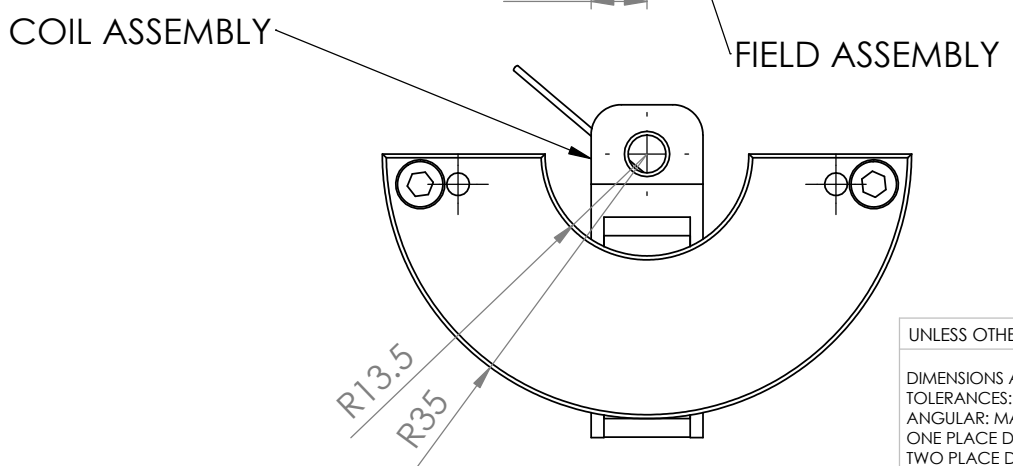
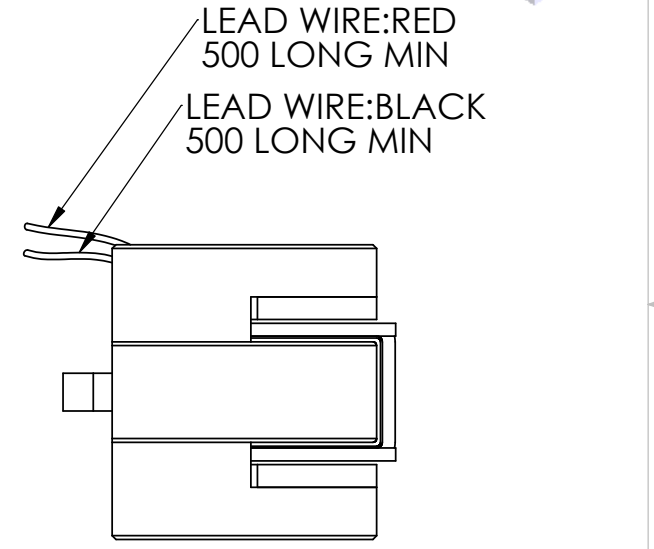
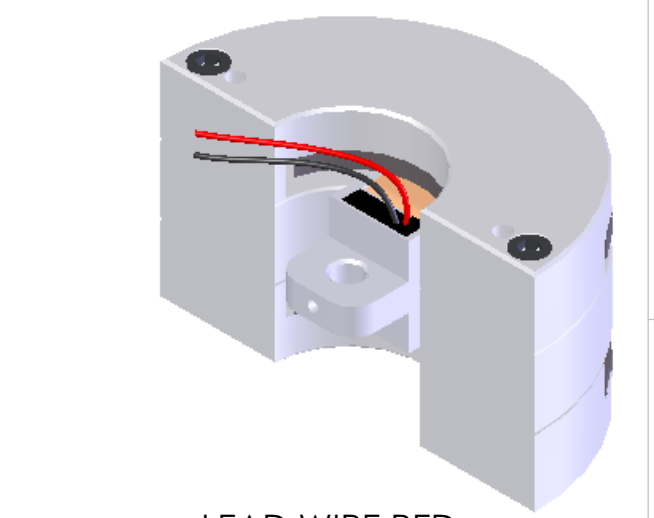
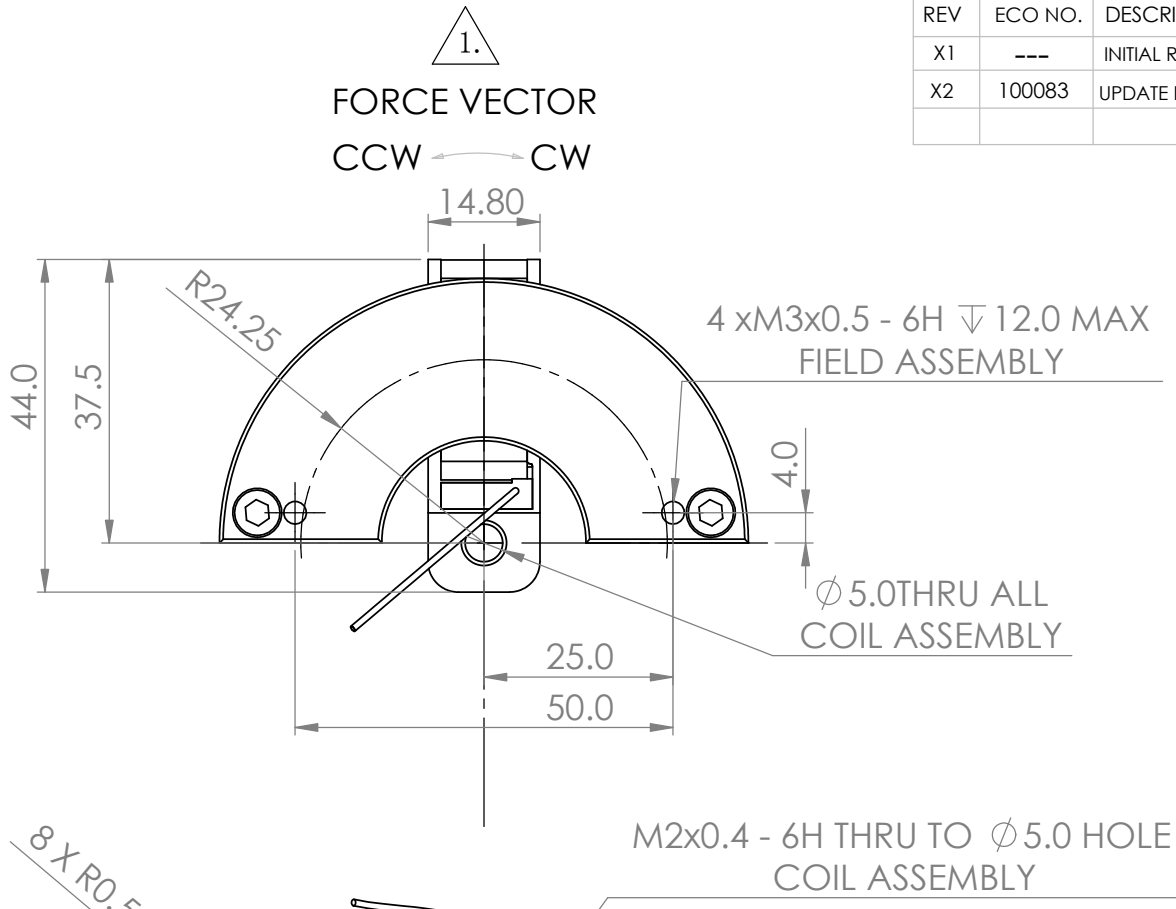


