

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	Inactive for new design. Editorial and format changes throughout.	7 May 2003	Kendall Cottongim

Inactive for new design

CURRENT DESIGN ACTIVITY CAGE CODE 037Z3
DEFENSE LOGISTICS AGENCY
DEFENSE SUPPLY CENTER, COLUMBUS
COLUMBUS, OHIO 43216-5000

Prepared in accordance with ASME Y14.100

Multidetail drawing

REV																				
PAGE																				
REV STATUS OF PAGES	REV	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A				
	PAGES	1	2	3	4	5	6	7	8	9	10	11	12	13	14					

PMIC N/A	PREPARED BY F Karimi	DEFENSE ELECTRONICS SUPPLY CENTER, DAYTON, OH 45444-5000
Original date of drawing 17 March 1988	CHECKED BY QC WTM	TITLE SWITCH, FLAME DETECTOR
	APPROVED BY J. C. Coulter	
	SIZE A	CODE IDENT. NO. 037Z3
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TABLE I. Switch assembly parts list.

Part or Identifying Number (PIN)		Quantity required	Nomenclature or description	Specification	Material
1	See figure 2	1	Bracket, switch		
2	See figure 3	1	Bracket, switch		
3	See figure 4	1	Switch, lever		
4	See figure 5	1	Rod actuator		
5	See figure 6	1	Spring, compression		
6	See figure 7	5	Screw and captive washer assembly		
7	See figure 8	1	Washer, shield		
8	AIA/NAS NASM35649-262	2	Nut, plain, hex, .138-32 UNC-2B		
9	AIA/NAS NASM35206-249	2	Screw, mach-pan HD, .138-32 UNC-2A X 1.000L		
10	MS35333-37	2	Washer, lock, flat-external tooth, .138 nominal		
11	AIA/NAS NASM35206-248	1	Screw mach-pan HD .138-32 UNC-2A		
12	AIA/NAS NAS45938/8-21A	1	Nut, SLFLKG, clinch .138-32 UNC-3B	AIA/NAS NAS45938/8	
13	MS27183-6	1	Washer, flat		
14	AIA/NAS NASM171534	1	Pin, spring .125 X 1.000L		
15	SAE 100110	1	Nut, sleeve 7/16-24 UNS-2B	SAE J246	
16	SAE 060115	1	Sleeve, 1/4 Nom tube OD, see note 2	SAE J512	
17	MIL-E-22118	AR	Enamel, electrical insulating		
18	Grade HV	AR	Sealing, LKG, retaining compounds	MIL-S-22473	

NOTES:

1. Interpret drawing in accordance with ASME Y14.100.
2. Washer, item number 7; nut, item number 15; and sleeve, item number 16; shall be bagged and furnished as loose items.
3. Adjust set point as follows:
 - (a) Loosen screw, item number 11, until switch, item number 3, clicks ("NO" contacts open and "NC" contacts close).
 - (b) Tighten screw until switch clicks again, ("NO" contacts close and "NC" contacts open).
 - (c) Tighten screw an additional 1/2 turn.
 - (d) Seal threads with enamel, item number 17.
4. Seal threads with compound, item number 18.
5. Bag or tag and identify as NSN 5930-00-345-5455 in accordance with MIL-STD-130.
6. Vender item, see figures 3 and 6.

FIGURE 1. Section assembly, flame detector.

