C
Environmental Rating:	IP67
Total Weight	5.9 kg (13 lb)
Assist Torque Ratio	0.88 Nm/A (0.65 ft-lb/A)
Max Assisted Output Speed	650 deg/sec
Maximum Instantaneous Battery Current	50 A
Quiescent Current	< 100 µA
Integral Connectors (2) including CAN 2.0B	Battery (+), battery (-) and Ignition Fault output (hard wired or CAN)
Speed Dependent Functionality	Vehicle speed (hard wired or CAN) Optional engine RPM (hard wired or CAN)



POW-R STEER software: Torque assist curve calibration tool

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Dimensions

