

INCH-POUND

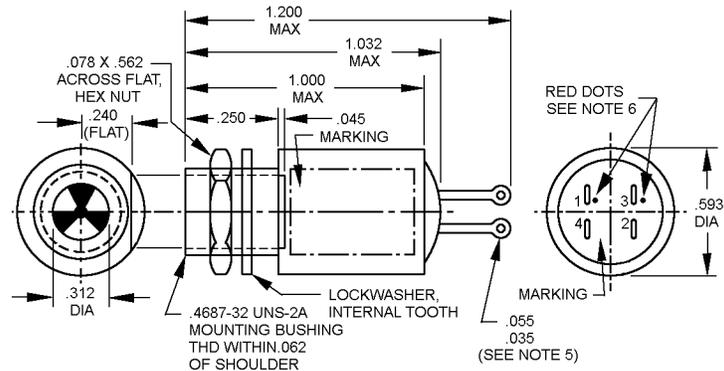
  
MIL-PRF-83287/2E  
w/AMENDMENT 2  
22 August 2014  
SUPERSEDING  
MIL-PRF-83287/2E  
w/AMENDMENT 1  
12 December 2013

PERFORMANCE SPECIFICATION SHEET

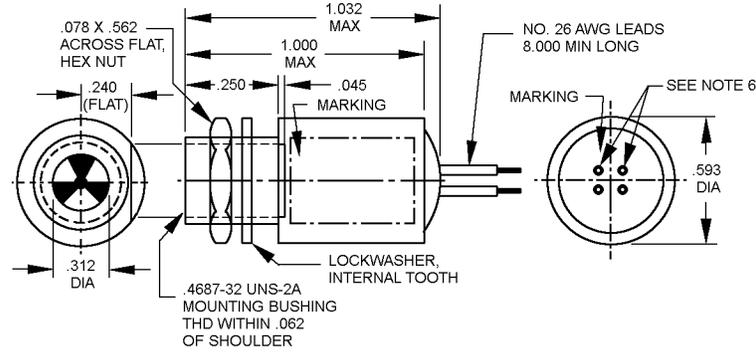
INDICATORS, FAULT LOCATING, FLAG INDICATING, ELECTRICAL RESET

This specification is approved for use by all  
Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist  
of this specification sheet and MIL-PRF-83287.



SOLDER TERMINALS

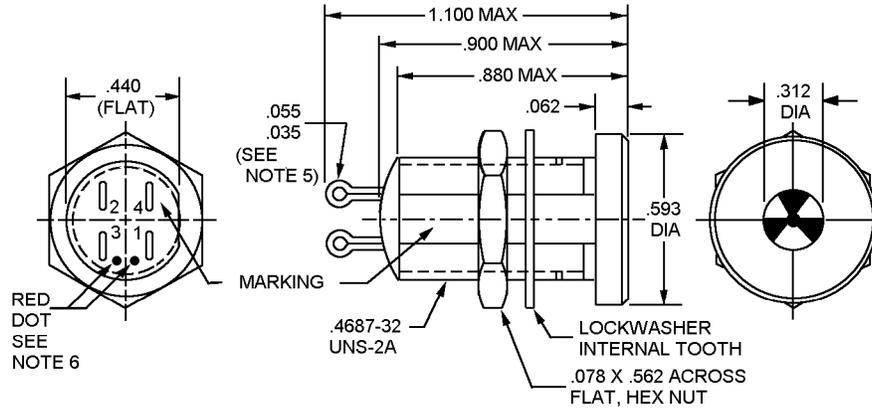


WIRE LEADS

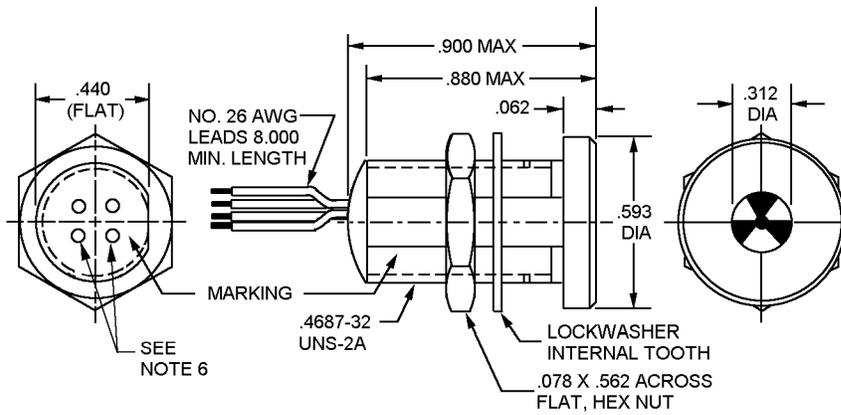
CONFIGURATION A

FIGURE 1. Dimensions and configurations.