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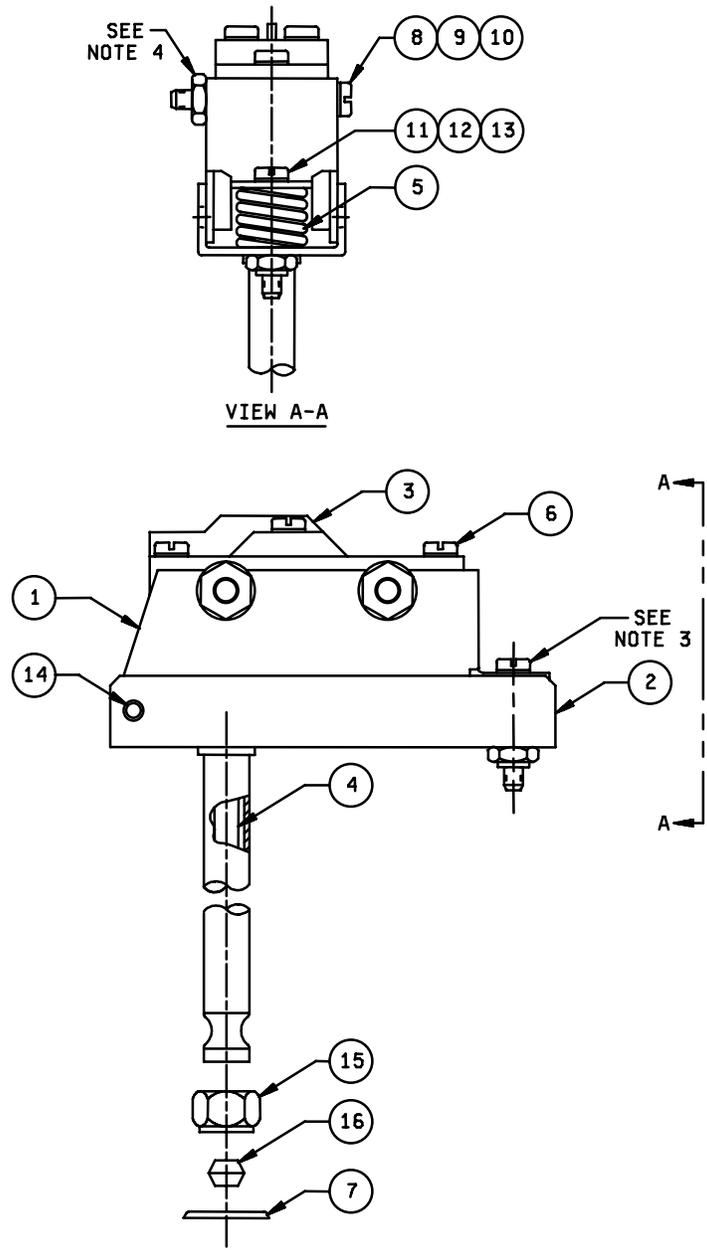
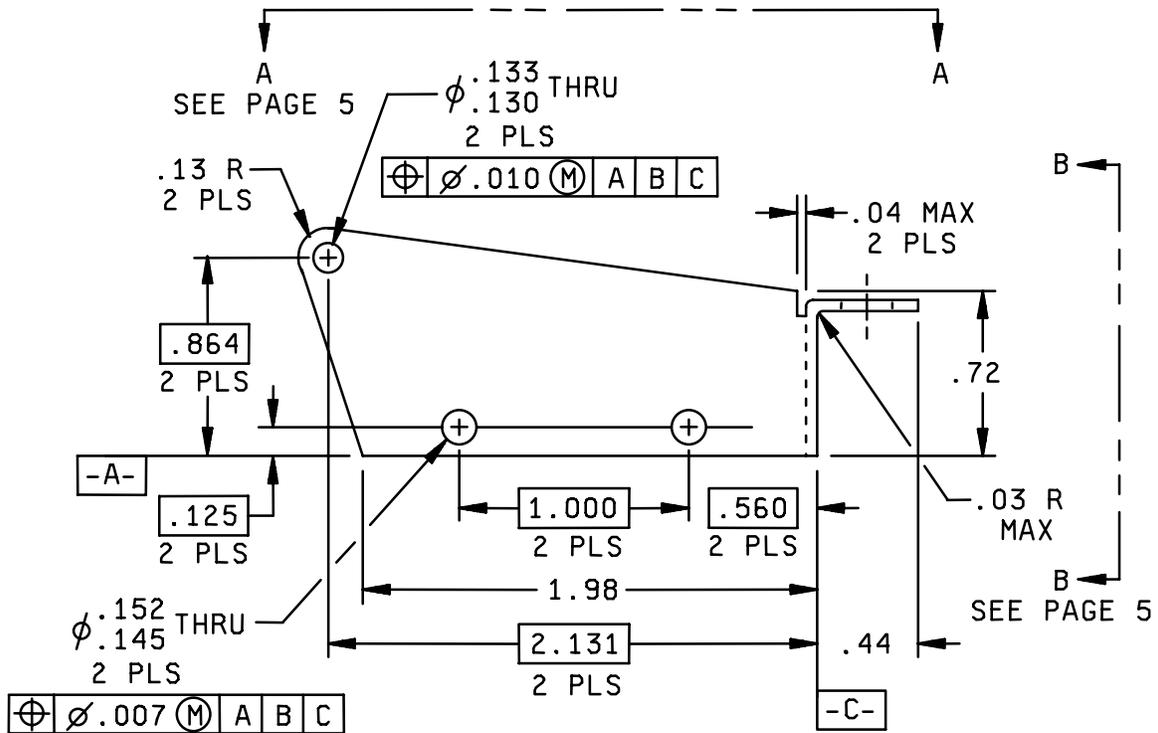


