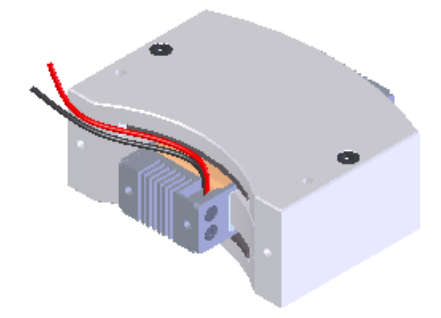
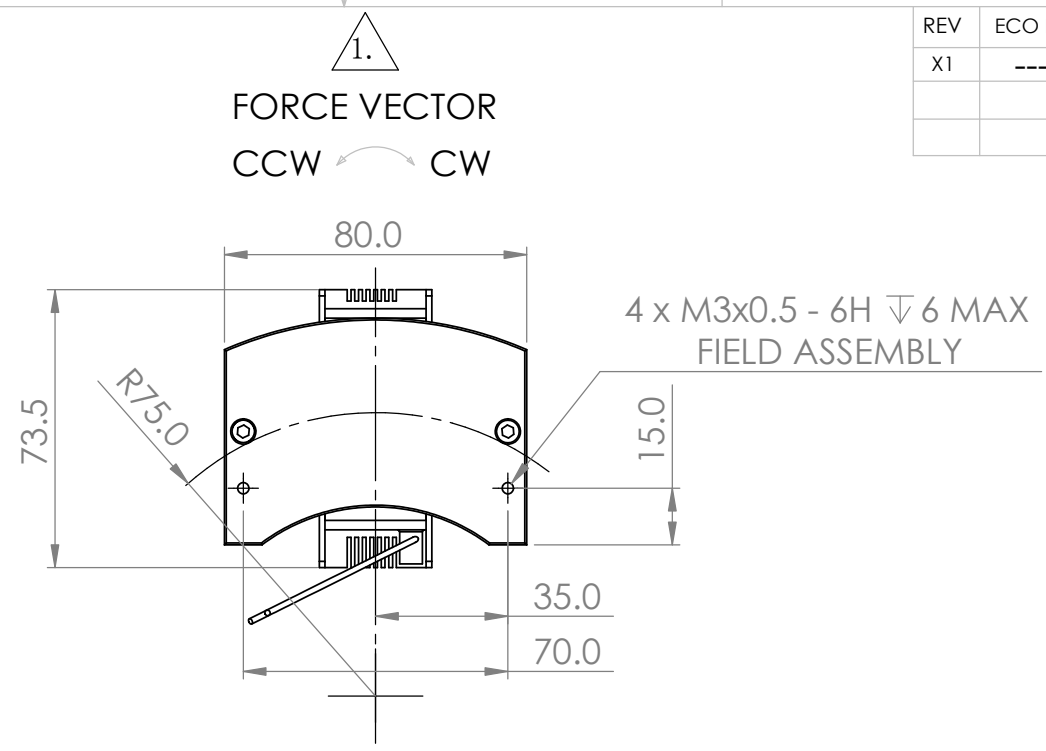


WINDING CONSTANT	TOL	SYM	VALUE	UNITS
DC RESISTANCE	± 10%	R	4.7	OHMS
VOLTAGE @ Fp	NOMINAL	Vp	8.4	VOLTS
CURRENT @ Fp	NOMINAL	Ip	1.8	AMPS
TORQUE SENSITIVITY	± 10%	Kt	0.67	N-m / A
BACK EMF CONSTANT	NOMINAL	Kb	0.67	V/Rad/Sec
INDUCTANCE *****	± 30%	L	1.6	mH

