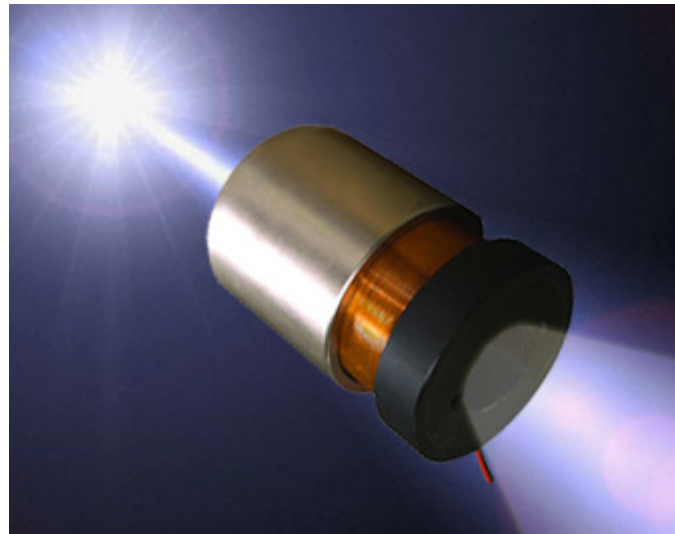


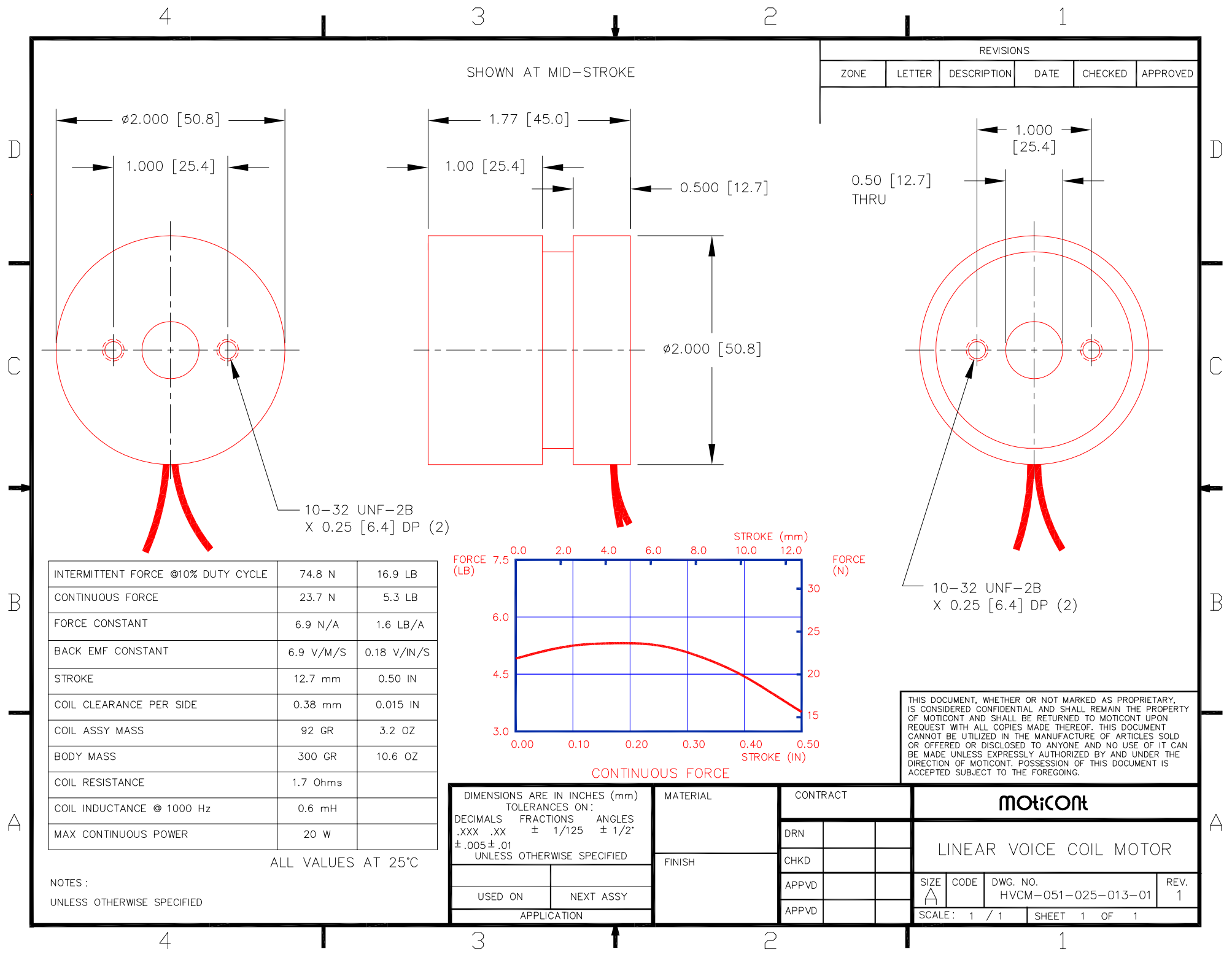
Hollow Core Linear Voice Coil Motors



motiCONT

Moticont
6901 Woodley Avenue
Van Nuys, California 91406 U.S.A.
www.moticont.com

Toll Free (888) 785-1804
+1 (818) 785-1800
FAX +1 (818) 785-5713
moticont@moticont.com

