

1

2

3

4

5

ACTUATOR SHOWN AT MIDSTROKE

REVISION TABLE

REV	ECN#	DESCRIPTION	REV BY	APPROVED	DATE
---	---	Original Drawing	JRM	MPW	10-02-07
A	---	Added specifications sheet	JRM	MPW	10-02-07

[31.2]
Ø 1.230 Coil OD

Pins insulated with Kynar
Shrink Sleeve(2 Pl.) H2W
to provide 2 spare per
actuator. (To be potted
with 3M 2216 (2 part Epoxy)
into place onto BOBBIN)

Connection Pin (Provided by ATA)
Amphenol P/N M39029/58-360-X
(2 Pl.)

MOTION

[6.4]
[6.4]
Ø .253 THRU
Ø .251
MAGNET
ASSEMBLY

DRILL AND TAP 6-32 THRU
(3 Pl. Eq. Sp. on BC shown)

⊕ .003 A

[29.2]
Ø 1.150

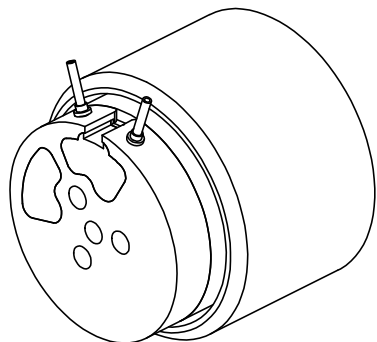
-BC-

120°
TYP.

[37.8]
Ø 1.490

INSIDE BOBBIN
Ø .129 [3.3] THRU
Ø .219 [5.6] ▽ .112 [2.8]
(3 Pl. eq. sp. on a
0.400" [10.2] B.C.)

Pocket is to be filled with an Epoxy
with a maximum TML of 1.0% and a
maximum CVCM content of 0.1%,
which have been determined through
work on Aerospace programs



Materials:

1. Bobbin is 6061-T6 Aluminum, Anodized Type III, Class 2, Color Black.
2. Magnet Assembly consists of Passivated 416 SS , and ND 42 Nickel-Copper-Nickel Plated Magnets.
3. Coil is terminated to pins using HIGH temperature solder.



H2W Technologies, Inc.
Santa Clarita, CA 91350 USA
Tel: (661) 291-1620
www.h2wtech.com

These drawings and specifications are the property of H2W Technologies, Inc. They are issued in confidence and shall not be reproduced, copied, or used without written permission from H2W Technologies, Inc.

UNLESS SPECIFIED OTHERWISE:
All dimensions are in inches
Standard Tolerances are as follows
.XXX ±.005 ANGLES ±.1°
.XX ±.010 FILLETS .010
.X ±.020 CORNERS .010
Remove All Burrs and Sharp Edges

