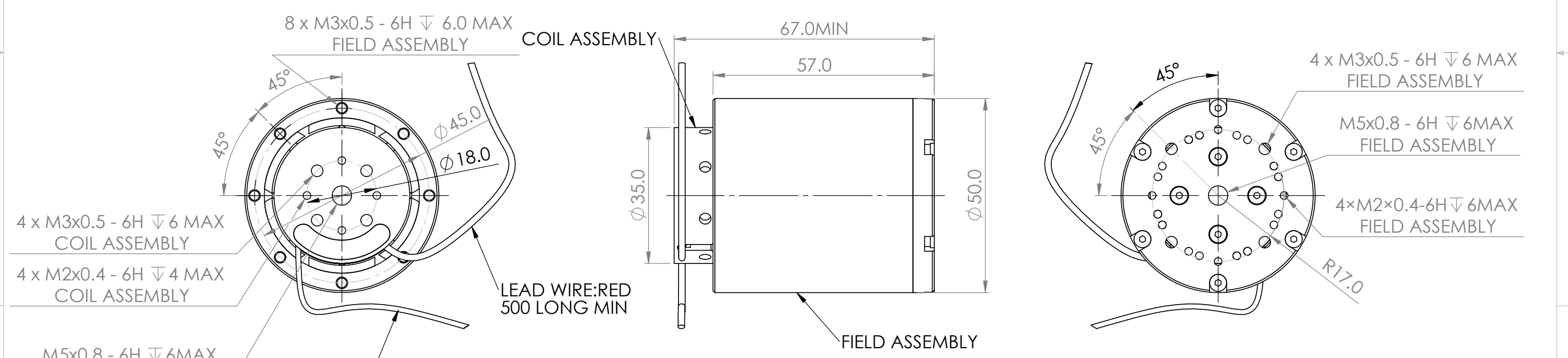
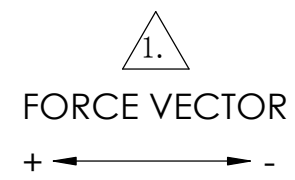


| WINDING CONSTANT | TOL | SYM | VALUE | UNITS |
|-------------------|---------|-----|-------|---------|
| DC RESISTANCE | ± 10% | R | 1.7 | OHMS |
| VOLTAGE @ Fp | NOMINAL | Vp | 11.9 | VOLTS |
| CURRENT @ Fp | NOMINAL | Ip | 7.0 | AMPS |
| FORCE SENSITIVITY | ± 10% | Kf | 5.0 | N / A |
| BACK EMF CONSTANT | NOMINAL | Kb | 5.0 | V/M/Sec |
| INDUCTANCE***** | ± 30% | L | 1.0 | mH |

| ACTUATOR PARAMETER | SYM | VALUE | UNITS |
|---------------------------------------|------|-------|-----------|
| PEAK FORCE * | Fp | 35 | N |
| CONTINUOUS FORCE ** | Fc | 15.6 | N |
| CONTINUOUS FORCE WITH HEAT SINK | Fc | 21.4 | N |
| ACTUATOR CONSTANT | Ka | 3.8 | N/√w |
| ELECT TIME CONSTANT | Te | 0.59 | milli-sec |
| POWER I ² R@Fp | Pp | 83.3 | W |
| TOTAL STROKE | S | 10.5 | mm |
| CLEARANCE ON SIDE OF COIL | CL | 0.5 | mm |
| THERMAL RESISTANCE *** | θth | 7.5 | C / W |
| THERMAL RESISTANCE WITH HEAT SINK**** | θth | 4.0 | C / W |
| MAX WINDING TEMP | Tmax | 150 | C |
| WEIGHT OF COIL ASSEMBLY | WTc | 95 | g |
| WEIGHT OF FIELD ASSEMBLY | WTf | 685 | g |
| WEIGHT OF ACTUATOR | WTa | 780 | 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 TONGHUI TH2821A.

| REV | ECO NO. | DESCRIPTION | DRN | APP'D | Q.A. | DATE |
|-----|---------|-----------------|-----|-------|------|----------|
| X1 | --- | INITIAL RELEASE | BWZ | WYG | LBQ | 07/12/12 |



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 POSITIVE (+) DIRECTION.

NOTES:UNLESS OTHERWISE SPECIFIED

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

| | NAME | DATE |
|-----------|------|----------|
| DRAWN | BWZ | 07-04-26 |
| CHECKED | | |
| ENG APPR. | WYG | 07-04-26 |
| MFG APPR. | | |
| Q.A. | LBQ | 07-04-26 |

usas motion Suzhou, China

TITLE:
LINEAR ACTUATOR

| SIZE | DWG. NO. | REV |
|----------|------------------|-----|
| B | VLR0035-0105-00A | X1 |

SCALE: 1: 1 SHEET 1 OF 1