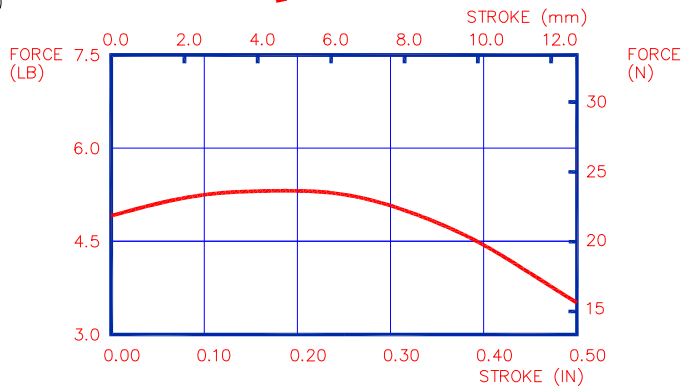


| REVISIONS | | | | | |
|-----------|--------|-------------|------|---------|----------|
| ZONE | LETTER | DESCRIPTION | DATE | CHECKED | APPROVED |
| | | | | | |

| | | |
|------------------------------------|-----------|-------------|
| INTERMITTENT FORCE @10% DUTY CYCLE | 74.8 N | 16.9 LB |
| CONTINUOUS FORCE | 23.7 N | 5.3 LB |
| FORCE CONSTANT | 6.9 N/A | 1.6 LB/A |
| BACK EMF CONSTANT | 6.9 V/M/S | 0.18 V/IN/S |
| STROKE | 12.7 mm | 0.50 IN |
| COIL CLEARANCE PER SIDE | 0.38 mm | 0.015 IN |
| COIL ASSY MASS | 92 GR | 3.2 OZ |
| BODY MASS | 300 GR | 10.6 OZ |
| COIL RESISTANCE | 1.7 Ohms | |
| COIL INDUCTANCE @ 1000 Hz | 0.6 mH | |
| MAX CONTINUOUS POWER | 20 W | |

