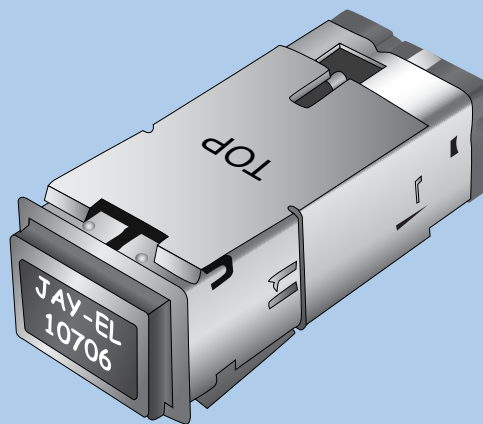


MARK 10
P/N 10706



JAY-EL

PRODUCTS



JAY-EL MARK 10 P/N 10706
ILLUMINATED PUSHBUTTON SWITCH
MEETS REQUIREMENTS OF
MIL-S-22885



Ducommun
Technologies



THIS SWITCH IS DESIGNED TO MEET THE EXACTING REQUIREMENTS FOR COMMERCIAL AIRLINERS, MILITARY AIRCRAFT AND GROUND SUPPORT EQUIPMENT.

IMPORTANT FEATURES

Designed to Mil-S-22885
No soldering
May be provided with a removable mounting sleeve installed from the rear of the panel (mounting type I).
Light weight
Many different lightning displays featuring 2 T-1 3/4 lamps
Readable in direct sunlight
Terminal junction system utilizing the military approved wire termination method to accept a Mil-C-39029/1-101pin
Resilient rubber grommet seal at rear-2 pole, double make, double break switching
Individual input to each lamp
Retained pushbutton
Positive cam and sleeve mounting system
Switching loads to 7.5 amps resistive, 5.0 amps inductive, lamps 1.0 amps
Life ratings 50,000 cycles electrical, 100,000 mechanical.
Switching actions: momentary-maintained depressed alternate.

DESIGN FEATURES

ELECTRICAL

Lightning: to Mil-S-22885. Different display types featuring visible before lighted and visible in direct sunlight.

Terminations: Electrical connections can be made by crimp, insertable-removable contacts through a resilient grommet. The contact conforming to Mil-C-39029/1-101. Contact insertion and removal forces are in accordance with Mil-T-81714.

Contact Ratings @ 115 VAC or 28 VDC:

Resistive 7.5 amps

Inductive 5.0 amps

Lamp 1.0 amps

50,000 cycles electrical life at full load.

Contact configuration:

Up to 2 double make, double break switching.

Lamps: 2 each T-1 3/4 midget flange base individual input to each lamp - relampable from front.

ENVIRONMENTAL

Mark Ten is designed to qualify to Mil-S-22885, Mil-T-81714

The following Qualifications Tests apply:

1. Operation Force
2. Pushout Force
3. Dielectric
4. Insulation Resistance
5. Contact Resistance
6. Mechanical Endurance
7. Electrical Endurance
8. Lamp Retention
9. Shock, Vibration
11. Explosion
12. Humidity
13. Color

MECHANICAL

Switch actions:

Maintained depressed, alternate action
Momentary

Actuation Force: 3.5 lbs + 1 lb

Weight: 1.31 oz. for complete switch assy.

Mounting: Standard front panel mounting.

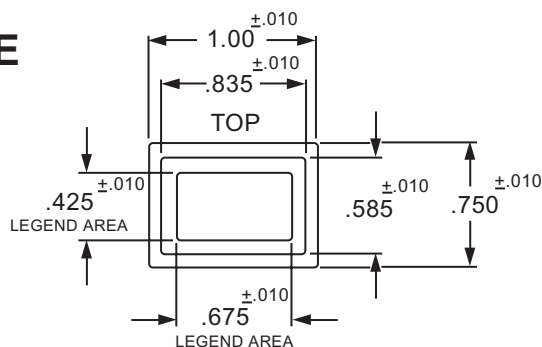
The entire switch and mounting sleeve may be removed from the front of the mounting panel, without access to the rear.

Mounting Type 1 - Removable mounting sleeve installed from the rear of the panel.

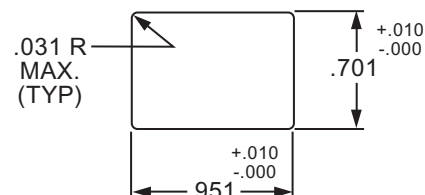
Pushbutton: Retained to switch housing.

