M02A Mini-Helmer Azimuth 120

The M02A Azimuth Lever has the same precise feel as all other marine controls. The Z-axis with rotation will ensure total control.

A masterpiece of construction:

- **Precision control –** The consistent smooth friction, and exact detents will ensure effortless control over the vessel.
- **Premium look –** Brushed black anodized aluminum finish on panel plate.
- **LED illumination –** Dimmable LED illumination guarantees effortless readout in every situation.
- **Safety first –** Can be equipped with dual independent hall-effect sensors.

Other features making M02A irresistible:

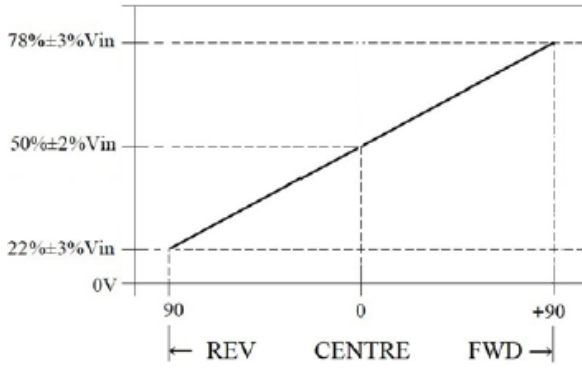- Hall-effect sensor or potentiometer
- Made in Sweden
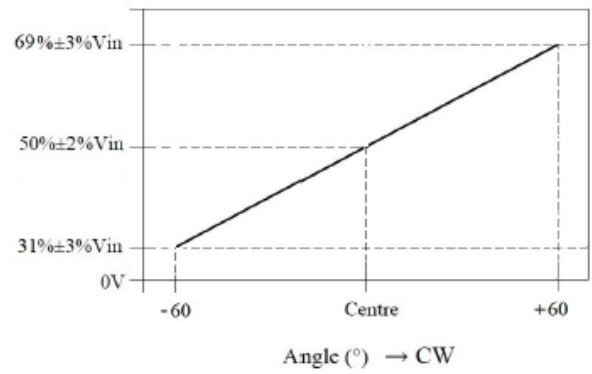
Specification details

Handle movement RPM:	+/-90°, zero detent, 10-0-10 Green illuminated scale.
Handle movement AZ:	+/-60°, zero detent, 30-0-30 Green illuminated scale.
Materials:	Black anodized aluminium POM handle, PMMA scale
Sensors:	Hall effect sensor / Potentiometer
Enclosure:	IP66 from bottom panel and above
Voltage light:	Voltage Dimmable LED 8-24VDC
Type connection:	D-Sub 25-pole male
Pin configuration D-sub, Hall Effect sensor version:	

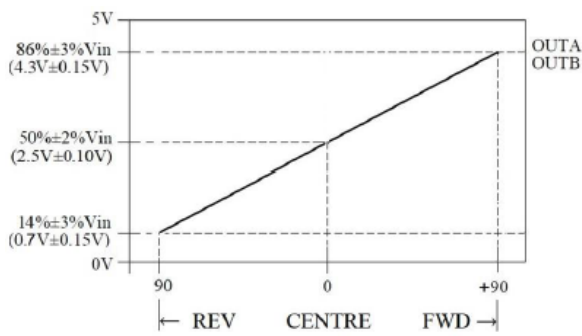| **Dual Independent Hall sensor**	**Potentiometer**
1. In-A +VDC (Thrust Red) 2. GND-A (Thrust Black) 3. Out-A (Thrust White) 4. In-B +5VDC (Thrust Green) 5. GND-B (Thrust Yellow) 6. Out-B (Thrust Blue) 8. In-A +5VDC (Steering Red) 9. GND-A (Steering Black) 10. Out-A (Steering White) 11. In-B +5VDC (Steering Green) 12. GND-B (Steering Yellow) 13. Out-B (Steering Blue) 14. +24V LED (Green) 15. GND LED (Black)	1. +5V (Blue) 2. GND (White) 3. Thrust (Grey) 5. +5V (Purple) 6. GND (Brown) 7. Steering (Pink) 14. +24V LED (Green) 15. GND LED (Black)
Wiring diagram 141006	Wiring diagram 141008
Available versions:	M02A-H Hall sensor version M02A-P Potentiometer version
Options:	Customer logo shields/white illuminated scale.

Marine Controls

Output Potentiometer version

RPM

AZ

Output Hall effect version

RPM

AZ