ALL VALUES AT 25°C

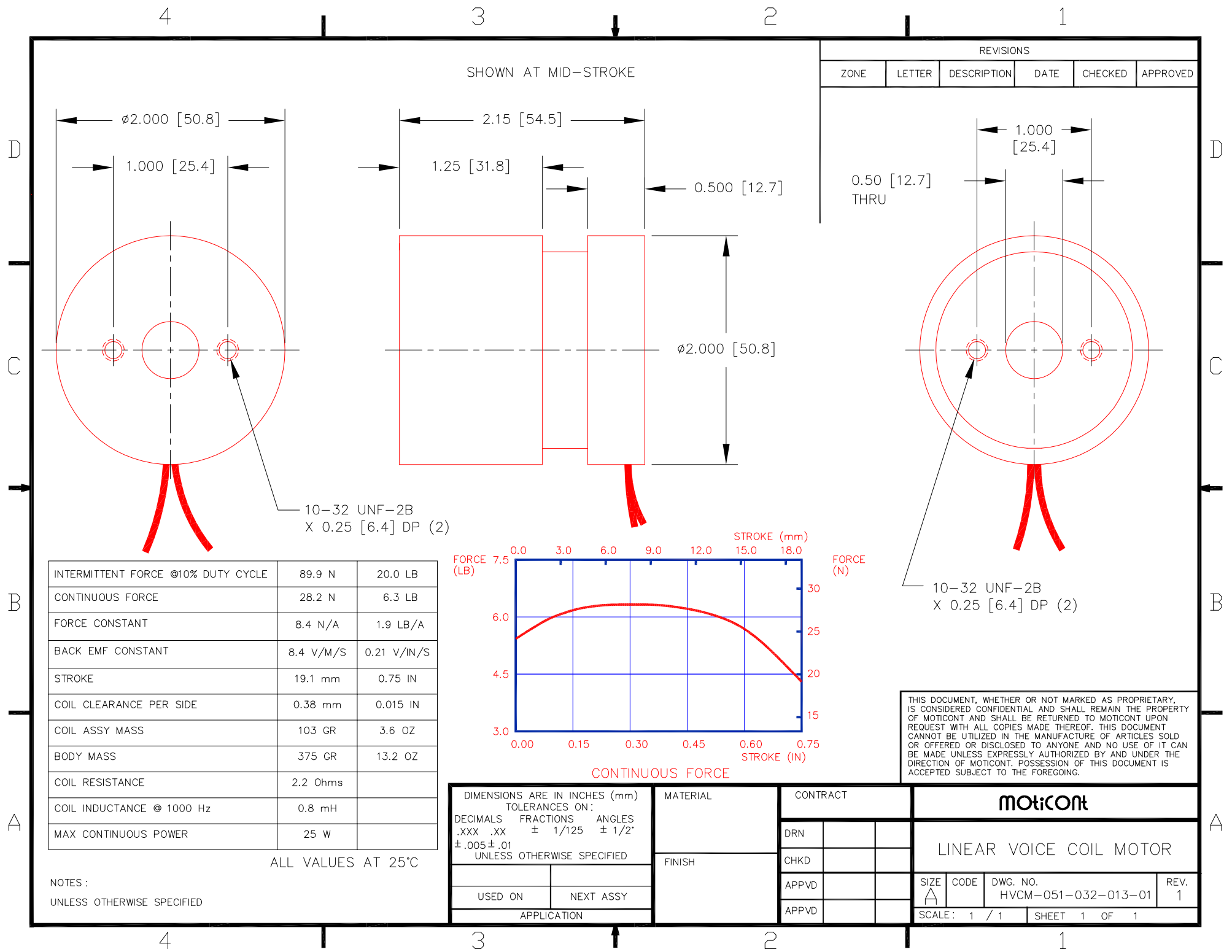
NOTES :
UNLESS OTHERWISE SPECIFIED



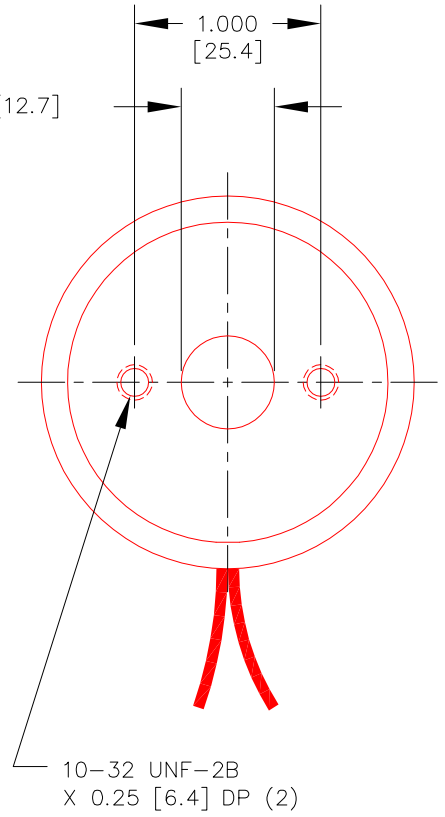
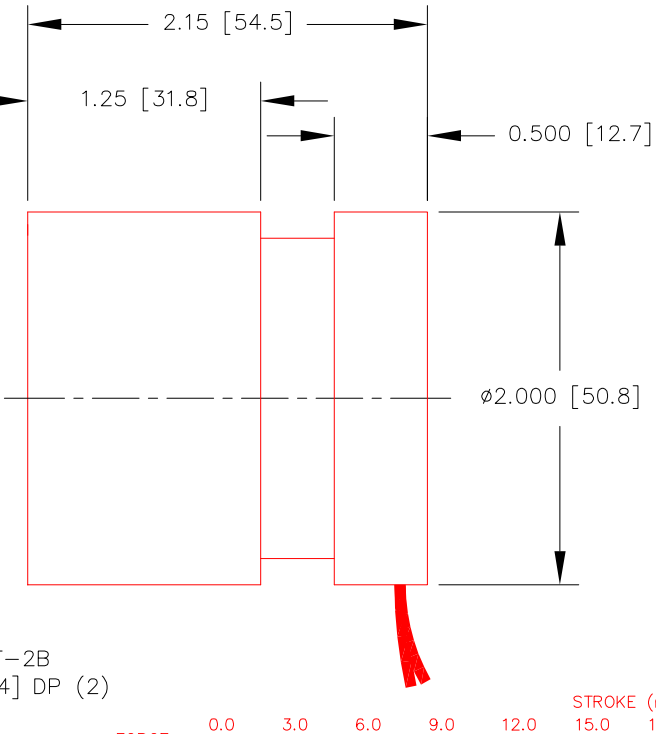
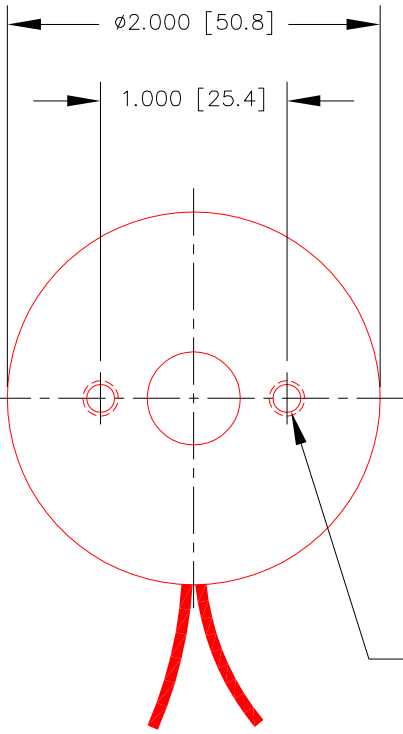
CONTINUOUS FORCE

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|---|--|----------|----------|--|--|------|---------------------|------|
| DIMENSIONS ARE IN INCHES (mm) TOLERANCES ON: DECIMALS FRACTIONS ANGLES .XXX .XX ± 1/125 ± 1/2' ± .005 ± .01 UNLESS OTHERWISE SPECIFIED | | MATERIAL | CONTRACT | | motiCont LINEAR VOICE COIL MOTOR | | | |
| FINISH | | DRN | | | | | | |
| USED ON | | CHKD | | | SIZE | CODE | DWG. NO. | REV. |
| NEXT ASSY | | APPVD | | | A | | HVCM-051-025-013-01 | 1 |
| APPLICATION | | APPVD | | | SCALE: 1 / 1 | | SHEET 1 OF 1 | |



| REVISIONS | | | | | |
|-----------|--------|-------------|------|---------|----------|
| ZONE | LETTER | DESCRIPTION | DATE | CHECKED | APPROVED |
| | | | | | |



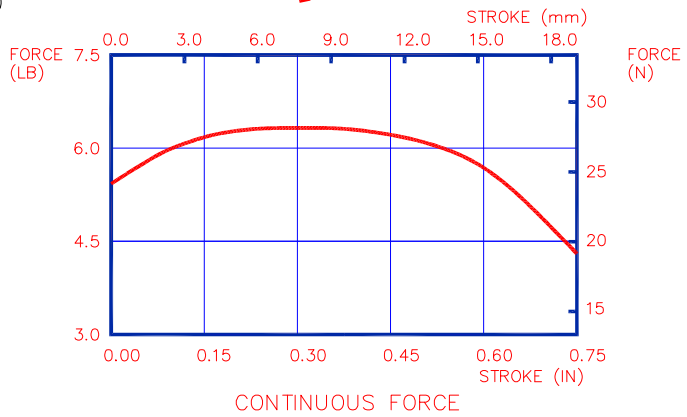
10-32 UNF-2B
X 0.25 [6.4] DP (2)

10-32 UNF-2B
X 0.25 [6.4] DP (2)

| | | |
|------------------------------------|-----------|-------------|
| INTERMITTENT FORCE @10% DUTY CYCLE | 89.9 N | 20.0 LB |
| CONTINUOUS FORCE | 28.2 N | 6.3 LB |
| FORCE CONSTANT | 8.4 N/A | 1.9 LB/A |
| BACK EMF CONSTANT | 8.4 V/M/S | 0.21 V/IN/S |
| STROKE | 19.1 mm | 0.75 IN |
| COIL CLEARANCE PER SIDE | 0.38 mm | 0.015 IN |
| COIL ASSY MASS | 103 GR | 3.6 OZ |
| BODY MASS | 375 GR | 13.2 OZ |
| COIL RESISTANCE | 2.2 Ohms | |
| COIL INDUCTANCE @ 1000 Hz | 0.8 mH | |
| MAX CONTINUOUS POWER | 25 W | |