**FOR
REFERENCE
ONLY**

MATERIAL

FINISH

TITLE

Voice Coil Actuator
Model #: NCC02-15-015-1SA

DWG # **30-0610**

REV **A**

DATE 10-02-07 SHEET

1 of 3

1

2

3

4

5

A

A

B

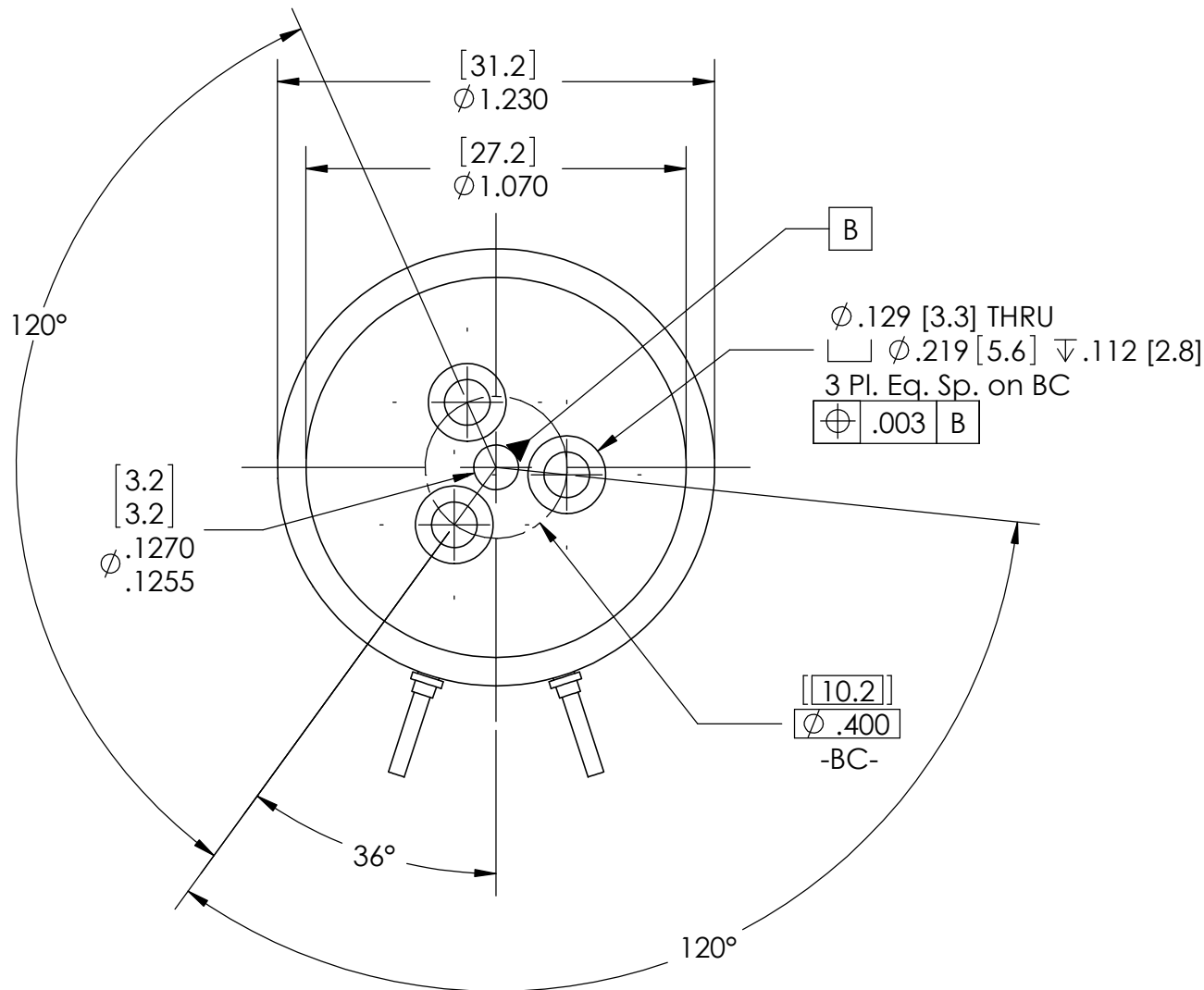
B

C

C

D

D



H2W Technologies, Inc.
Santa Clarita, CA 91350 USA
Tel: (661) 291-1620
www.h2wtech.com

These drawings and specifications are the property of H2W Technologies, Inc. They are issued in confidence and shall not be reproduced, copied, or used without written permission from H2W Technologies, Inc.

UNLESS SPECIFIED OTHERWISE:
All dimensions are in inches
Standard Tolerances are as follows
.XXX $\pm .005$ ANGLES $\pm 1^\circ$
.XX $\pm .010$ FILLETS $.010$
.X $\pm .020$ CORNERS $.010$
Remove All Burrs and Sharp Edges

**FOR
REFERENCE
ONLY**

MATERIAL

FINISH

TITLE

Voice Coil Actuator
Model #: NCC02-15-015-1SA

DWG #

30-0610

REV

A

DATE

10-02-07

SHEET

2 of 3

1

2

3

4

5

A

A

B

B

C

C

D

D

MOVING COIL NON-COMM ACTUATOR SPECIFICATIONS

Motor P/N	NCC02-15-015-1SA	
Stroke	0.16"	4.1 mm
Radial Clearance	0.035" per side	0.89 mm per side
Bearing Type	None Provided	
Moving Mass	0.63 oz	18 grams
Total Mass	6.06 oz	172 grams
Resistance @ 20C	5.4 ohms	
Inductance @ 20C	0.8 mH	
Electrical Time Constant	142 μ sec	
Motor Constant	0.66 LBS/SQRT(Watt)	2.89 N/SQRT(Watt)
Force Constant	1.52 LBS/Amp	6.68 N/Amp
Back EMF	0.17 V/ips	6.68 V/m/sec
Continuous Force	1.50 LBS	6.68 N
Max Power @ 100% Duty	5 Watts	
Peak Force	4.50 LBS	20.02 N
Max Power @ 10% Duty	47 Watts	



H2W Technologies, Inc.
 Santa Clarita, CA 91350 USA
 Tel: (661) 291-1620
www.h2wtech.com

These drawings and specifications are the property of H2W Technologies, Inc. They are issued in confidence and shall not be reproduced, copied, or used without written permission from H2W Technologies, Inc.

UNLESS SPECIFIED OTHERWISE:
 All dimensions are in inches
 Standard Tolerances are as follows
 .XXX $\pm$.005 ANGLES $\pm$.1"
 .XX $\pm$.010 FILLETS .010
 .X $\pm$.020 CORNERS .010
 Remove All Burrs and Sharp Edges

**FOR
 REFERENCE
 ONLY**

MATERIAL

FINISH

TITLE

Voice Coil Actuator
Model #: NCC02-15-015-1SA

DWG #

30-0610

REV

A

DATE

10-02-07

SHEET

3 of 3