ALL INFORMATION PUBLISHED IN THIS CATALOGUE IS EFFECTIVE AT TIME OF PUBLICATION AND IS SUBJECT TO CHANGE WITHOUT NOTICE.

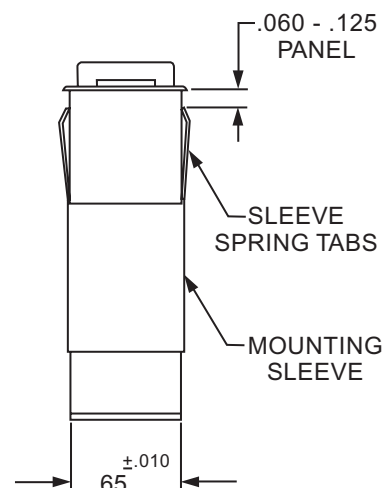
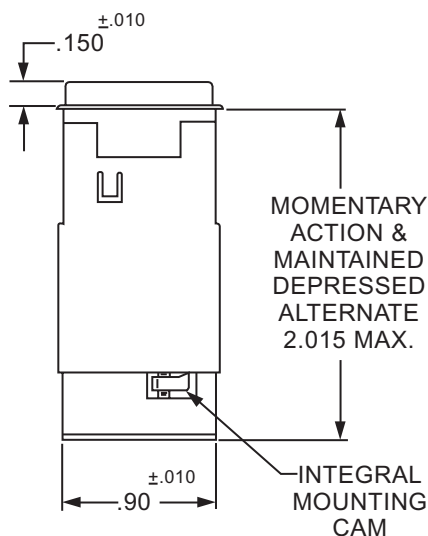
MAJOR OUTLINE DIMENSIONS



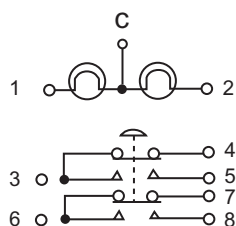
MOUNTING HOLE



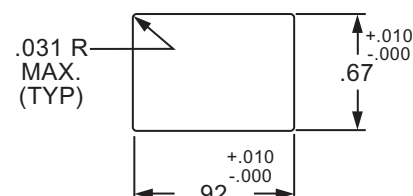
STANDARD MOUNTING



SCHEMATIC

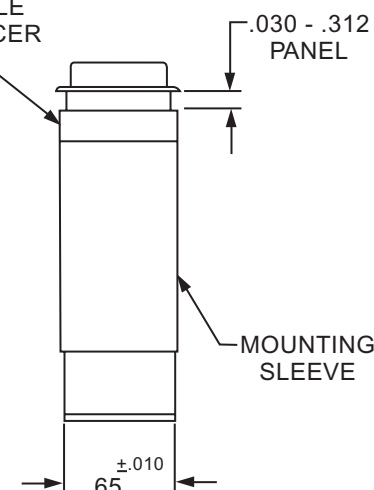
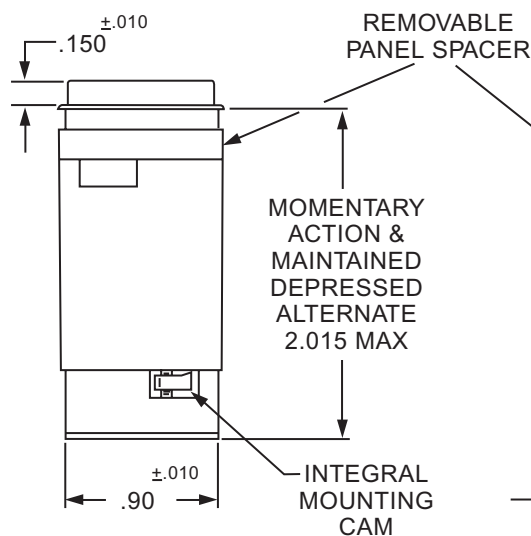