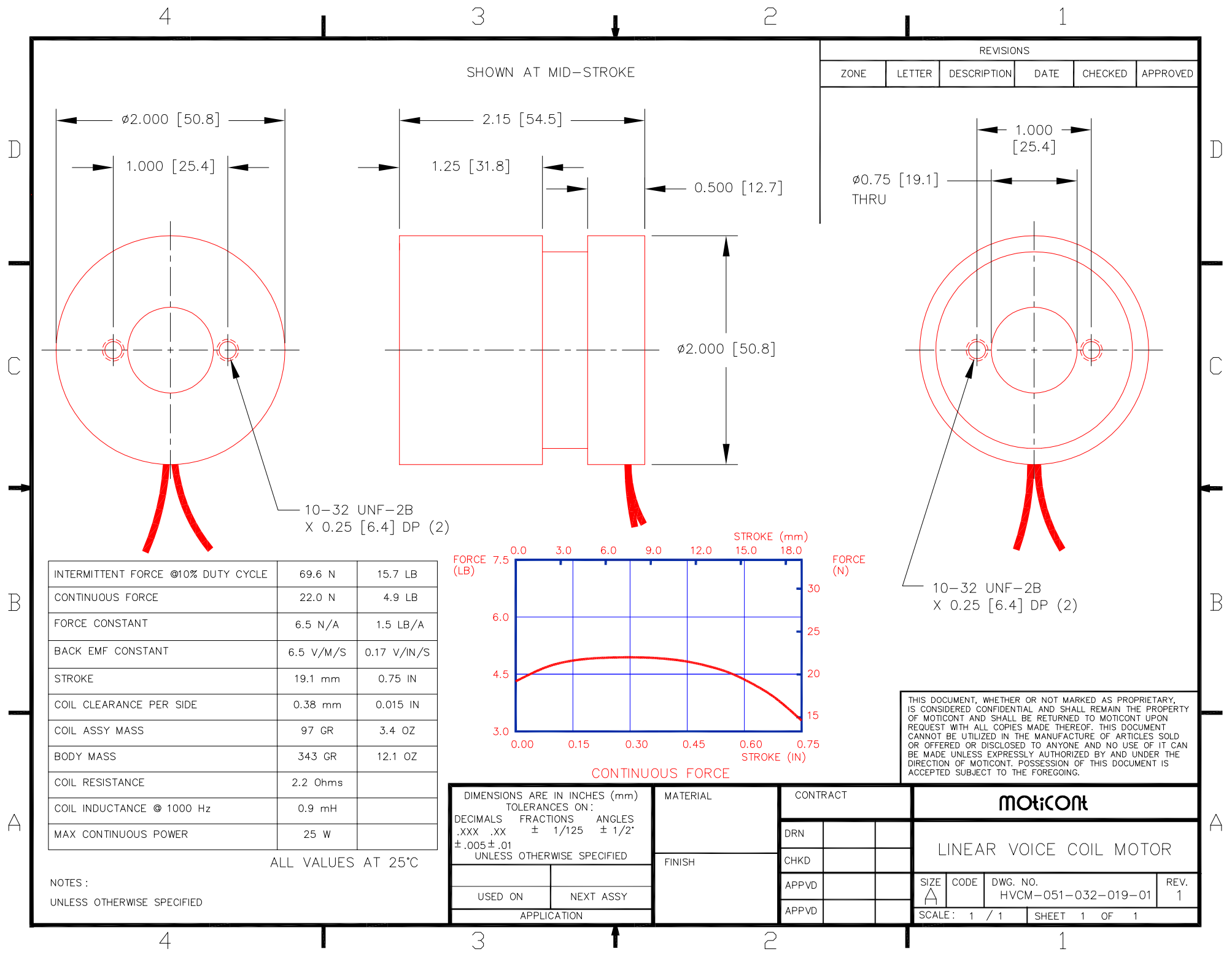
ALL VALUES AT 25°C

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UNLESS OTHERWISE SPECIFIED



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| | | | | | | | | |
|---|--|----------|----------|--|--|------|---------------------|------|
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| USED ON | | FINISH | DRN | | | | | |
| NEXT ASSY | | | CHKD | | SIZE | CODE | DWG. NO. | REV. |
| APPLICATION | | | APPVD | | A | | HVCM-051-032-013-01 | 1 |
| | | | APPVD | | SCALE: 1 / 1 | | SHEET 1 OF 1 | |



| REVISIONS | | | | | |
|-----------|--------|-------------|------|---------|----------|
| ZONE | LETTER | DESCRIPTION | DATE | CHECKED | APPROVED |
| | | | | | |

| | | |
|------------------------------------|-----------|-------------|
| INTERMITTENT FORCE @10% DUTY CYCLE | 69.6 N | 15.7 LB |
| CONTINUOUS FORCE | 22.0 N | 4.9 LB |
| FORCE CONSTANT | 6.5 N/A | 1.5 LB/A |
| BACK EMF CONSTANT | 6.5 V/M/S | 0.17 V/IN/S |
| STROKE | 19.1 mm | 0.75 IN |
| COIL CLEARANCE PER SIDE | 0.38 mm | 0.015 IN |
| COIL ASSY MASS | 97 GR | 3.4 OZ |
| BODY MASS | 343 GR | 12.1 OZ |
| COIL RESISTANCE | 2.2 Ohms | |
| COIL INDUCTANCE @ 1000 Hz | 0.9 mH | |
| MAX CONTINUOUS POWER | 25 W | |

ALL VALUES AT 25°C

NOTES :
UNLESS OTHERWISE SPECIFIED

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|---|-----------|
| DIMENSIONS ARE IN INCHES (mm) TOLERANCES ON: DECIMALS FRACTIONS ANGLES .XXX .XX ± 1/125 ± 1/2' ± .005 ± .01 UNLESS OTHERWISE SPECIFIED | |
| USED ON | NEXT ASSY |
| APPLICATION | |

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|----------|----------|--|
| MATERIAL | CONTRACT | |
| FINISH | DRN | |
| | CHKD | |
| | APPVD | |
| | APPVD | |

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| motiCont | | | |
| LINEAR VOICE COIL MOTOR | | | |
| SIZE | CODE | DWG. NO. | REV. |
| A | | HVCM-051-032-019-01 | 1 |
| SCALE: 1 / 1 | | SHEET 1 OF 1 | |