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SOLDER TERMINALS

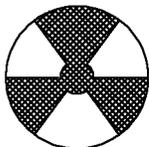
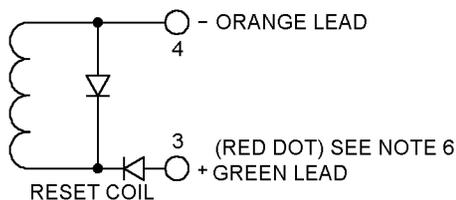
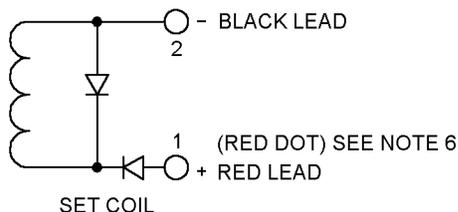


WIRE LEADS

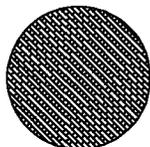
CONFIGURATION B

FIGURE 1. Dimensions and configurations – Continued.

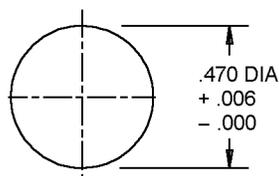
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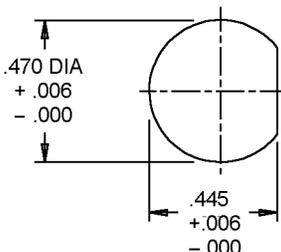
"FAULT" INDICATION:  
BLACK AND WHITE



"NO FAULT" INDICATION:  
BLACK



PANEL LAYOUT



PANEL LAYOUT

Inches	mm
.006	0.15
.035	0.89
.045	1.14
.055	1.40
.062	1.57
.078	1.98
.240	6.10
.250	6.35
.312	7.92
.324	8.23
.4687	11.904
.475	12.07
.562	14.27
.593	15.06
1.00	25.4
1.032	26.21
1.200	30.48
8.000	203.20

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerance is  $\pm .005$  (0.13 mm).
4. The flag and the flat on the mounting bushing shall be aligned approximately as shown.
5. The shape and location of the solder terminals shown are not intended to limit specific manufacturing processes. When the shape of the terminals shown is used, the hole-diameter shall be as shown.
6. The positive polarity on the Solder Terminals (1 and 3) shall be identified by a red dot. The positive polarity on the Wire Leads shall be identified by Red and Green wire jacket colors.
7. Mounting torque of 5 to 7 in-lbs. may be used.
8. The left side views of Configuration A (see page 1) are drawn without the nut and washer, to show the 0.240 inch location of the Flat surface (notch), which also appears in the middle view with a 0.045 inch depth.

FIGURE 1. Dimensions and configurations - Continued.

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REQUIREMENTS:

Dimensions and characteristics: See figure 1 and tables I and II.

Weight (including hardware): 0.044 pound (20 grams), maximum.

Diodes: When specified in table I, the indicators shall contain both transient suppression and steering diodes internally connected as shown on figure 1.

Coil transient suppression: Applicable, when diodes are specified (see table II).

Transfer pulse length: A pulse length of 40 milliseconds or greater shall cause a fault indication. A pulse length of 2 milliseconds or less shall not cause a fault indication.

Terminal strength:

Rigid type solder terminals: Test condition A (3 pounds, minimum).