MOUNTING HOLE



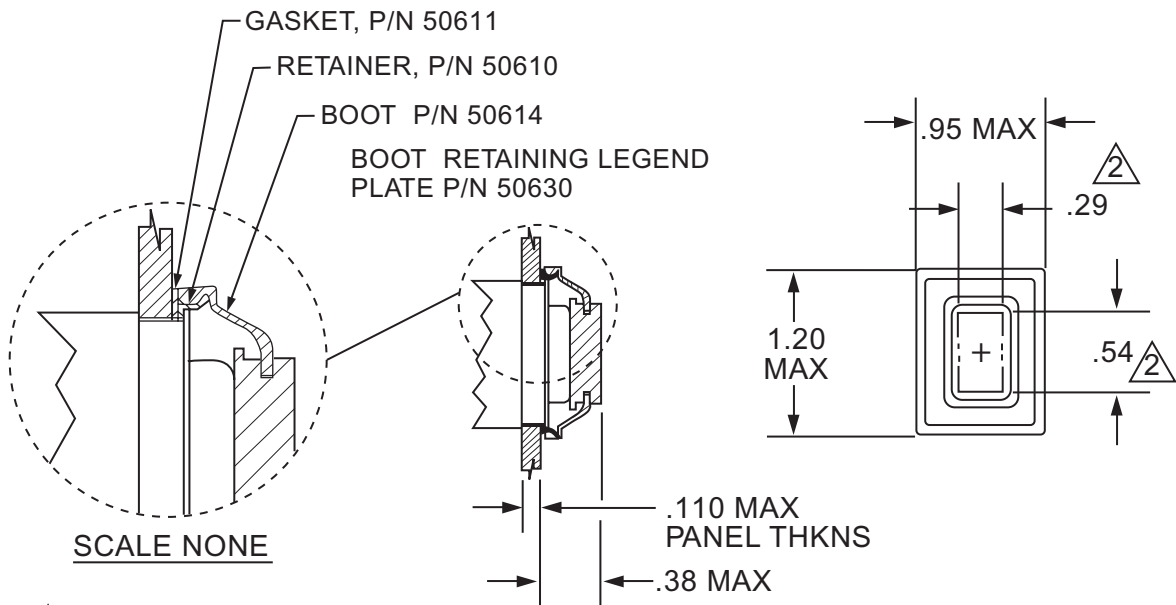
MOUNTING TYPE 1

Type 1 mounting- The switch is installed from the front of the mounting panel and a removable mounting sleeve is installed from the rear.



Tolerances: Unless otherwise specified - Fraction $\pm 1/32$ ", .XX $\pm .01$, XXX $\pm .005$

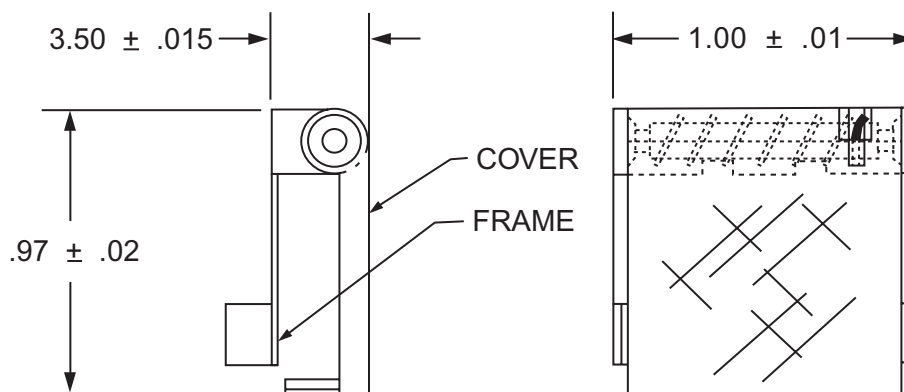
RUBBER BOOT KIT P/N 50645



△2 LEGEND VIEWING AREA.

1. BOOT RETAINING LEGEND PLATE REPLACES STANDARD LEGEND PLATE ORDER PER SHEET 8.

SWITCH GUARD P/N 50512



3. OPEN ENDED FRAME ALLOWS FRONT PANEL ASSEMBLY WITHOUT REMOVING HOUSING FROM PANEL.
2. COVER HINGES 180° WITH 0.8 OZ MIN LIFTING FORCE.
1. MATL:
FRAME: #301-304 CRES. COLOR: BLACK, PER MIL-C-13924.
COVER: TRANSPARENT POLYCARBONATE.

ORDERING PROCEDURE - Fill out Preliminary Product Specification using Tables below and submit to Jay-El for Customer Code assignment.