4

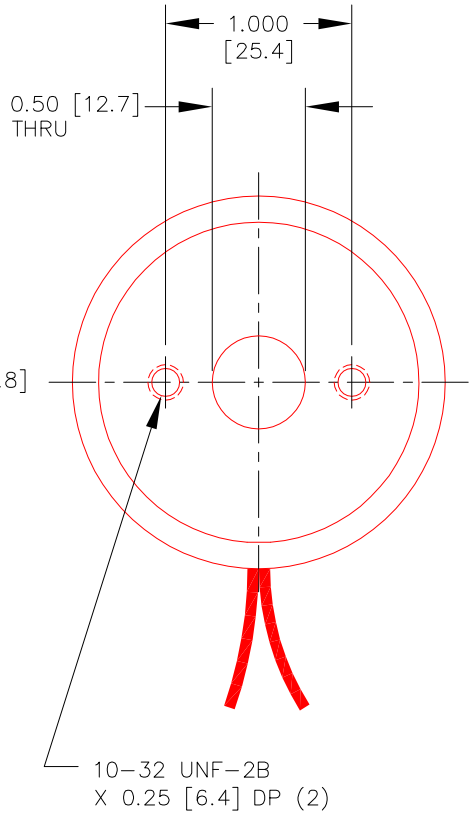
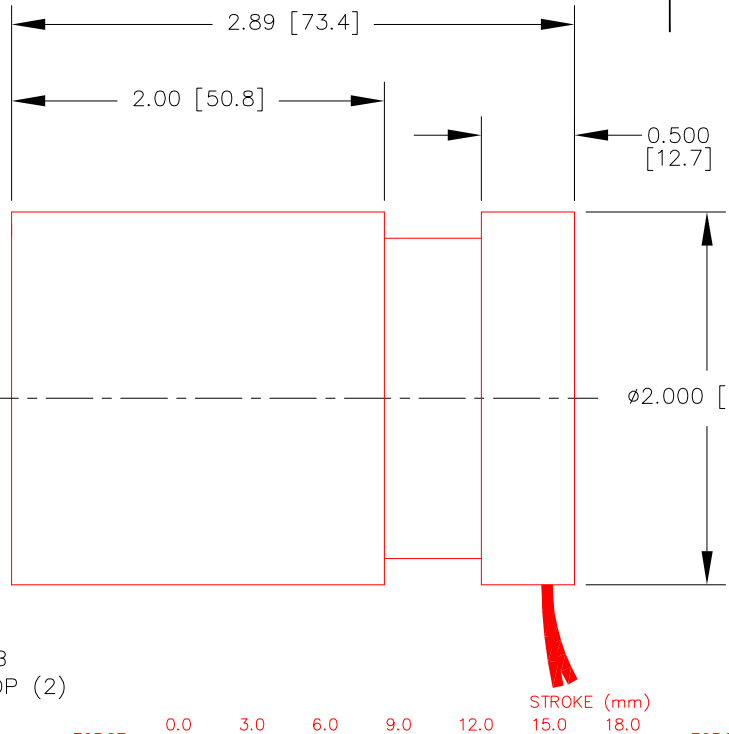
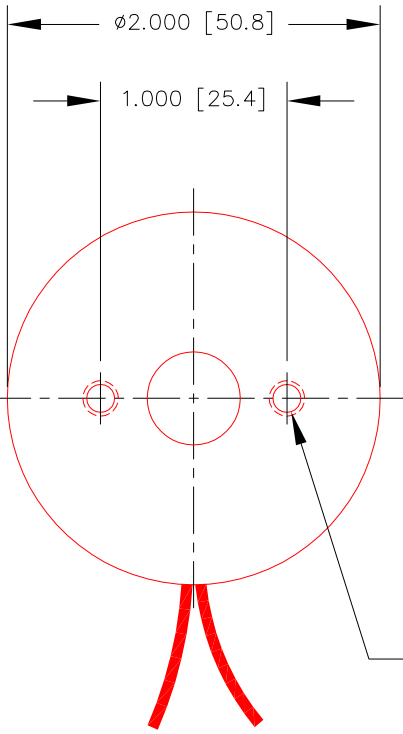
3

2

1

SHOWN AT MID-STROKE

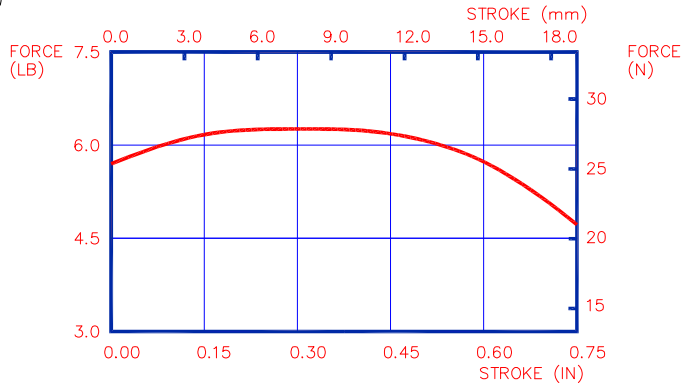
| REVISIONS | | | | | |
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| ZONE | LETTER | DESCRIPTION | DATE | CHECKED | APPROVED |
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|------------------------------------|-----------|-------------|
| INTERMITTENT FORCE @10% DUTY CYCLE | 88.6 N | 19.9 LB |
| CONTINUOUS FORCE | 28.0 N | 6.3 LB |
| FORCE CONSTANT | 8.0 N/A | 1.8 LB/A |
| BACK EMF CONSTANT | 8.0 V/M/S | 0.20 V/IN/S |
| STROKE | 19.1 mm | 0.75 IN |
| COIL CLEARANCE PER SIDE | 0.38 mm | 0.015 IN |
| COIL ASSY MASS | 120 GR | 4.23 OZ |
| BODY MASS | 630 GR | 22.2 OZ |
| COIL RESISTANCE | 2.7 Ohms | |
| COIL INDUCTANCE @ 1000 Hz | 1.2 mH | |
| MAX CONTINUOUS POWER | 33 W | |

