

Pajoe Engineering Ltd
Electric Power Steering Technical Specification

Performance

Max Torque	38Nm at 12V DC and 25°C
Torque Response	38Nm @ 300% 20Nm @ 600%

Mechanical

Approx. Dimensions	105mm x 130mm x 245mm
Weight	5kg
Spline	
Mounting	4 mounting holes around output shaft

Electrical

Supply Voltage	12V DC (Nominal)
Max Current	58A
Quiescent Current	< 2mA

Communication Interface

Communication	Protocol 500kBaud CAN Interface with 11bit message identifiers. ISO11898 Compliant
Signal Rate	2.38ms
Output Signals : Column Angle	
Range	±1600°
Accuracy	±0.1°
Output Signals : Column Rate	
Range	±5 rps
Accuracy	±0.001 rps
Output Signals : Column Torque	
Range	±8Nm
Accuracy	±0.001Nm

Environmental

Thermal Shock	-30°C to +80°C
Slow Temp. Cycle	-30°C to +65°C
Temperature Endurance	-30°C to +80°C
Sinusoidal Vibration	5-300Hz, 3g (subsystems)
Random Vibration & Temp Shock	5-50Hz, 3g (system) 5g shock, 6000 times per axis

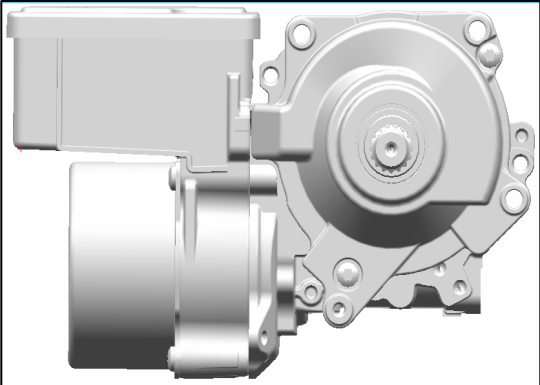
EMC

Radiated RFI Immunity	0.2-2GHz, 200V/m
Conducted RFI Immunity	1-400MHz 100mA

Operation

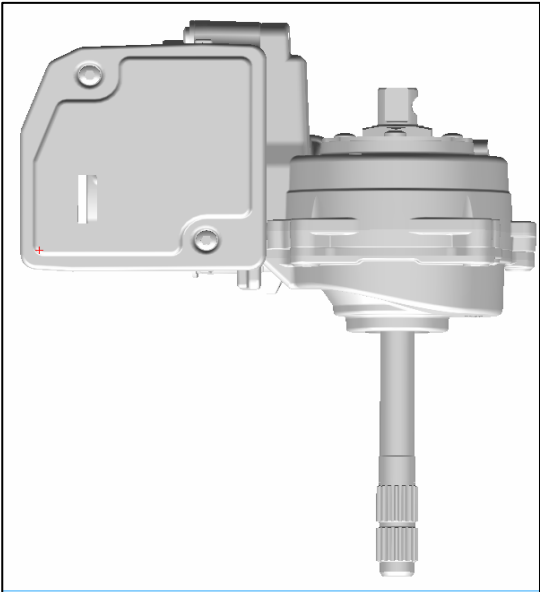
Power Up	Each time the unit is powered up, the sensor will require calibration. This can be achieved by rotating the steering wheel slowly for 360°. The unit will operate correctly if this is not performed, but there will be no angle signal.
Power Down	To allow the unit to correctly power down, power should not be removed for 30s after deactivation of the unit via the standby switch.
Safety Integrity	Microprocessor watchdogs, startup and runtime integrity checks minimize the chance that the MEPS will generate incorrect, or undemanded torques.

Pajoe Engineering Ltd
Electric Power Steering Technical Specification

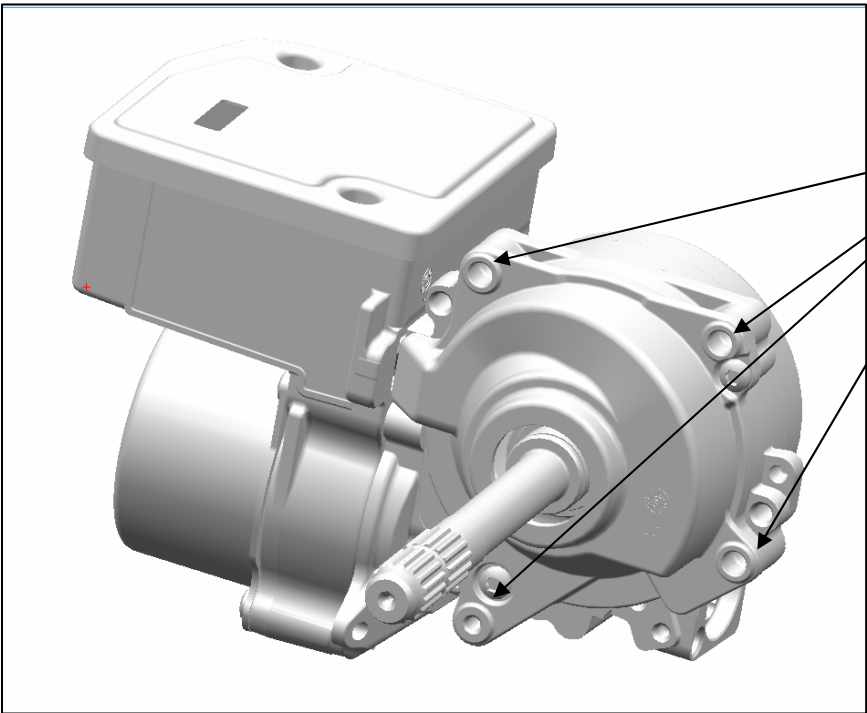


140mm

240mm



270mm



Mounting Points