FIGURE 1. Section assembly, flame detector - Continued.

<p>DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO</p>	<p>SIZE A</p>	<p>CODE IDENT NO. 037Z3</p>	<p>DWG NO. 89003</p>
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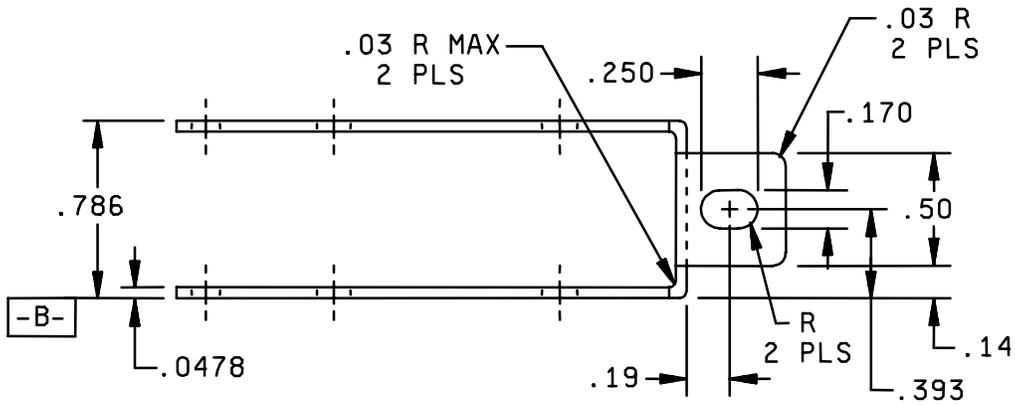


NOTES:

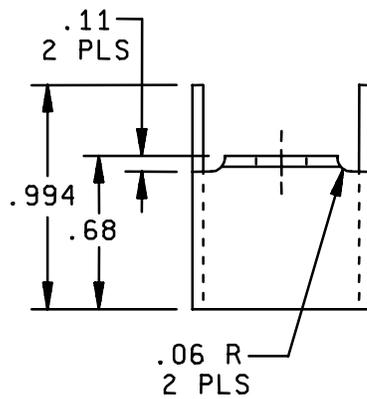
1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are $\pm .010$ (0.025 mm) for three place decimals and $\pm .02$ (0.5 mm) for two place decimals.
4. Material, steel sheet, cold rolled, commercial quality, .0478 (18 GA) stock in accordance with ASTM A366, class 1.
5. Finish: Cadmium plate in accordance with AMS-QQ-P-416, class 3, type II.
6. Remove burrs and break sharp edges.

FIGURE 2. Bracket, switch.