TABLE 1 BASIC P/N	TABLE 2 MOUNTING TYPE	TABLE 3 BEZEL COLOR	TABLE 4 SPLIT GROUND	TABLE 5 EMI	TABLE 6 INTEGRAL SEAL	TABLE 7 RETAINED PUSHBUTTON
10620	I II	BLACK CRES	NO	YES NO	NO	YES NO

TABLE 8 PUSHBUTTON STYLE	TABLE 9 SWITCH POLES	TABLE 10 CONTACTS	TABLE 11 SWITCH ACTION	TABLE 12 UNLIGHTED BACKGROUND COLOR	TABLE 13 DISPLAY DATA
STANDARD	0 INDICATOR 1 1 SPDT 2 2 SPDT	(ABOVE 1 AMP) S SILVER CONTACTS (BELOW 1 AMP) G GOLD CONTACTS	O INDICATOR M MOMENTARY A ALTERNATE	BLK BLACK DW DIFFUSED NG WHITE R NUETRAL A GRAY Y RED G AMBER B YELLOW BLUE	TO BE SPECIFIED ON PRELIMINARY FORM

TABLE 14 * LIGHTED COLOR	TABLE 15 ** DISPLAY TYPE	TABLE 16 CHARACTER SIZE AND PLACEMENT
C CLEAR R RED A AMBER Y YELLOW G GREEN B BLUE DW DIFFUSED WL WHITE NG NUETRAL AG AVIATION AY AVIATION AG1 AVIATION B1 BLUE 1	1. BLACK CHARATERS ON DIFFUSED WHITE BACKGROUND. BACKGROUND ILLUMINATES IN COLOR. 2. REPLACED BY DISPLAY TYPE 7. 3. NOT READILY DISCERNIBLE BEFORE LIGHTED. OPAQUE CHARACTERS ON NEUTRAL GRAY ILLUMINATING BACKGROUND. 4. ILLUMINATING CHARACTERS ON BLACK BACKGROUND. CHARACTERS SHALL NOT APPEAR ILLUMINATED IN UNLIT CONDITION. 5. CONTRASTING OPAQUE CHARACTERS ON ILLUMINATING COLORED BACKGROUND. BLACK CHARACTERS ON YELLOW OR AMBER BACKGROUND. WHITE CHARACTERS ON ALL OTHER COLORS. 6. DISPLAY TYPES NOT COVERED BY THIS TABLE SHOULD BE SPECIFIED BY A NOTE ON PURCHASE ORDER OR MAY BE SPECIFIED ON JAY-EL CUSTOMER SPECIFICATION. 7. WHITE CHARACTERS ILLUMINATE IN COLOR ON BLACK BACKGROUND. 8. SUNLIGHT READABLE ILLUMINATING CHARACTERS ARE HIDDEN BEFORE LIGHTED. BLACK BACKGROUND. CHARACTERS ARE VISIBLE IN DIRECT SUNLIGHT. (10,000FC) WHEN LIGHTED.	SEE CHARACTER INFORMATION CHART ** TABLE 17 * LAMPS T1 3/4 NUMBER 328 5V 330 12V 387 28V NEON 115V

ACCESSORIES May be ordered by the P/N's below:

Rubber Boot Kit - P/N 50645

Note: When ordering the above boot kits contact Jay-El for EMI-No EMI requirements.

Switch Guard - P/N 50512

NOTES:

- * AG OR AY SHOULD BE SPECIFIED WHEN GREEN OR YELLOW IS TO MEET MIL-C-25050.
- * AY APPEARS AMBER WHEN ILLUMINATED.
- * B1 & AG1 SPECIAL HIGH BRIGHT BLUE & GREEN RECOMMENDED FOR DISPLAY TYPE 8
- ** DISPLAY TYPE 8 AVAILABLE WITH .012 STROKE WIDTH ONLY
- * A1H NEON LAMPS ARE AVAILBALE WITH
- ** ONLY RED OR AMBER ILLUMINATION. NEON LAMPS REQUIRE BALLAST RESISTOR (NOT SUPPLIED)

CHARACTER INFORMATION (HORIZONTAL DIRECTION ONLY)

CONDENSED BLOCK	SIZE	STROKE	HEIGHT
JAY-EL PRODUCTS INC.	-1	.010	.072
JAY-EL PRODUCTS INC.	-2	.012	.087
JAY-EL PRODUCTS INC.	-3	.015	.109
JAY-EL PRODUCTS	-4	.018	.125
JAY-EL PRODUCTS	-5	.020	.145
JAY-EL PRODU	-6	.025	.175
JAY-EL PRO	-7	.035	.222
JAY-EL P	-8	.040	.290

To obtain more characters per line other type fonts are available. Contact Jay-El for further information.

MARK 10
P/N 10706



JAY-EL

Products



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Federal Mfg. Code No. 08719