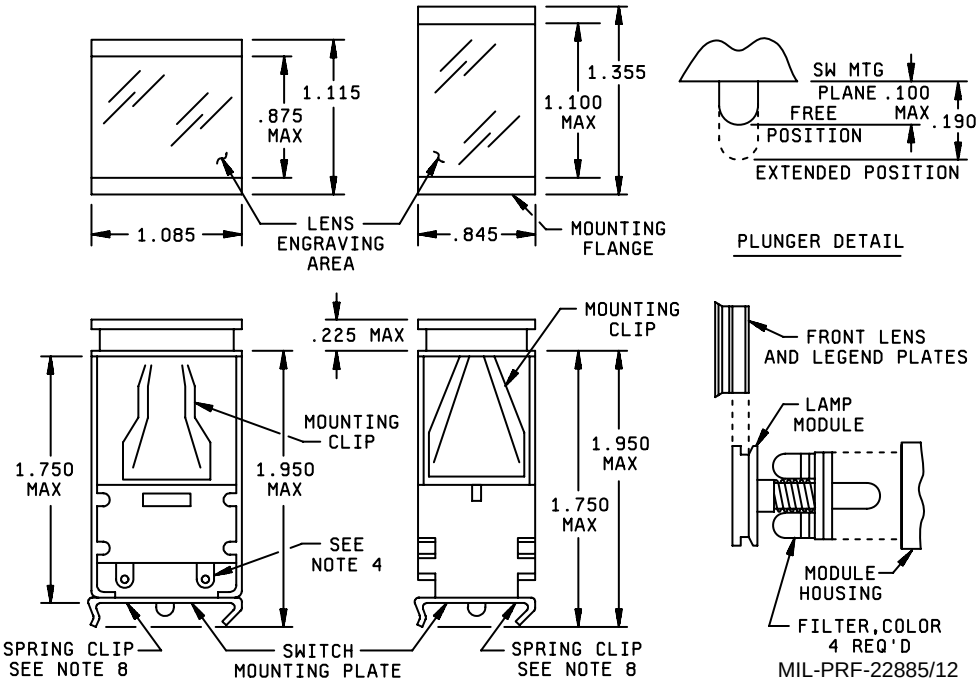
INCH POUND
MIL-PRF-22885/16F
1 November 2006
SUPERSEDING
MIL-PRF-22885/16E
1 March 2001

PERFORMANCE SPECIFICATION SHEET

SWITCH, PUSH BUTTON, ILLUMINATED
4-LAMP, CLIP MOUNTED, LIGHT MODULE FOR

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

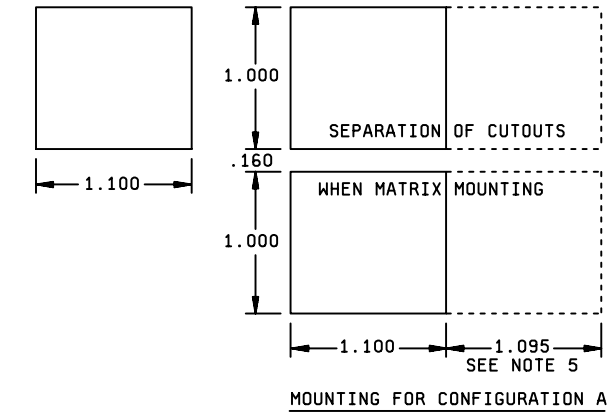
The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-PRF-22885.

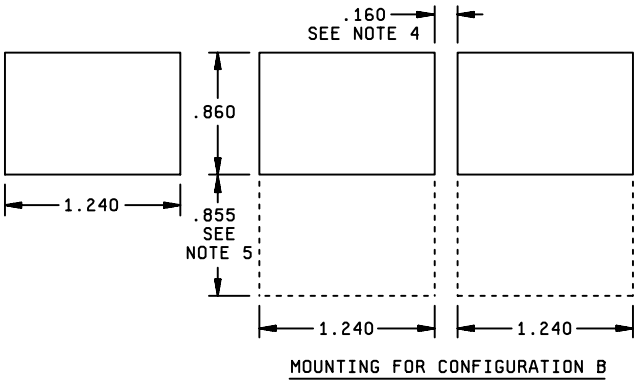


Inches	mm	Inches	mm
.100	2.54	1.085	27.56
.190	4.83	1.100	27.94
.225	5.72	1.115	28.32
.845	21.46	1.355	34.42
.875	22.23	1.950	49.53

NOTES:
1. Dimensions are in inches.
2. Unless otherwise specified, tolerance is ±.016 (0.41 mm).
3. The design of the terminals is optional. Terminals must accept #20 AWG wire.
4. Terminals shall be permanently identified with letters as shown in table II.
5. Metric equivalents (to the nearest .01 mm) are given for general information only.
6. Lamp circuit schematic shall be marked on module housing as shown in table II.
7 Switch clip design optional-must interface with MIL-PRF-22885/11 switch modules.

FIGURE 1. Switch or light modules, 4 lamp.





Inches	mm
.160	4.06
.855	21.72
.860	21.84
1.000	25.40
1.095	27.81
1.100	27.94
1.240	31.50

NOTES:
1. Dimensions are in inches.
2. Tolerance is +.010 (.25 mm), -000 (.00 mm).
3. Metric equivalents (to the nearest .01 mm) are given for general information only.
4. This is the separation of cutout when matrix mounting.
5. Add for each additional unit.

FIGURE 2. Recommended panel cutouts.

