



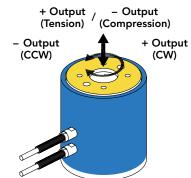
## **FEATURES**

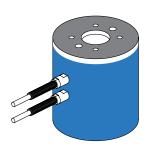
- Strain gauge based
- Aluminum construction
- Ideal for auditing the torque of aircraft control columns
- Ideal for propeller efficiency characterization



Active End

Fixed End





SPECIFICATIONS	
PERFORMANCE	
Nonlinearity	±0.25% of RO
Hysteresis	±0.25% of RO
Nonrepeatability	±0.05% of RO
ELECTRICAL	
Rated Output (RO)	2 mV/V nom (50–150 lb) 3 mV/V nom (200 lb)
Excitation (VDC or VAC)	18 max
Bridge Resistance	350 Ohm
Insulation Resistance	≥500 MOhm @ 50 VDC
Connection	#28 AWG, 4 conductor, braided shielded PVC cable, 10 ft [3 m] long
Wiring Code	WC1
MECHANICAL	
Weight (approximate)	6.5 oz (184 g)
Safe Overload	150% of RO (50–150 lb) 125% of RO (200 lb)
Material	Aluminum
IP Rating	IP40
TEMPERATURE	
Operating Temperature	-45 to 200°F (-42 to 93°C)
Compensated Temperature	60 to 160°F (15 to 72°C)
Temperature Shift Zero	±0.005% of RO/°F (0.01% of RO/°C)
Temperature Shift Span	±0.005% of Load/°F (0.01% of Load/°C)
CALIBRATION	
Calibration Test Excitation	10 VDC
Calibration (standard)	5-pt Compression, CW
Calibration (available)	5-pt Tension and Compression, CCW and CW
Shunt Calibration Value	60.4 kOhm (2 mV/V) 43.575 kOhm (3 mV/V)





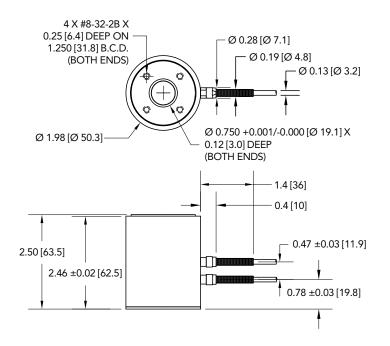




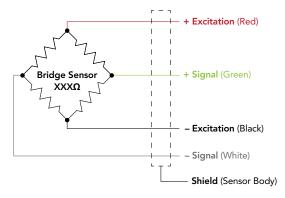


Model MBA500

## **DIMENSIONS** inches [mm]



WIRING CODE (WC1 WITH SHIELD)				
RED	+ EXCITATION			
BLACK	– EXCITATION			
GREEN	+ SIGNAL			
WHITE	– SIGNAL			
SHIELD	FLOATING			



CAPACITIES						
ITEM #	Load Capacity		Torque Capacity		Direction (in)	Natural Frequency (Hz)
	lb	N	in-lb	Nm	(Fz only)	(Fz only)
FSH04259	50	222	50	5.65	0.001	2100
FSH04260	100	444	100	11.3	0.001	2700
FSH04261	200	890	200	23	0.002	2900