ALL VALUES AT 25°C

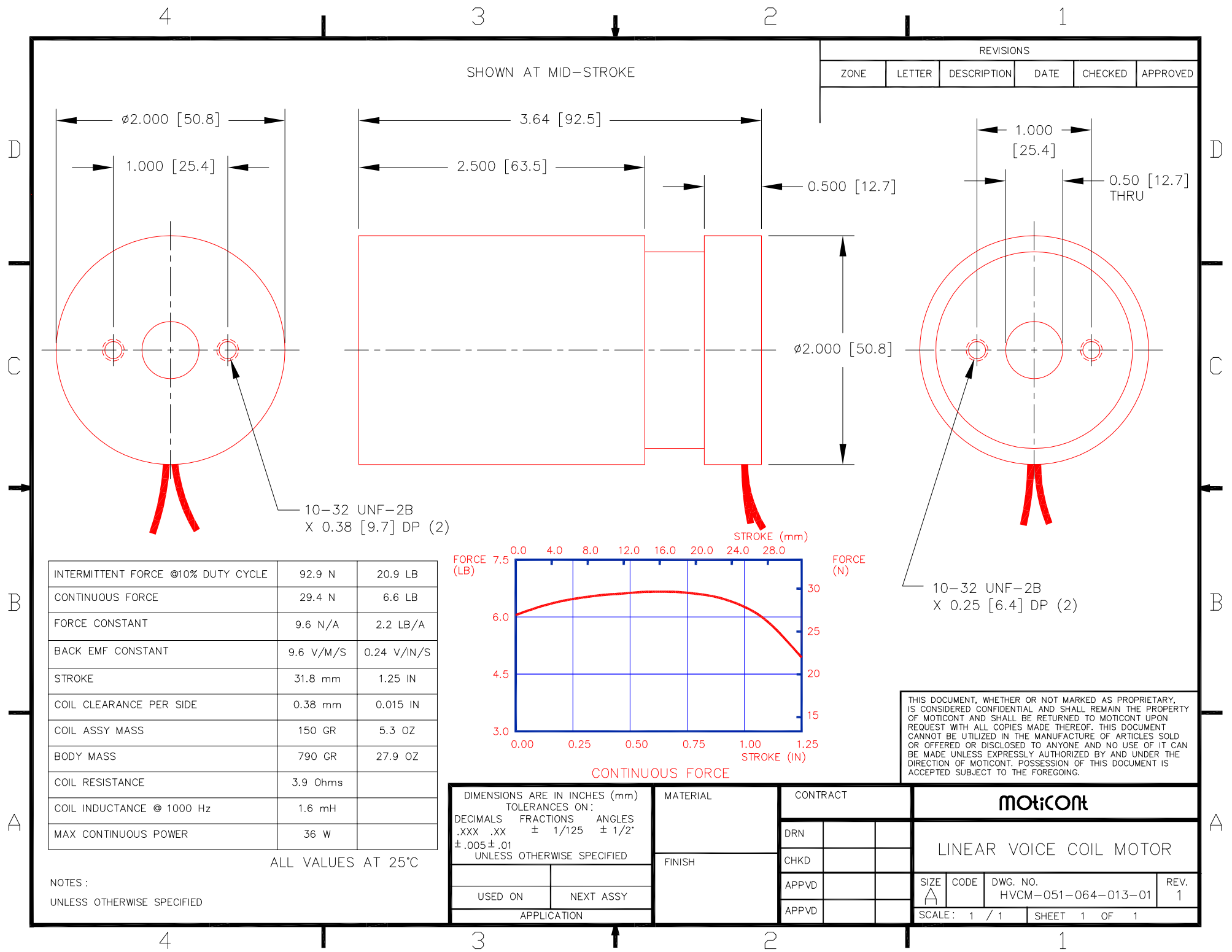
NOTES :
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CONTINUOUS FORCE

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|---|--|--------------|----------|--------------|-------------------------|------|---------------------|------|
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| FINISH | | DRN | | | | | | |
| USED ON | | CHKD | | | LINEAR VOICE COIL MOTOR | | | |
| NEXT ASSY | | APPVD | | | SIZE | CODE | DWG. NO. | REV. |
| APPLICATION | | APPVD | | | △ | | HVCM-051-051-013-01 | 1 |
| | | SCALE: 1 / 1 | | SHEET 1 OF 1 | | | | |



| | | |
|------------------------------------|-----------|-------------|
| INTERMITTENT FORCE @10% DUTY CYCLE | 92.9 N | 20.9 LB |
| CONTINUOUS FORCE | 29.4 N | 6.6 LB |
| FORCE CONSTANT | 9.6 N/A | 2.2 LB/A |
| BACK EMF CONSTANT | 9.6 V/M/S | 0.24 V/IN/S |
| STROKE | 31.8 mm | 1.25 IN |
| COIL CLEARANCE PER SIDE | 0.38 mm | 0.015 IN |
| COIL ASSY MASS | 150 GR | 5.3 OZ |
| BODY MASS | 790 GR | 27.9 OZ |
| COIL RESISTANCE | 3.9 Ohms | |
| COIL INDUCTANCE @ 1000 Hz | 1.6 mH | |
| MAX CONTINUOUS POWER | 36 W | |

ALL VALUES AT 25°C

NOTES :
UNLESS OTHERWISE SPECIFIED

| | |
|---|----------------------------|
| DIMENSIONS ARE IN INCHES (mm) TOLERANCES ON: | |
| DECIMALS | FRACTIONS ANGLES |
| .XXX .XX | $\pm 1/125 \pm 1/2'$ |
| $\pm .005 \pm .01$ | UNLESS OTHERWISE SPECIFIED |
| USED ON | NEXT ASSY |
| APPLICATION | |

| | |
|----------|----------|
| MATERIAL | CONTRACT |
| FINISH | DRN |
| | CHKD |
| | APPVD |
| | APPVD |

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| motiCont | | | |
| LINEAR VOICE COIL MOTOR | | | |
| SIZE | CODE | DWG. NO. | REV. |
| Δ | | HVCM-051-064-013-01 | 1 |
| SCALE: 1 / 1 | | SHEET 1 OF 1 | |

