



BOTH CHANNELS WIRED THE SAME



WHEN THE STEERING IS TURNED TO THE LEFT THE POTENTIOMETER SHOULD TURN COUNTER-CLOCKWISE AND THE STEERING BITS VALUE ON THE DESKTOP DISPLAY SHOULD FALL. IF NOT, PINS 1 AND 3 ON THE SENSOR SHOULD BE REVERSED.

PNU009D – DCE Dual Channel Multi-turn Steering Angle Sensor Kit.

Kit comprises of:

- 1x Large gear wheel - 60 teeth.
- 1x Small gear wheel - 24 teeth.
- 1x Toothed belt.
- 1x Dual Track Multi-turn sensor, 10 x 360 degree rotations.
- 2x Mating connector kit
- 4x Grub screws.

Large gear wheel is mounted on the steering column. The centre can be machined to a larger inside diameter so that it fits on the steering column. Grub screws hold the gear wheel to shaft. The small gear wheel is mounted to the sensor via grub screws. The sensor is mounted to a bracket on the chassis. The belt joins the large and small gear wheels. Be sure to remove the grub screws before any machining is done to larger gear wheel.

The sensor is ratiometric with an output range of 0-5V.

Setup:

The sensor must be near its center of rotation when steering wheel is central (wheels straight). When connected to the DCE EPAS Ultra ECU, the steering angle is shown as a bit value. When the wheels are straight, the steering angle bit value should be near 128bits. The steering angle bit value must reduce when the steering wheel is turned left. Failure of this will result in a malfunctioning EPAS system. If this is not correct when setting up, the sensor can be turned around or pins 1 and 3 of the connector can be swapped. See EPAS Ultra user manual for instruction on setting steering angle stops.

Replacement parts available individually on request.



DRAWING NOT TO SCALE.
ALL DIMENSIONS IN MILLIMETERS.

CUSTOMER:	DCE		REVISION:
TITLE:	Dual Channel Multi-turn Steering Angle Sensor Kit		
PART NO:	PNU0097D		
DRAWN BY:	D.Cunliffe	DATE:	18 th May 2021
CHECKED BY:	J.Chappell	DATE:	18 th May 2021
FILENAME:	PNU0097D- Dual Track Steering Angle Sensor.vsd		