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VIEW A-A

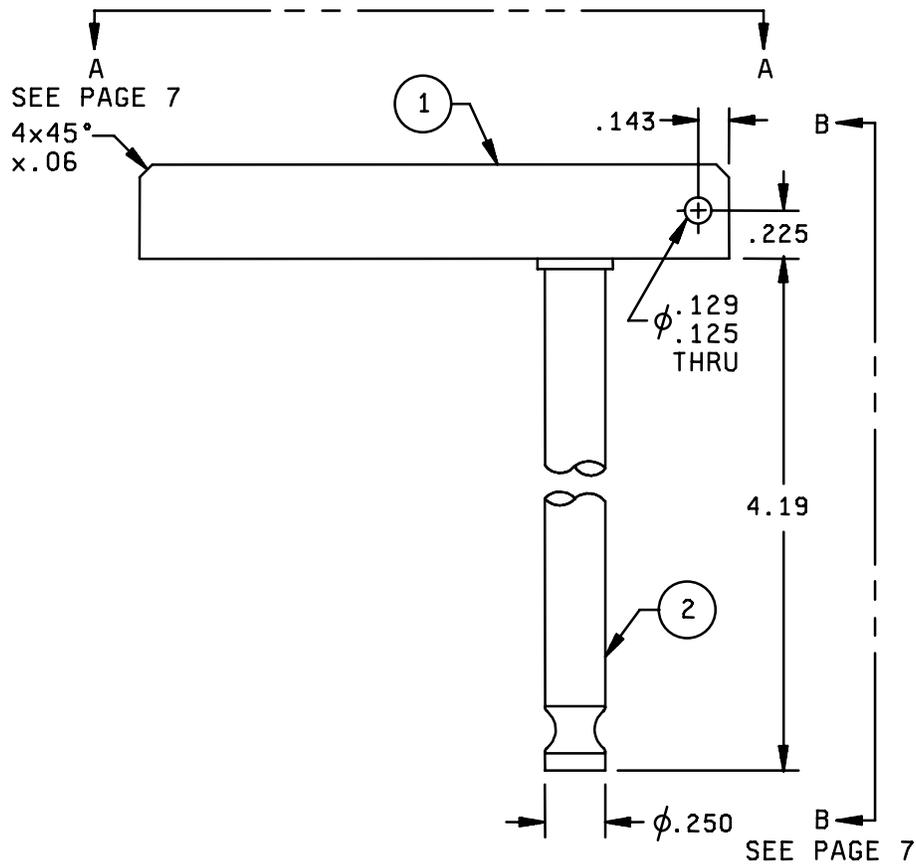


VIEW B-B

Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.007	0.18	.06	1.5	.145	3.68	.44	11.2	.864	21.95
.010	0.25	.11	2.8	.152	3.86	.50	12.7	.994	25.25
.02	0.5	.125	3.18	.170	4.32	.560	14.22	1.000	25.40
.03	0.8	.130	3.30	.19	4.8	.68	17.3	1.98	50.3
.04	1.0	.133	3.38	.250	6.35	.72	18.3	2.131	54.13
.478	1.214	.14	3.5	.393	9.98	.786	19.96		

FIGURE 2. Bracket, switch - Continued.

DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO	SIZE A	CODE IDENT NO. 037Z3	DWG NO. 89003
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Switch assembly parts list.

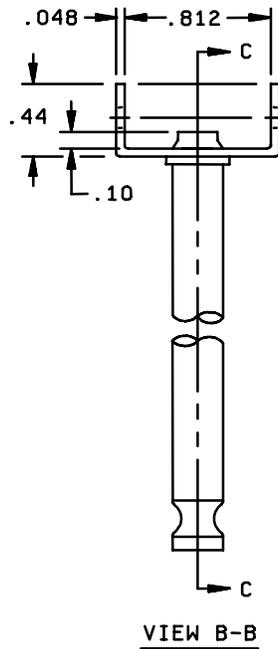
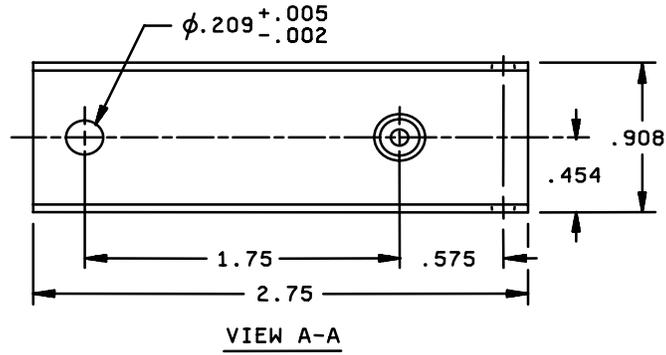
PIN	Quantity required	Nomenclature or description	Specification	Material	
1	UNS S31000	1	Sheet, No.2B finish both sides, .048 (18 GA) stock	ASTM A240	CRES
2	UNS S31000	1	Tubing, seamless, .250 OD X .049 wall stock	ASTM A511	CRES
3	UNS S30400	1	Wire, round, condition A, cold drawn, .250 diameter stock	ASTM A580	CRES

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are ± 0.010 (0.025 mm) for three place decimals and ± 0.02 (0.5 mm) for two place decimals.
4. Brazing shall be in accordance with AWS C3.4.
5. Remove burrs and break sharp edges.