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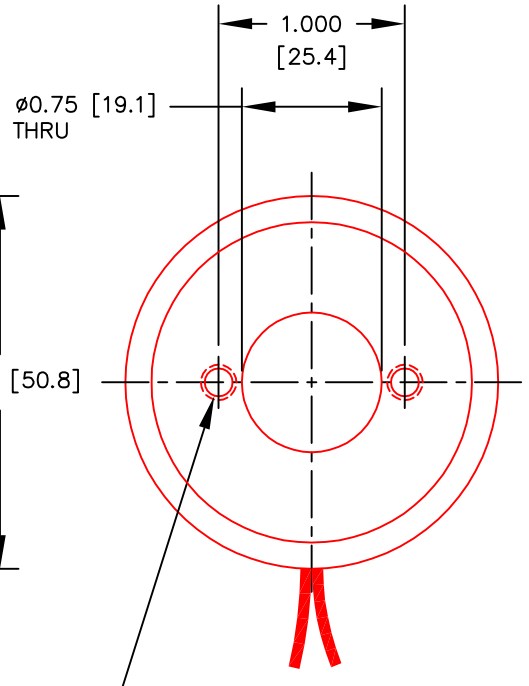
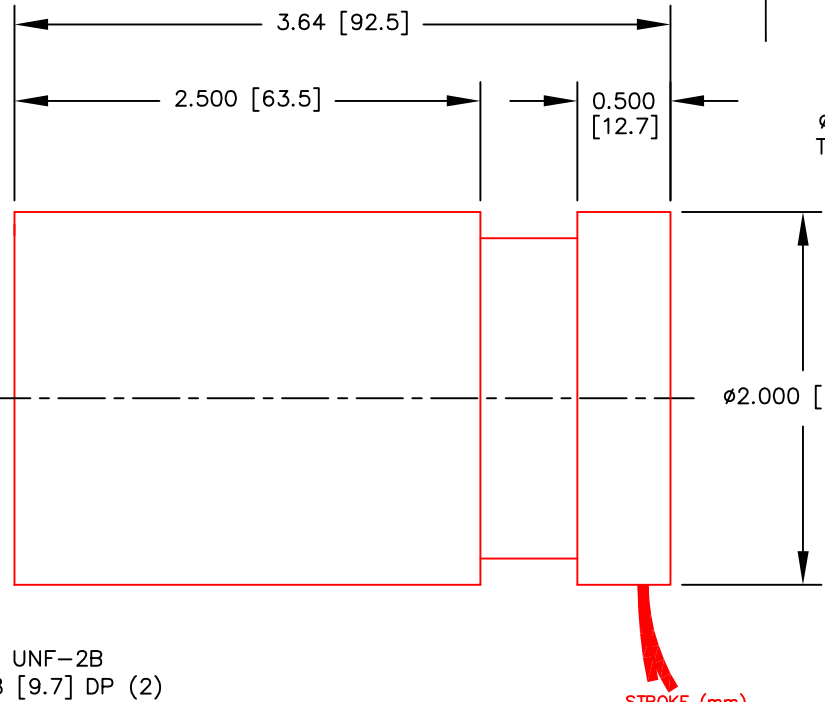
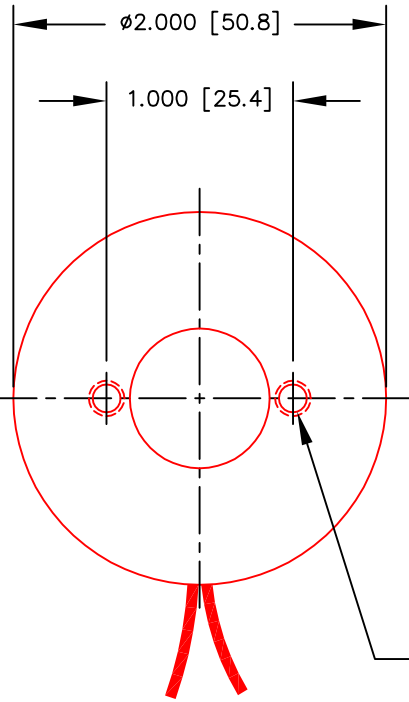
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2

1

SHOWN AT MID-STROKE

| REVISIONS | | | | | |
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| ZONE | LETTER | DESCRIPTION | DATE | CHECKED | APPROVED |
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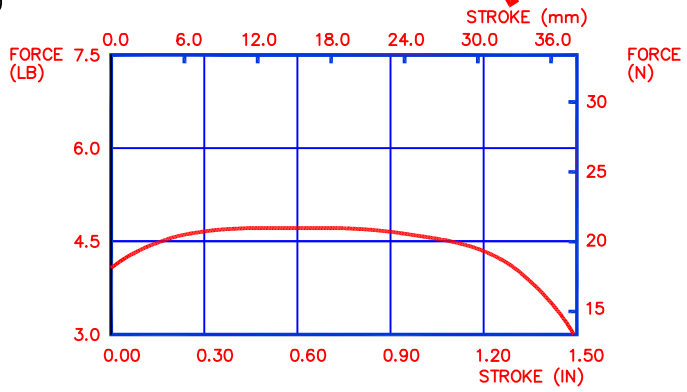


10-32 UNF-2B X 0.38 [9.7] DP (2)

10-32 UNF-2B X 0.25 [6.4] DP (2)

| | | |
|------------------------------------|-----------|-------------|
| INTERMITTENT FORCE @10% DUTY CYCLE | 66.3 N | 14.9 LB |
| CONTINUOUS FORCE | 21.0 N | 4.7 LB |
| FORCE CONSTANT | 7.0 N/A | 1.6 LB/A |
| BACK EMF CONSTANT | 7.0 V/M/S | 0.18 V/IN/S |
| STROKE | 38.1 mm | 1.50 IN |
| COIL CLEARANCE PER SIDE | 0.38 mm | 0.015 IN |
| COIL ASSY MASS | 135 GR | 4.8 OZ |
| BODY MASS | 700 GR | 24.7 OZ |
| COIL RESISTANCE | 4.0 Ohms | |
| COIL INDUCTANCE @ 1000 Hz | 1.9 mH | |
| MAX CONTINUOUS POWER | 36 W | |

ALL VALUES AT 25°C



CONTINUOUS FORCE

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| USED ON | NEXT ASSY |
| APPLICATION | |

| | |
|----------|----------|
| MATERIAL | CONTRACT |
| FINISH | DRN |
| | CHKD |
| | APPVD |
| | APPVD |

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|-------------------------|------|---------------------|------|
| motiCont | | | |
| LINEAR VOICE COIL MOTOR | | | |
| SIZE | CODE | DWG. NO. | REV. |
| A | | HVCM-051-064-019-01 | 1 |
| SCALE: 1 / 1 | | SHEET 1 OF 1 | |

