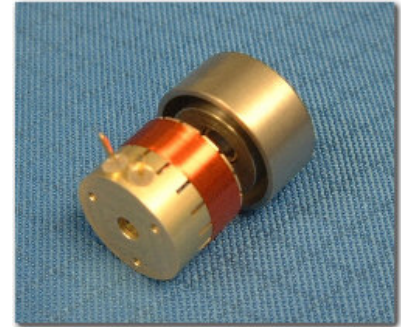
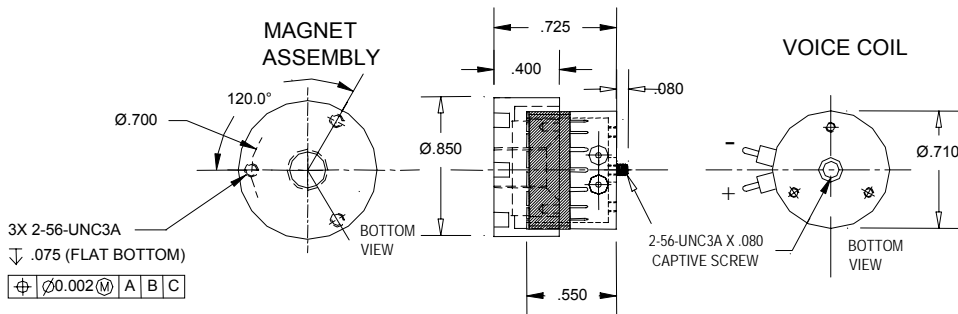


## ACT-085-010 Actuator

### High Band Width Electro-Magnetic Actuators



ATA Sensors Actuator Model ACT-085-010 is designed for precision alignment between the voice coil and the magnet assembly. A custom mounting tool is provided to ensure proper axial alignment between the magnet assembly and the voice coil. The coil uses a captive 2-56 screw that allows  $\pm 0.025$  inches of misalignment between the central axis of the magnet assembly and the mounting hole for the voice coil.

## Performance Data

PARAMETER	SYMBOL	VALUE	UNIT
<b>Electrical</b>			
DC Winding Resistance	$R_C$	2.63	$\Omega$
Voltage @ Peak Force	$V_C$	7.6	VDC
Current @ Peak Force	$I_C$	2.89	Amp
Power @ Peak Force	$P_P$	22	Watt
Force Constant	$K_F$	3.46 (0.96)	Oz. /Amp (N/Amp)
Peak Force	$F_P$	10.0 (2.78)	Oz. (N)
Back EMF Constant	$K_B$	0.30 (0.85)	V/ft/s (V/m/s)
Inductance	$L_C$	100	$\mu H$
Electrical Time Constant	$\tau_{COIL}$	26	$\mu sec$
<b>Mechanical</b>			
Coil Weight	$m_{COIL}$	0.176 (5.0)	Oz. (gm)
Magnet Assembly	$m_{MAG}$	0.775 (22.0)	Oz. (gm)
Stroke	$d$	$\pm 0.030$ ( $\pm .76$ )	In. (mm)
Actuator Total Weight	$m_{ACT}$	0.891 (25.3)	Oz. (gm)