

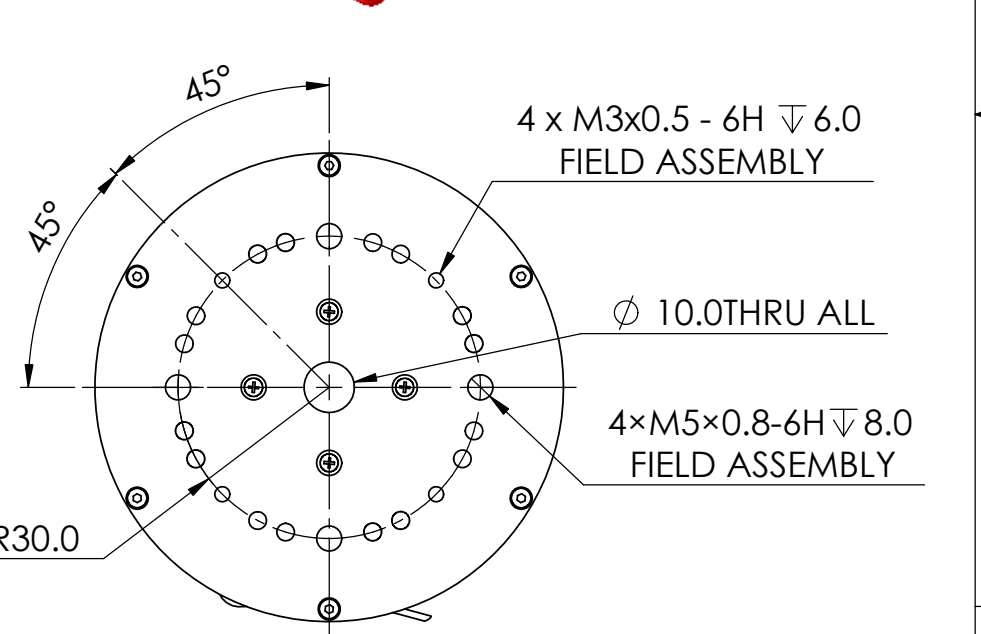
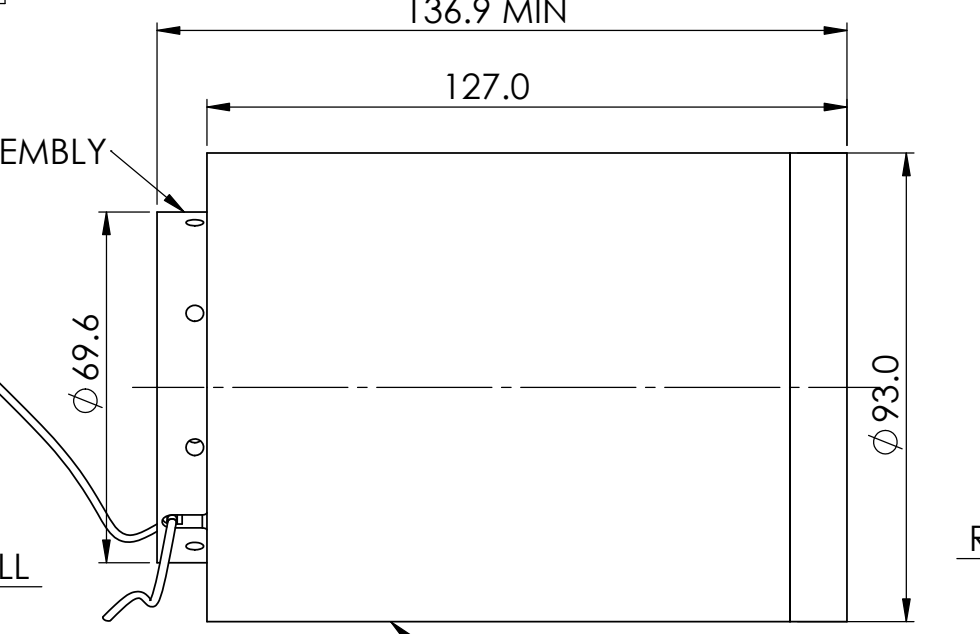
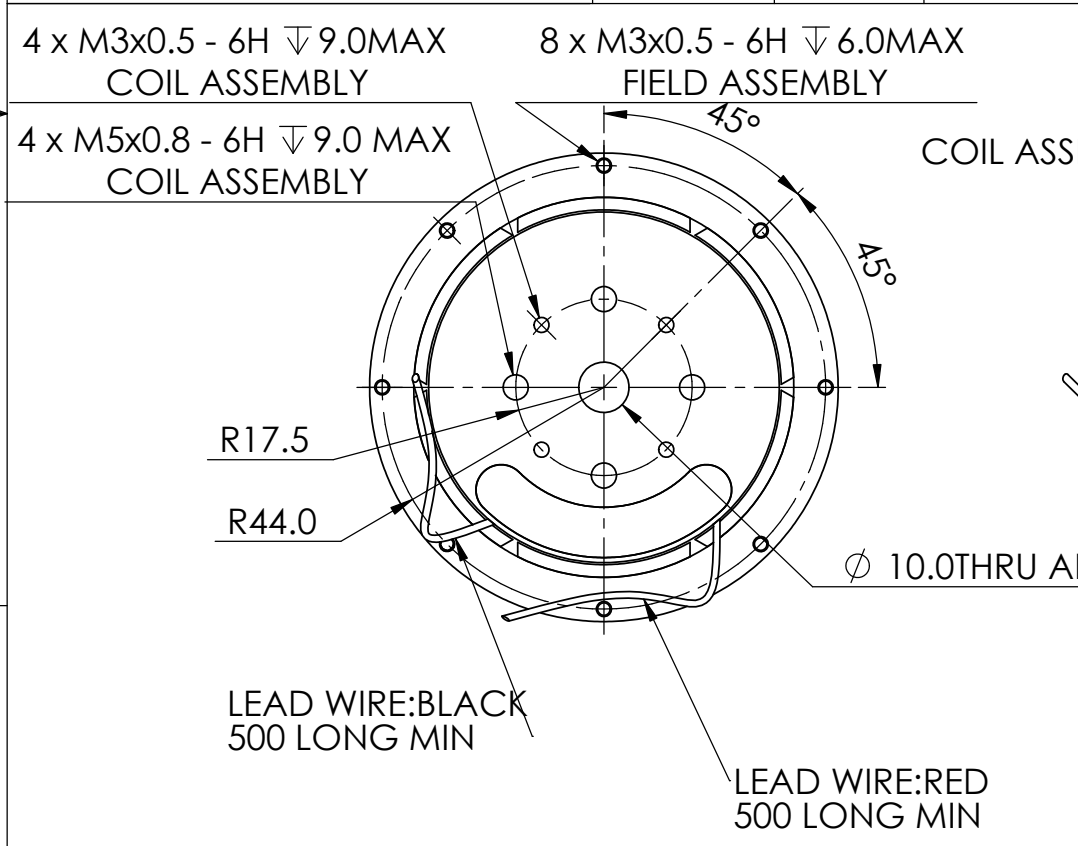
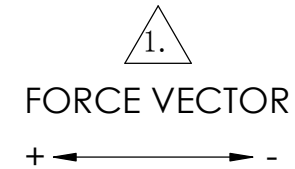
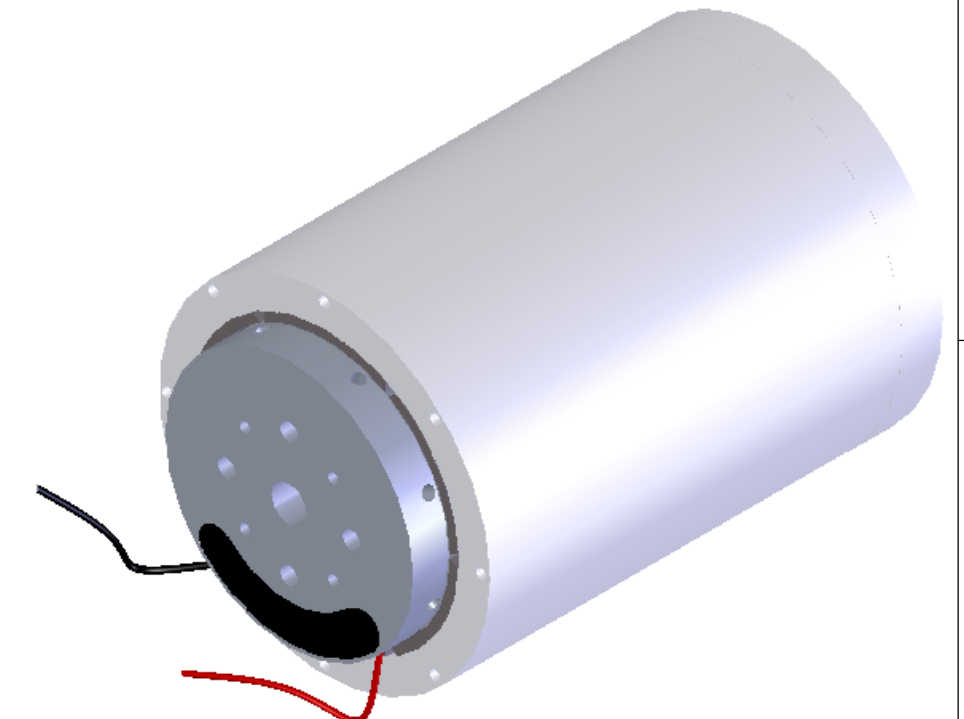
WINDING CONSTANT	TOL	SYM	VALUE	UNITS
DC RESISTANCE	± 10%	R	9.5	OHMS
VOLTAGE @ Fp	NOMINAL	Vp	114	VOLTS
CURRENT @ Fp	NOMINAL	Ip	12	AMPS
FORCE SENSITIVITY	± 7.5%	Kf	24.5	N / A
BACK EMF CONSTANT	NOMINAL	Kb	24.5	V/M/Sec
INDUCTANCE*****	± 30%	L	20.0	mH