FIGURE 3. Bracket, probe.

DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO	SIZE A	CODE IDENT NO. 037Z3	DWG NO. 89003
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Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	Mm
.002	0.05	.05	1.3	.129	3.28	.209	5.31	.812	20.62
.003	0.08	.06	1.5	.143	3.63	.225	5.72	.908	23.06
.005	0.13	.10	2.5	.152	3.86	.250	6.35	1.75	44.4
.01	0.3	.101	2.57	.166	4.22	.44	11.2	2.75	69.8
.048	1.22	.12	3.0	.188	4.78	.454	11.53	4.19	106.4
.049	1.24	.125	3.18	.19	4.8	.575	14.61		

FIGURE 4. Bracket, probe assembly.

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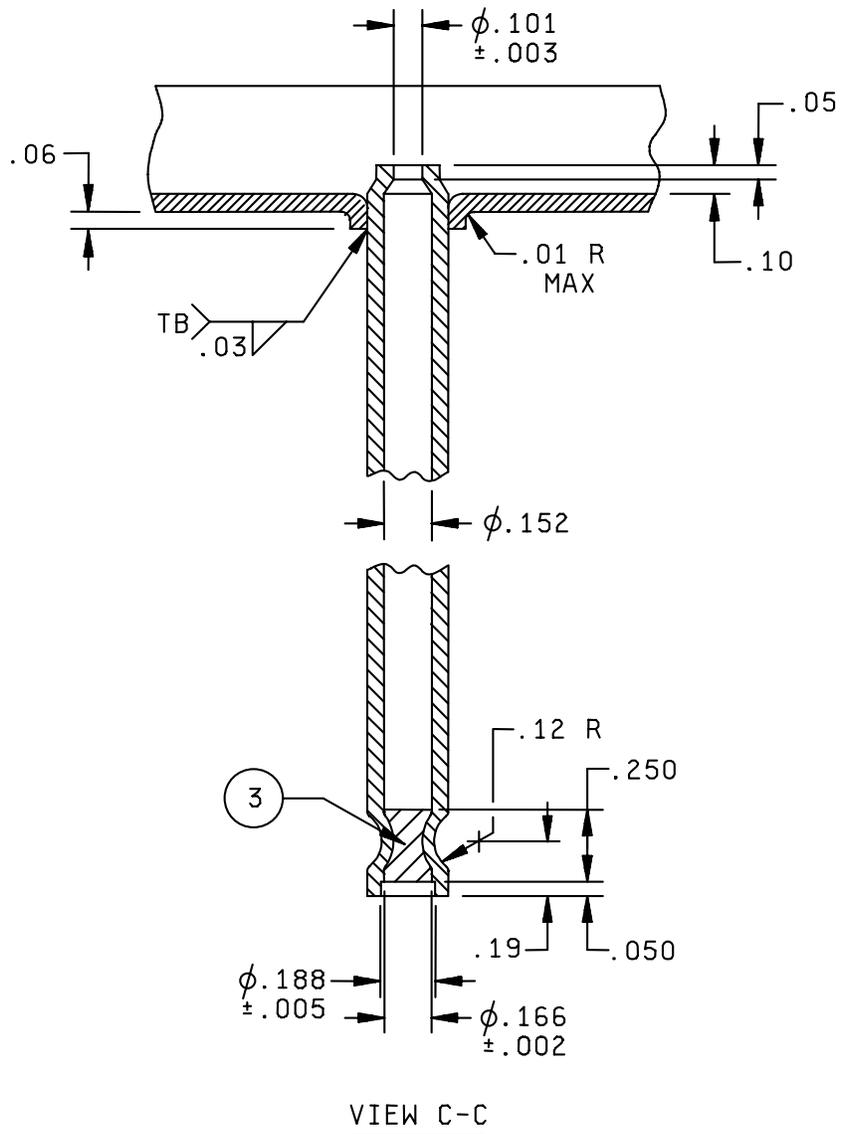
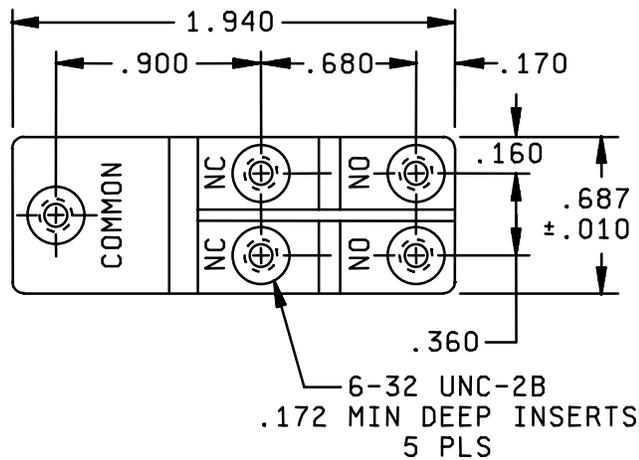
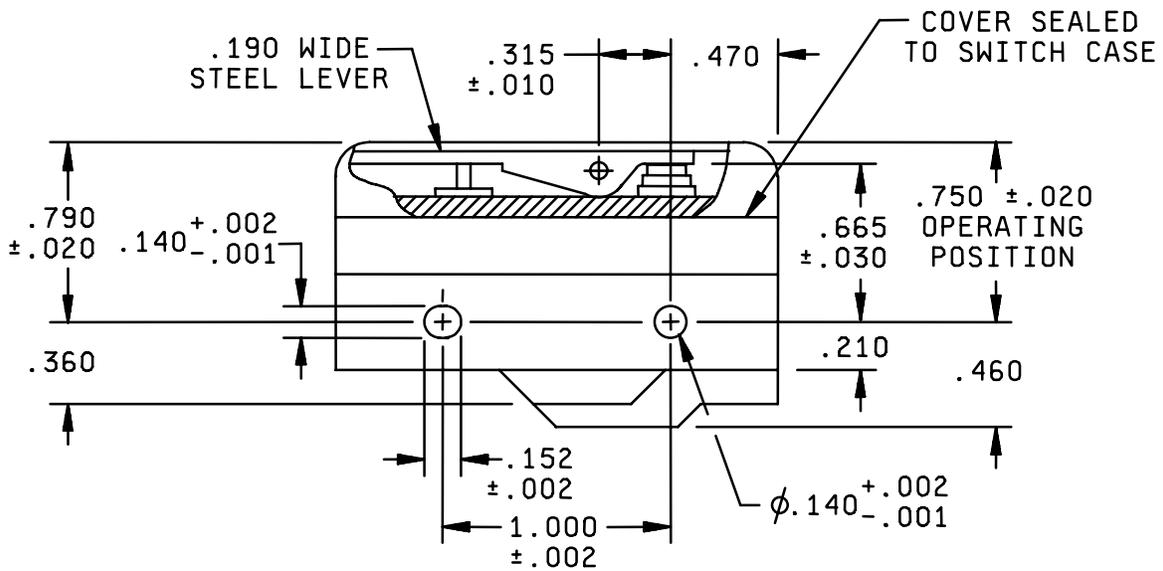


FIGURE 4. Bracket probe assembly - Continued.