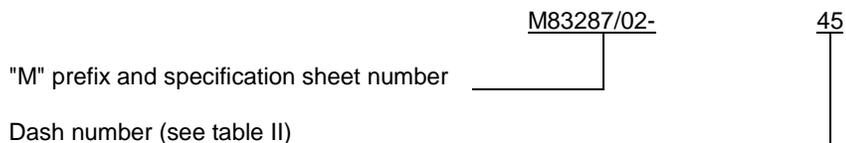
Wire type solder terminals: Test condition A (3 pounds, minimum).  
Test condition C (1 pound, minimum).

Random vibration: Test condition D, curve 1, 30 minutes test time; applies to all dash numbers.

Marking of solder terminals: The terminals shall be identified by number as shown on figure 1. The positive terminal shall be identified by a red dot.

Extent of qualification: Qualification testing and approval of M83287/02-01 and M83287/02-52 shall be sufficient to grant qualification approval for all indicators covered by this specification sheet.

Part or Identifying Number (PIN): The term Part or Identifying Number (PIN) is equivalent to the term part number which was previously used in this specification. The PIN consists of "M" prefix followed by specification sheet number and the dash number (see table II), as shown in the following example:



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TABLE I. Electrical characteristics.

Dash number	Voltage (volts, dc)			DC coil resistance (ohms) at					
	Rated	Operating		-65°C		+125°C		Ambient (+25°C)	
		<u>1/</u> Min	Max	Min	Max	Min	Max	<u>2/</u> Min	Max
01 through 08	28	22.4	30.0	425	575	951	1233	675	880
09 through 16 <u>3/</u>	28	16.0	30.0	216	315	498	705	360	500
17 through 20	28	17.0	30.0	236	552	528	1182	375	850
21 through 24	28	22.4	30.0	425	575	951	1233	675	880
25 through 28 <u>3/</u>	28	16.0	30.0	216	315	498	705	360	500
29 through 40	12	9.6	14.4	76	160	180	320	130	230
41 through 52	5	4.0	6.0	11	25	25	50	19	35

1/ Refers to the minimum operating voltage, at which the indicator must operate.

2/ For both the set and reset coils.

3/ For use with non-regulated power systems (see MIL-STD-704).

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TABLE II. Physical characteristics.

Dash numbers	Diodes	Termination type	Anti-reflection coating	Configuration	
01	No	Wire leads	No coating	A	
02	Yes				
03	No	Solder terminals	With coating		
04	Yes				
05	No	Wire leads	No coating		
06	Yes				
07	No	Solder terminals	With coating		
08	Yes				
09	No	Wire leads	No coating	A	
10	Yes				
11	No	Solder terminals	With coating		
12	Yes				
13	No	Wire leads	No coating		
14	Yes				
15	No	Solder terminals	With coating		
16	Yes				
17	No	Wire leads	No coating	A	
18	Yes				
19	No	Solder terminals	With coating		
20	Yes				
21	No	Wire leads	No coating		
22		Solder terminals			
23	No	Wire leads	With coating	B	
24		Solder terminals			
25	No	Wire leads	No coating		
26		Solder terminals			
27	No	Wire leads	With coating		
28		Solder terminals			
29	No	Wire leads	No coating	A	
30	Yes				
31	No	Solder terminals	With coating		
32	Yes				
33	No	Wire leads	No coating		
34	Yes				
35	No	Solder terminals	With coating		
36	Yes				
37	No	Wire leads	No coating	B	
38		Solder terminals			
39	No	Wire leads	With coating		
40		Solder terminals			
41	No	Wire leads	No coating		A
42	Yes				
43	No	Solder terminals	With coating		
44	Yes				
45	No	Wire leads	No coating		
46	Yes				
47	No	Solder terminals	With coating		
48	Yes				
49	No	Wire leads	No coating	B	
50		Solder terminals			
51	No	Wire leads	With coating		
52		Solder terminals			

Supersession data: See table III.

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TABLE III. Supersession information.

Superseding military PIN's M83287/02-	Superseded military PIN's
02	M83287-13
06	M83287-14
10	M83287-17
14	M83287-18

Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Referenced documents. In addition to MIL-PRF-83287, this document references the following:

MIL-STD-704

CONCLUDING MATERIAL

Custodians:  
Army – AV  
Navy - AS  
Air Force - 11  
DLA – CC

Preparing activity:  
DLA - CC

(Project: 6625-2014-021)

Review activities:  
Army – MI  
Air Force – 84

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.