ACTUATOR PARAMETER	SYM	VALUE	UNITS
PEAK FORCE *	Fp	294	N
CONTINUOUS FORCE **	Fc	56.8	N
CONTINUOUS FORCE WITH HEAT SINK	Fc	59.9	N
ACTUATOR CONSTANT	Ka	7.95	N/√w
ELECT TIME CONSTANT	Te	2.11	milli-sec
POWER I2R@Fp	Pp	1368	W
TOTAL STROKE	S	49.8	mm
CLEARANCE ON SIDE OF COIL	CL	0.4	mm
THERMAL RESISTANCE ***	θth	2.45	C / W
THERMAL RESISTANCE WITH HEAT SINK****	θth	2.2	C / W
MAX WINDING TEMP	Tmax	150	C
WEIGHT OF COIL ASSEMBLY	WTc	700	g
WEIGHT OF FIELD ASSEMBLY	WTf	5140	g
WEIGHT OF ACTUATOR	WTa	5840	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	07/04/27
X2	100064	UPDATE DATA SHEET	BWZ	WYG	LBQ	07/07/05



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

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UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN MM		DRAWN	BWZ 07-04-27
TOLERANCES:		CHECKED	
ANGULAR: MACH ±0° 30'		ENG APPR.	WYG 07-04-27
ONE PLACE DECIMAL ±0.25		MFG APPR.	
TWO PLACE DECIMAL ±0.1		Q.A.	LBQ 07-04-27
INTERPRET GEOMETRIC TOLERANCING PER: ANSI Y14.5M-1982.		COMMENTS:	

**usas motion** Suzhou, China

**TITLE:**  
**LINEAR ACTUATOR**

SIZE	DWG. NO.	REV
<b>B</b>	VLR0294-0498-00A	X2

SCALE: 1:1.5 SHEET 1 OF 1

DO NOT SCALE DRAWING