WINDING CONSTANT	TOL	SYM	VALUE	UNITS
DC RESISTANCE	± 10%	R	7.2	OHMS
VOLTAGE @ Fp	NOMINAL	Vp	11.1	VOLTS
CURRENT @ Fp	NOMINAL	Ip	1.5	AMPS
TORQUE SENSITIVITY	± 10%	Kt	0.11	N-m / A
BACK EMF CONSTANT	NOMINAL	Kb	0.11	V/Rad/Sec
INDUCTANCE *****	± 30%	L	1.4	mH

ACTUATOR PARAMETER	SYM	VALUE	UNITS
PEAK TORQUE *	Tp	0.17	N-m
CONTINUOUS STALL TORQUE **	Tcs	0.10	N-m
CONTINUOUS TORQUE WITH HEAT SINK	Tcs	0.16	N-m
ACTUATOR CONSTANT	Ka	0.04	N-m/Vw
ELECT TIME CONSTANT	Te	0.19	milli-sec
POWER I ² R@Fp	Pp	17.1	W
TOTAL STROKE(ANGULAR)	S	90	degree
CLEARANCE ON SIDE OF COIL	CL	0.5	mm
THERMAL RESISTANCE ***	θth	17.8	C / W
THERMAL RESISTANCE WITH HEAT SINK****	θth	7.8	C / W
MAX WINDING TEMP	Tmax	150	C
WEIGHT OF COIL ASSEMBLY	WTc	18	g
INERTIA OF COIL ASSEMBLY	Ic	90.8	g-cm ²
WEIGHT OF FIELD ASSEMBLY	WTF	432	g
WEIGHT OF ACTUATOR	WTa	450	g

* 10 sec @ 25C ambient, 150C coil temp.
 ** 25C ambient, 150C coil temp.
 *** In free air.
 **** Measured with 250×250×10mm heat sink.
 ***** Measured with BK PRECISION 875B.

REV	ECO NO.	DESCRIPTION	DRN	APP'D	Q.A	DATE
X1	---	INITIAL RELEASE	BWZ	WYG	LBQ	07-04-25
X2	100083	UPDATE DATA SHEET TO REFLECT TEST RESULT	BWZ	WYG	LBQ	07-10-10



UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN MM
 TOLERANCES:
 ANGULAR: MACH ±0° 30'
 ONE PLACE DECIMAL ±0.25
 TWO PLACE DECIMAL ±0.1

INTERPRET GEOMETRIC TOLERANCING PER:
 ANSI Y14.5M-1982.

DO NOT SCALE DRAWING

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NAME	DATE
DRAWN: BWZ	07-04-25
CHECKED:	
ENG APPR.: WYG	07-04-25
MFG APPR.:	
Q.A.: LBQ	07-04-25

usas motion Suzhou, China

TITLE:
ROTARY ACTUATOR

SIZE	DWG. NO.	REV
B	VRS0017-090-00A	X2

SCALE: 1: 1 SHEET 1 OF 1

2.INSULATION RESISANCE:100 MEGOHMS MINIMUM AT 500 VDC.
 1.A POSITIVE(+)VOLTAGE APPLIED TO THE RED LEAD WILL PRODUCE A FORCE ON THE COIL ASSEMBLY IN CLOCKWISE(CW) DIRECTION.
 NOTES:UNLESS OTHERWISE SPECIFIED