



Configuration:	Arc
Calibrated sensing Range:	70 degrees
Air Gap:	~6.5mm
Supply Voltage:	+6 - +31VDC
Resolution:	12 bit
Update Rate:	5kHz
Output:	Channel 1: Analogue. Factory set to 0.25VDC @0° – 4.75VDC @70° Channel 2: Analogue. Factory set to 0.25VDC @0° - 4.75VDC@70°
Supply Current:	nom 20mA @ +12VDC
Reverse Polarity:	protected
Sensitivity:	Min. 64mV/degree
Termination:	Flying lead
Wiring:	Independant harnesses for each channel 2m, 5 core 26AWG sleeved in RW-200E
Sensor Dimensions:	Approx. 107mm x 47mm x 14mm (see drawing view)
Housing Material:	AL 6082T6, hard anodised
Mounting:	2 x M5 threaded inserts
Linearity:	+/- 0.4% full scale output
Operating Temperature:	-40 °C to 125 °C
Storage Temperature:	-20 °C to 85 °C
Vibration:	10G from 10Hz to 2,000Hz
Shock:	50 G half sine wave with 11 ms duration
Sealing:	IP67
Part Number:	MV-100-05
Target magnet assembly:	MV-102-01

WIRING DESIGNATION		
	CHANNEL 1	CHANNEL 2
RED	V+ (24V) CHANNEL 1	V+(24V CHANNEL 2)
BLACK	GnD	GnD
YELLOW	0.25 -4.75V SIGNAL (CHANNEL 1)	0.25 - 4.75V SIGNAL (CHANNEL 2)
WHITE	COMMS Tx (TRANSMIT CHANNEL 1)	COMMS Tx (TRANSMIT CHANNEL 2)
GREEN	COMMS Rx (RECEIVE CHANNEL 1)	COMMS Rx (RECEIVE CHANNEL 2)

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ±0.05 ANGULAR: ±0.05	FINISH: CLEAR HARD ANODISED 50µ	DEBUR AND BREAK SHARP EDGES	REVISION	ISSUE	DESCRIPTION	DATE	APPROVED
			03		CABLE LENGTH INCREASED FROM 1m		NJM
			04		MAGNET ASSEMBLY UPDATED	20.10.23	NJM
			05		MAGNET ASSEMBLY PART No CHANGED	12.04.24	NJM
DRAWN	NAME NJM	SIGNATURE	DATE 8.10.23	TITLE: RUDDER QUADRANT SENSOR ASSEMBLY			
CHK'D							
APPV'D							
MFG							
Q.A				MATERIAL: AL 6082 T6		DWG NO. MV-100-05	A3
WEIGHT:			SCALE: 1:1		SHEET 1 OF 1		