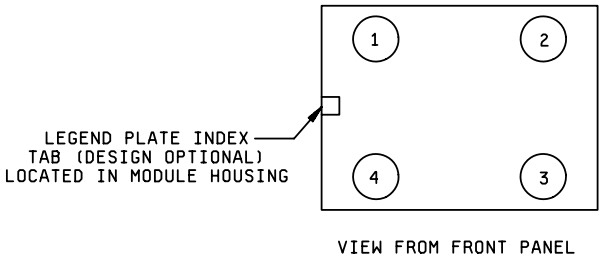
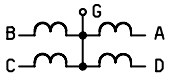
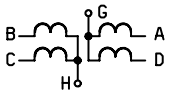
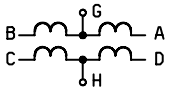
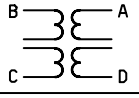


FIGURE 3. Color filter location with respect to modular indicator light (housing).

TABLE I LENS PLATE

CODE	LENS STYLE (DIFFUSER CONFIGURATION) SEE NOTE 1
A	SOLID
B	SPLIT VERTICALLY
C	SPLIT HORIZONTALLY

TABLE II CIRCUIT SCHEMATIC

CODE	LAMP TERMINATION IDENTIFICATION	COMMON TERMINAL IDENTIFICATION	SCHEMATIC AND LAMP TERMINAL IDENTIFICATION SEE NOTE 2
1	A,B,C, AND D	CONNECTED TO G	
2	A AND D B AND C	CONNECTED TO G CONNECTED TO H	
3	A AND B C AND D	CONNECTED TO G CONNECTED TO H	
4	A,1 AND 2 B,1 AND 2 C,1 AND 2 D,1 AND 2		

1/ Orientation is as shown in figure 3.
2/ Lamp and terminal location shown is as viewed from front panel, with unit oriented as shown in figure 3.

REQUIREMENTS:

Dimensions and configuration: See figure 1 and tables I, II, and IV.

Light module shall consist of

Complete switch shall consist of:
1 - Lamp module (with translucent white diffuser).
1 - Transparent front lens plate.
1 - Transparent legend plate.
4 - Lamps (T-1-3/4 midget-flange-base, incandescent type) - Not included, order separately.
4 - Color filters, when specified (see table IV).
1 - Lamp module housing.
1 - Plunger stop.

Enclosure design: 1 (unsealed).

Vibration grade: 1 (10 to 500 Hz).

Operation: Operator/indicator.

Color: Diffuser shall provide translucent background, and appropriate lens style when illuminated, the background shall appear in a color determined by the color of the lamp filters.

Luminance: See table III.

Thermal shock: Maximum temperature shall be +71°C (+55°C with lamps energized) Minimum temperature shall be -55°C.

Shock (specified pulse): Method 213 of MIL-STD-202, test condition A (50g).

TABLE III Luminance

With color filter	Minimum luminance 1/ (foot-lamberts)
Red	30
Green	35
Yellow	90
Blue	8
White	90
None	250

1/ Illuminated with four M6363/8-5 lamps at 28 V dc and utilizing lens with lens style A.

Plastic Lens assembly shall be heat resistant thermoplastic capable of withstanding 71°C.

Mounting flanges: Stainless steel with a lusterless finish.

Weight: 16 pound maximum.

Plunger stop. Shall be readily adjustable or removable in the field without the need of special tools. Plunger stop shall be removed when switching is required when indicator light is coupled to a switch assembly.

Plunger stop test. With the plunger stop functionally installed in the lamp module, and the lamp module mounted by its normal mounting means, a static force of 25 pounds shall be applied to the legend plate for 1 minute. The plunger stop shall restrict normal actuator travel.

QUALIFICATION

Qualification inspection shall be performed on the complete assembly as required by MIL-PRF-22885/15 using the applicable modular switch subassemblies.

TABLE IV. Part number and design characteristics.

Part number 1/ 2/	Mounting arrangement (configuration)	Lens plate code	Circuit schematic code
M22885/16			
-01(XXXX)	A	A	1
-02(XXXX)	B	A	1
-03(XXXX)	A	A	2
-04(XXXX)	B	A	2
-05(XXXX)	A	B	1
-06(XXXX)	B	B	1
-07(XXXX)	A	B	2
-08(XXXX)	B	B	2
-09(XXXX)		C	1
-10(XXXX)	B	C	1
-11(XXXX)	A	C	3
-12(XXXX)	B	C	3
-13(XXXX)	A	A	3
-14(XXXX)	B	A	3
-15(XXXX)	A	A	4
-16(XXXX)	B	A	4
-17(XXXX)	A	B	4
-18(XXXX)	B	B	4
-19(XXXX)	A	C	4
-20(XXXX)	B	C	4

1/ Part numbers shown are for operator/indicators without color filters. When color filters are required, add the color symbols of MIL-PRF-22885 in place of "(XXXX)" with the location as shown on figure 3.
Example: M22885/16-11RRGG.

2/ These part numbers are interchangeable with and replace former part numbers which contained an additional zero.

Intended use: The operator-indicators are intended for use as illuminated indicators and for use as illuminated operator/indicators when used with MIL-PRF-22885/11 modular switch sub-assemblies.

The margins of this specification are marked with vertical lines to indicate where modifications were made. 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:

MIL-PRF-22885
MIL-PRF-22885/11
MIL-PRF-22885/12
MIL-PRF-22885/15
MIL-STD-202

Custodians:
Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5930-2006-065)

Review activities:
Army - AR, AT, AV, CR4, MI
Navy - AS, MC, OS, SH
Air Force - 19, 99

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 http://assist.daps.dla.mil/ .