4

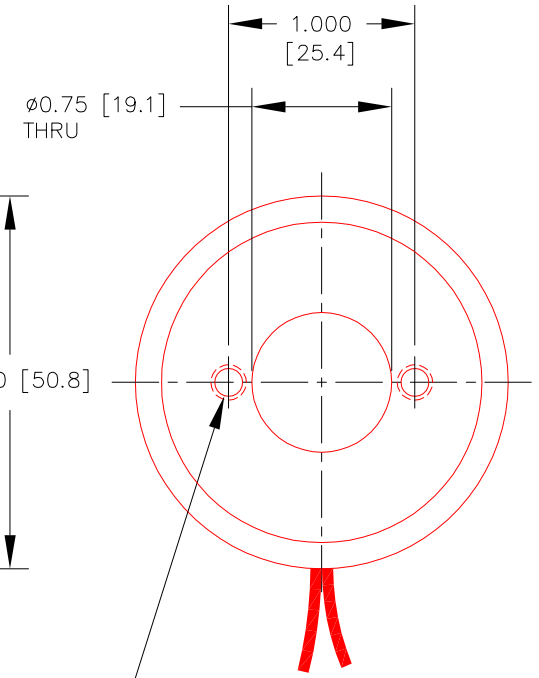
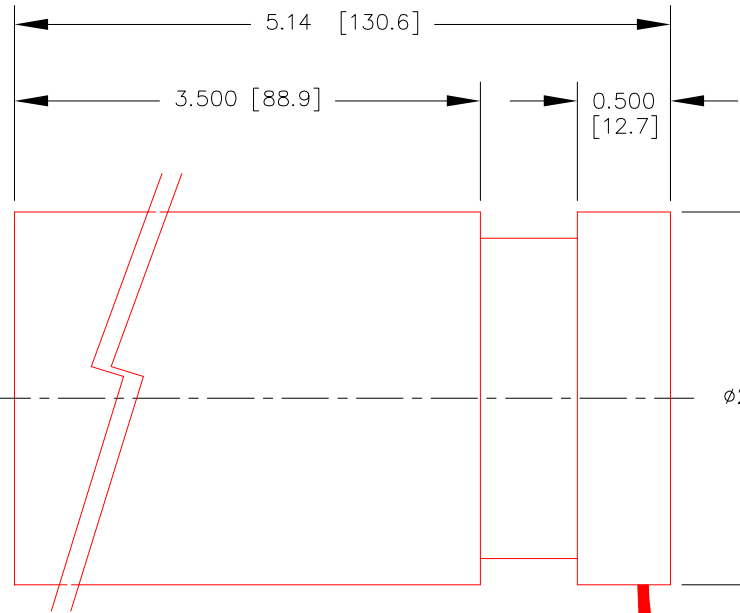
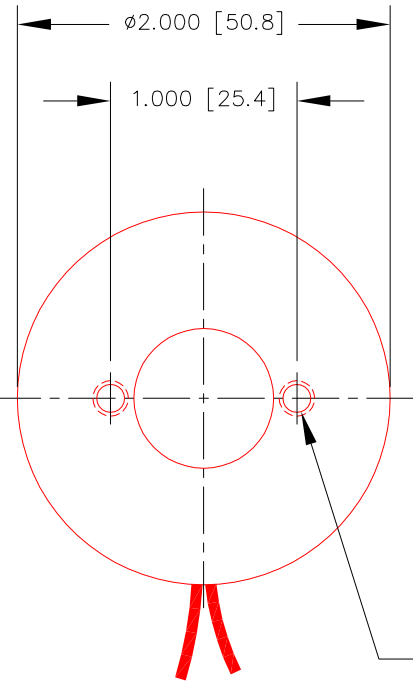
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2

1

SHOWN AT MID-STROKE

| REVISIONS | | | | | |
|-----------|--------|-------------|------|---------|----------|
| ZONE | LETTER | DESCRIPTION | DATE | CHECKED | APPROVED |
| | | | | | |

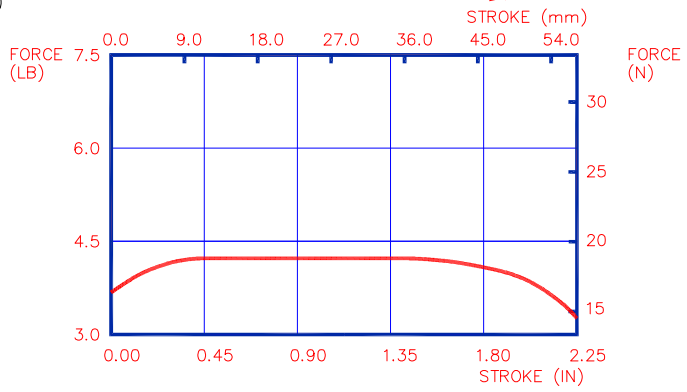


10-32 UNF-2B
X 0.38 [9.7] DP (2)

10-32 UNF-2B
X 0.25 [6.4] DP (2)

| | | |
|------------------------------------|-----------|-------------|
| INTERMITTENT FORCE @10% DUTY CYCLE | 59.5 N | 13.4 LB |
| CONTINUOUS FORCE | 18.8 N | 4.2 LB |
| FORCE CONSTANT | 7.3 N/A | 1.6 LB/A |
| BACK EMF CONSTANT | 7.3 V/M/S | 0.19 V/IN/S |
| STROKE | 57.2 mm | 2.25 IN |
| COIL CLEARANCE PER SIDE | 0.38 mm | 0.015 IN |
| COIL ASSY MASS | 190 GR | 6.7 OZ |
| BODY MASS | 954 GR | 33.7 OZ |
| COIL RESISTANCE | 6.0 Ohms | |
| COIL INDUCTANCE @ 1000 Hz | 2.9 mH | |
| MAX CONTINUOUS POWER | 40 W | |

ALL VALUES AT 25°C



CONTINUOUS FORCE

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| | |
|---|-----------|
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| USED ON | NEXT ASSY |
| APPLICATION | |

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| MATERIAL | CONTRACT |
| FINISH | DRN |
| | CHKD |
| | APPVD |
| | APPVD |

| | | | |
|-------------------------|------|---------------------|------|
| motiCont | | | |
| LINEAR VOICE COIL MOTOR | | | |
| SIZE | CODE | DWG. NO. | REV. |
| A | | HVCM-051-089-019-01 | 1 |
| SCALE: 1 / 1 | | SHEET 1 OF 1 | |