<p>DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO</p>	<p>SIZE A</p>	<p>CODE IDENT NO. 037Z3</p>	<p>DWG NO. 89003</p>
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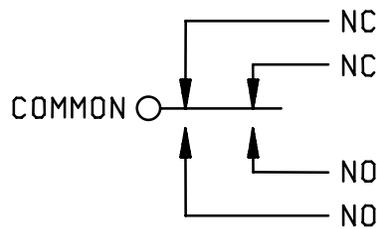


Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.001	0.03	.040	1.02	.172	4.37	.460	11.68	.750	19.05
.002	0.05	.140	3.56	.190	4.83	.470	11.94	.790	20.07
.010	0.25	.152	3.86	.210	5.33	.665	16.89	.900	22.86
.020	0.51	.160	4.06	.315	8.00	.680	17.27	1.000	25.40
.030	0.76	.170	4.32	.360	9.14	.687	17.45	1.940	49.28

FIGURE 5. Switch lever.

DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO	SIZE A	CODE IDENT NO. 037Z3	DWG NO. 89003
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Suggested source(s) of supply	
Vendor PIN	Vendor
BZ-3YW818-A22	Micro Switch Division Honeywell Incorporation 11 W. Spring Street Freeport IL CAGE 91929



SCHEMATIC

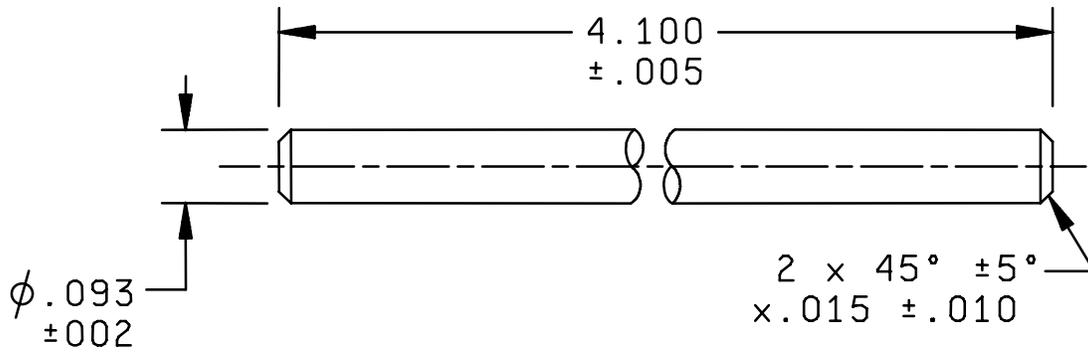
NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise stated, tolerances are ± 0.015 (0.38 mm) for three place decimals.
4. Housing material: General purpose phenolic.
5. Characteristics:

A. Electrical data:	5A – 250 V ac
B. Contact arrangement:	SPDT Single Pole, Double Throw
C. Operating force:	60 ounces. maximum
D. Release force:	2 ounces minimum
E. Differential travel:	.002 (.050 mm)
F. Overtravel:	.030 (.762 mm) maximum, .040 (1.06 mm) minimum
6. Identification of the suggested source(s) of supply hereon is not to be construed as a guarantee of present or continued availability as a source of supply for the item(s).

FIGURE 5. Switch lever – Continued.

DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO	SIZE A	CODE IDENT NO. 037Z3	DWG NO. 89003
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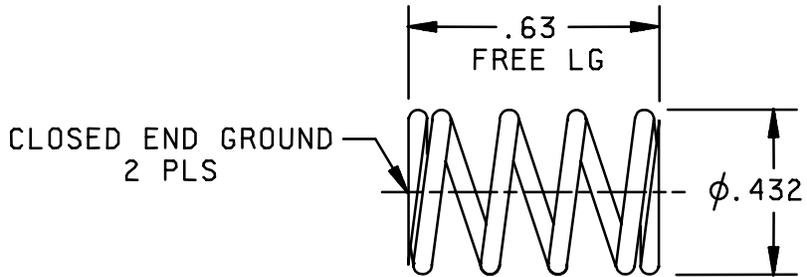
Inches	mm
.002	0.05
.005	0.13
.010	0.25
.015	0.38
.093	2.36
4.100	104.14

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Material: Ceramic rod, type II, 93 percent alumina in accordance with ASTM D2442.

FIGURE 6. Rod, actuator.

