

# Hammerhead HHR

## Miniature Rotator



### FEATURES

- ▶ Ultra-compact single-axis rotator
- ▶ Absolute position feedback
- ▶ Unlimited rotation
- ▶ Extra-high torque
- ▶ Variable-speed brushless motor
- ▶ Corrosion-resistant 316 stainless steel housing (aluminum optional)
- ▶ Air-filled to 1,000m (3,300ft) or pressure-balanced, oil-filled to 6,000m (19,700ft)
- ▶ Multi-drop RS232 or RS485 control with soft-addressing allows up to 255 units on a single serial port (power permitting)
- ▶ ASCII protocol and Windows GUI
- ▶ User-settable soft-stops
- ▶ Wide input supply

*Technical specifications on reverse*

# Technical Specs

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PARAMETER	HAMMERHEAD HHR
Model Number	AR303
Depth Rating	1,000m (3,300ft) air-filled; 6,000m (19,700ft) oil-filled
Input Voltage	10–40VDC
Rated Torque (per axis @24V)	6.8N-m (5ft-lb)
Current Draw (per axis @24V)	No load: 120 mA, Rated load: 425mA; Limit: 450mA
Rotation Range (per axis)	Unlimited; soft limits may be set by user commands
Speed Range	Continuously variable 0–100%, in 1% increments
No Load Speed (max)	5.5rpm (33° per sec.)
Payload	10kg (22Lbs)
Position Feedback	Absolute. Resolution: 0.1°; Accuracy: 0.2°
Gearbox Backlash	1.7° (100 arc-min.) <i>*Backlash is measured and reported by encoders</i>
Control	Multidrop RS232 or RS485 (2-wire); 254 soft-addresses
Housing Material	316 stainless steel (standard); anodized aluminum optional
Weight in Air (air-filled)	316 SS: 1.3kg (2.9Lbs); 6061AL: 600g (1.3Lbs)
Weight in Water (air-filled)	316 SS: 800g (1.8Lbs); 6061AL: 100g 0.2Lbs)
Operating Temperature	-10°C–40°C
Connector Pinout (Subconn MCBH4M or MCPBOF4M standard)	1: GND; 2: +10–40Vdc; 3: RS232 RX (in) or RS485 (A)-; 4: RS232 TX (out) or RS485(B)+ <i>*Additional pins on custom connectors will be left unused</i>

