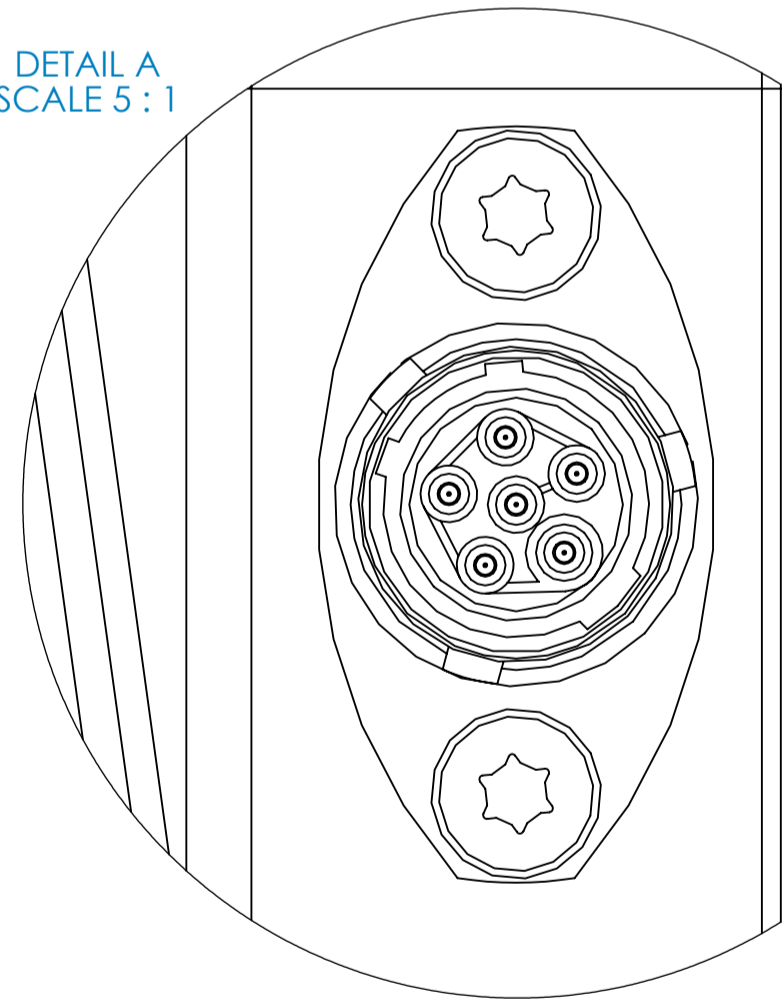


DETAIL A  
SCALE 5:1



SUMMARY OF MEASUREMENT PRINCIPLE:

1. SHROUD USES 3 RADIALLY POSITIONED MEASUREMENT HEADS EACH CONTAINING A MAGNETO RESISTIVE IC.
2. EACH MR IC IS PROCESSED BY THE ELECTRONICS CONTROL MODULE PRODUCING EITHER A 0-5V ANALOG OR CAN OUTPUT RELATIVE TO POSITION OF THE PLUNGER WITHIN THE SOCKET.
3. 3 RADIAL HEADS ARE USED TO ELIMINATE NON-CONCENTRICITY EFFECTS OF THE SOCKET WHEN ENGAGED ON THE WHEEL NUT
4. 25mm OF LINEAR MEASUREMENT OF THE WHEEL NUT RELATIVE TO THE AXLE IS AVAILABLE FROM THIS SYSTEM.
5. SOCKETS CAN BE CUSTOMISED TO ACCOMMODATE THE PLUNGER AND MAGNETIC TARGET FOR INDIVIDUAL APPLICATIONS

Configuration:	Linear
Sensing Range:	25mm (Can be re-programmed for an alternative range if required)
Gap between sensor head and magnetic target:	25mm
Supply Voltage:	5VDC regulated or 6VDC to 31VDC
Resolution:	12 bit
Update Rate:	5kHz
Output:	Configurable 0.25 – 4.75VDC analogue
Supply Current:	nom 25mA @ 12VDC
Reverse Polarity:	-40VDC
Sensitivity:	Min. 180mV/mm
Termination:	Connector: Deutsch ASX-002-06-PN-HE
Sensor head module dimensions	Approx. 18mm x 15mm x 6.5mm
Sensor electronics dimensions	60mm x 54mm x 14mm
Housing Material:	Carbon graphite
Linearity:	+/- 0.4% full scale output
Operating Temperature:	-40 °C to 150 °C
Storage Temperature:	-40 °C to 125 °C
Vibration:	10G from 10Hz to 2,000Hz
Shock:	50 G half sine wave with 11 ms duration
Sealing:	IP67
Assembly Part Number:	U-015-02

\* ANALOG VARIANT ONLY

CONNECTOR: DEUTSCH ASX- 002-06-PN-HE	
PIN 1	V+ SUPPLY
PIN 2	GnD
PIN 3	ANALOG SIGNAL OUT(0.25 -4.75V)
PIN 4	SPARE
PIN 5	Tx COMMS (CONFIGURATION ONLY)
PIN 6	Rx COMMS (CONFIGURATION ONLY)

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:	M/C	DEBUR AND BREAK SHARP EDGES	REVISION	ISSUE	DESCRIPTION	DATE	APPROVED
TOLERANCES: LINEAR: ±0.05 ANGULAR: ±0.05					01	FIRST RELEASE		20.08.20	NJM
					02	SHROUD DESIGN UPDATES		22.09.22	WJM
DRAWN	NAME	SIGNATURE	DATE	THIRD ANGLE	TITLE: <b>WHEEL GUN SENSOR ASSEMBLY MEASUREMENT DETAILS</b>				
CHKD	WJM		02.8.22		DWG NO. <b>U-016-02</b>				
APPVD					SCALE: 1:1				
MFG					SHEET 1 OF 1				
Q.A.	MATERIAL: VARIOUS			WEIGHT:		A1			