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Inches	mm
.010	0.25
.02	0.5
.054	1.37
.432	10.97
.63	16.0

NOTES:

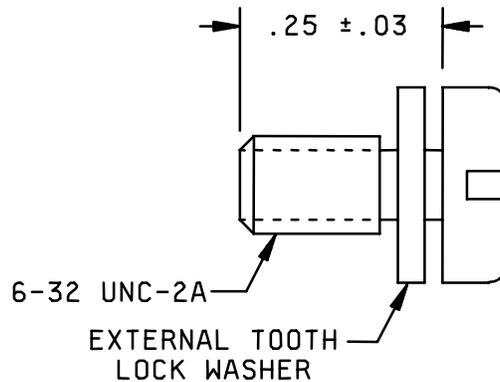
1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are $\pm .010$ (0.025 mm) for three place decimals and $\pm .02$ (0.5 mm) for two place decimals.
4. Material: Corrosion resisting steel wire in accordance with ASTM A 313/A 313M.
5. Requirements:

Wire diameter	.054 (1.37 mm)
Direction of helix:	Optional
Total coils:	$5 \pm 5\%$

FIGURE 7. Spring compression.

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Suggested source(s) of supply	
Vendor PIN	Vendor
61-060441-40-0142B-0542B	Shakeproof Division Illinois Tool Works Incorporated St. Charles Road Elgin IL 60120 CAGE 78189
NO. 6X1/4 SEMS	Federal Screw Products Incorporated 3917 N. Kedzie Avenue Chicago, IL 60618 CAGE 73734



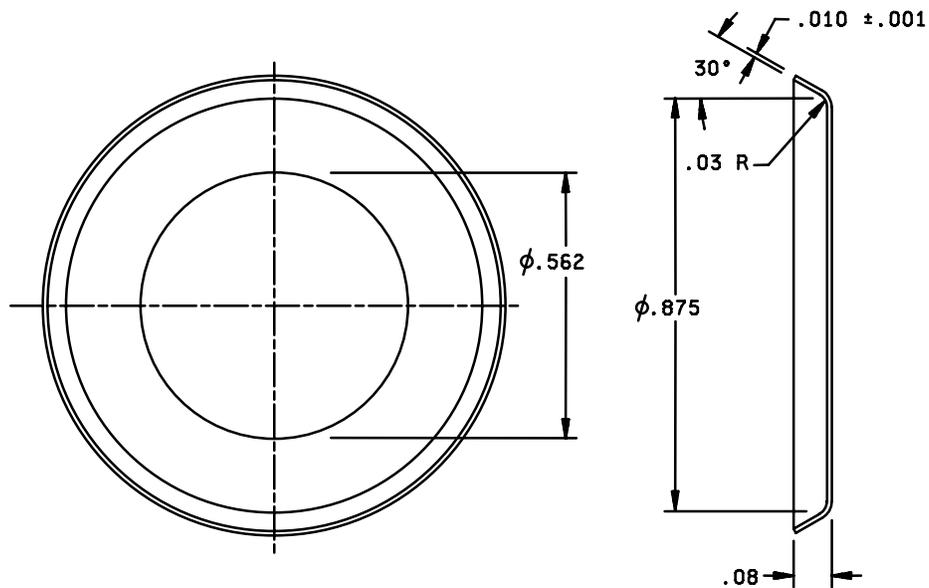
Inches	mm
.03	0.8
.25	6.3

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Material: Screw-Steel, Washer-Steel.
4. Finish: Cadmium plated.
5. Screw and washer assembly (SEMS) shall conform to ASME B18.13 for pan head machine screws.
6. Identification of the suggested source(s) of supply hereon is not to be construed as a guarantee of present or continued availability as a source of supply for the item(s).

FIGURE 8. Screw and captive washer assembly.

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Inches	mm
.001	0.03
.010	0.25
.015	0.38
.03	0.8
.08	2.0
.562	14.27
.875	22.23

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are $\pm .010$ (0.025 mm) for three place decimals and $\pm .02$ (0.5 mm) for two place decimals.
4. Material: Corrosion resisting steel sheet in accordance with ASTM A666, finish optional.
5. Remove burrs and break sharp edges.
6. Identification of the suggested source(s) of supply hereon is not to be construed as a guarantee of present or continued availability as a source of supply for the item(s).

FIGURE 9. Screw and captive washer assembly.

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