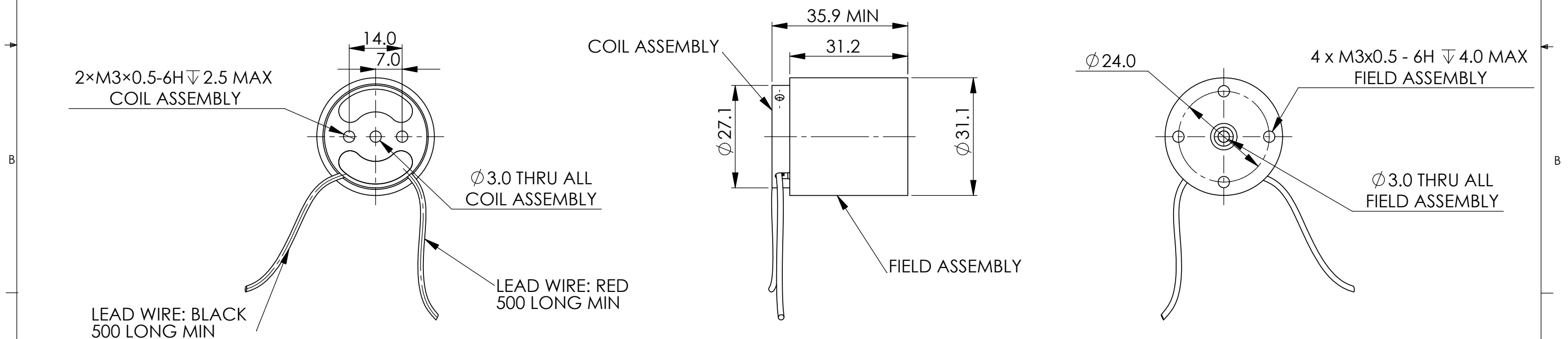
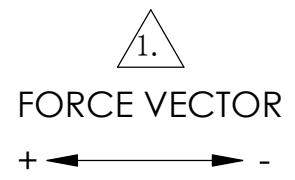
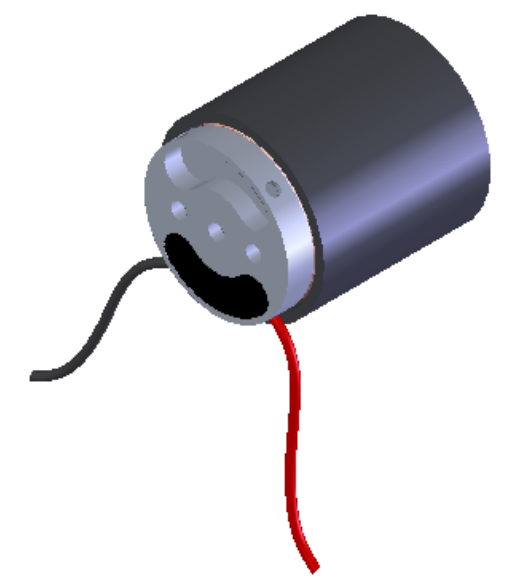


| REV | ECO NO. | DESCRIPTION | DRN | APP'D | Q.A. | DATE |
|-----|---------|-----------------|-----|-------|------|----------|
| X1 | --- | INITIAL RELEASE | WYG | FCL | MYM | 07/04/20 |
| | | | | | | |
| | | | | | | |

| WINDING CONSTANT | TOL | SYM | VALUE | UNITS |
|-------------------|---------|-----|-------|---------|
| DC RESISTANCE | ± 10% | R | 2.9 | OHMS |
| VOLTAGE @ Fp | NOMINAL | Vp | 16.8 | VOLTS |
| CURRENT @ Fp | NOMINAL | Ip | 5.8 | AMPS |
| FORCE SENSITIVITY | + 7.5% | Kf | 7.6 | N / A |
| BACK EMF CONSTANT | NOMINAL | Kb | 7.6 | V/M/Sec |
| INDUCTANCE***** | ± 30% | L | 0.74 | mH |

* 10 sec @ 25C ambient, 150C coil temp.
 ** 25C ambient, 150C coil temp.
 *** In free air.
 **** Measured with 250x250x10mm heat sink.
 ***** Measured with BK PRECISION 875B.

| ACTUATOR PARAMETER | SYM | VALUE | UNITS |
|---------------------------------------|------|-------|-----------|
| PEAK FORCE * | Fp | 44 | N |
| CONTINUOUS FORCE ** | Fc | 13.7 | N |
| CONTINUOUS FORCE WITH HEAT SINK | Fc | 28.3 | N |
| ACTUATOR CONSTANT | Ka | 4.5 | N/√w |
| ELECT TIME CONSTANT | Te | 0.26 | milli-sec |
| POWER I2R@Fp | Pp | 97.2 | W |
| TOTAL STROKE | S | 7.5 | mm |
| CLEARANCE ON SIDE OF COIL | CL | 0.4 | mm |
| THERMAL RESISTANCE *** | θth | 13.3 | C / W |
| THERMAL RESISTANCE WITE HEAT SINK**** | θth | 3.1 | C / W |
| MAX WINDING TEMP | Tmax | 150 | C |
| WEIGHT OF COIL ASSEMBLY | WTc | 38.6 | g |
| WEIGHT OF FIELD ASSEMBLY | WTf | 113.7 | g |
| WEIGHT OF ACTUATOR | WTa | 152.3 | g |



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

| | | | | | | |
|--|-----------|--------------|--------------|------------------------------------|------------------|-----|
| UNLESS OTHERWISE SPECIFIED: | | NAME | DATE | Suzhou, China | | |
| DIMENSIONS ARE IN MM TOLERANCES: ANGULAR: MACH±0° 30' ONE PLACE DECIMAL ±0.25 TWO PLACE DECIMAL ±0.1 | | DRAWN | WYG 07-04-20 | | | |
| PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF USAS MOTION - SUZHOU, CHINA. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF USAS MOTION - SUZHOU, CHINA IS PROHIBITED. | | CHECKED | | TITLE: <h1>LINEAR ACTUATOR</h1> | | |
| | | ENG APPR. | FCL 07-04-20 | | | |
| INTERPRET GEOMETRIC TOLERANCING PER: ANSI Y14.5M-1982 | Q.A. | MYM 07-04-20 | SIZE | | DWG. NO. | REV |
| | COMMENTS: | | B | | VLR0044-0075-00A | X1 |
| DO NOT SCALE DRAWING | | | SCALE: 1: 1 | | SHEET 1 OF 1 | |