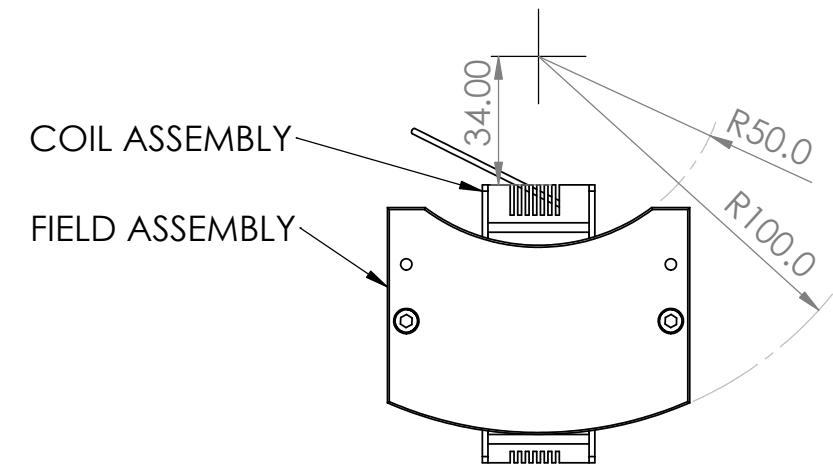
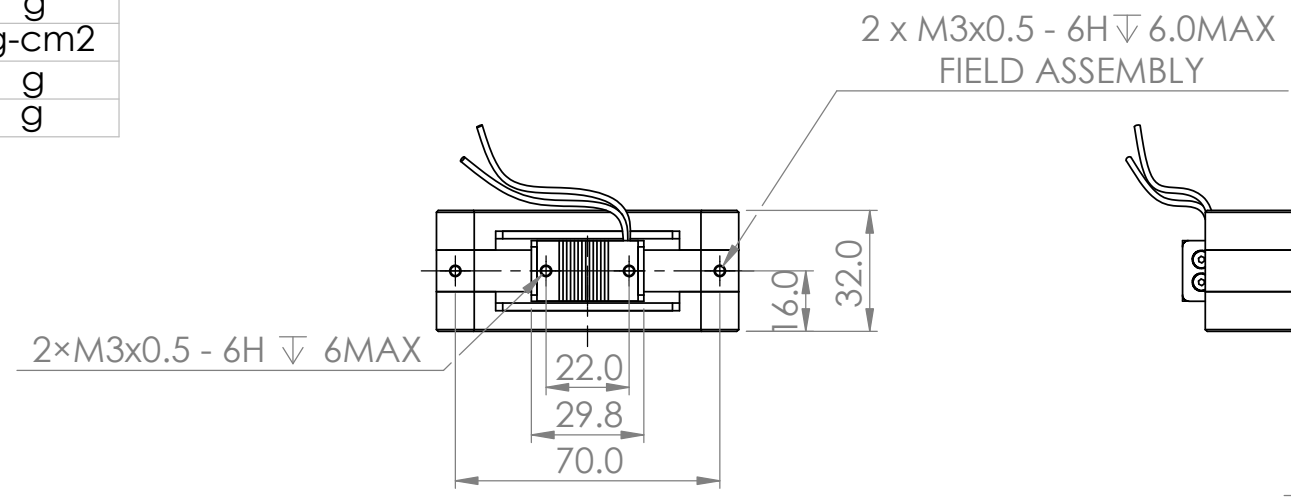
ACTUATOR PARAMETER	SYM	VALUE	UNITS
PEAK TORQUE *	Tp	1.2	N-m
CONTINUOUS STALL TORQUE **	Tcs	1.2	N-m
CONTINUOUS TORQUE WITH HEAT SINK	Tcs	1.2	N-m
ACTUATOR CONSTANT	Ka	0.31	N-m/√w
ELECT TIME CONSTANT	Te	0.34	milli-sec
POWER I2R@Fp	Pp	15	W
TOTAL STROKE(ANGULAR)	S	20	degree
CLEARANCE ON SIDE OF COIL	CL	0.5	mm
THERMAL RESISTANCE ***	θth	7.5	C / W
THERMAL RESISTANCE WITH HEAT SINK****	θth	3.9	C / W
MAX WINDING TEMP	Tmax	150	C
WEIGHT OF COIL ASSEMBLY	WTc	65	g
INERTIA OF COIL ASSEMBLY	Ic	3360	g-cm2
WEIGHT OF FIELD ASSEMBLY	Wtf	875	g
WEIGHT OF ACTUATOR	WTa	940	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	07-12-07



LEAD WIRE:RED
500 LONG MIN
LEAD WIRE:BLACK
500 LONG MIN



UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN MM		DRAWN	BWZ 07-08-25
TOLERANCES:		CHECKED	
ANGULAR: MACH ±0° 30'		ENG APPR.	WYG 07-08-25
ONE PLACE DECIMAL ±0.25		MFG APPR.	
TWO PLACE DECIMAL ±0.1		Q.A.	LBQ 07-08-25
INTERPRET GEOMETRIC TOLERANCING PER:		COMMENTS:	
ANSI Y14.5M-1982.			
DO NOT SCALE DRAWING			

usas motion Suzhou, China

TITLE:
ROTARY ACTUATOR

SIZE **B** DWG. NO. VRS0120-020-00A REV X1

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

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