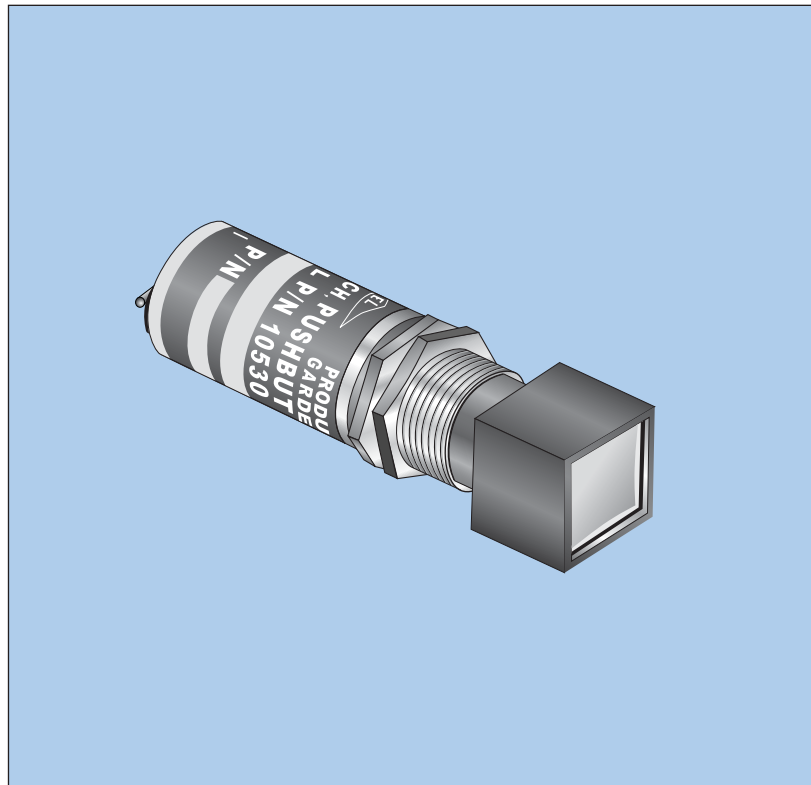


KEYBOARD
P/N 10530



JAY-EL

PRODUCTS



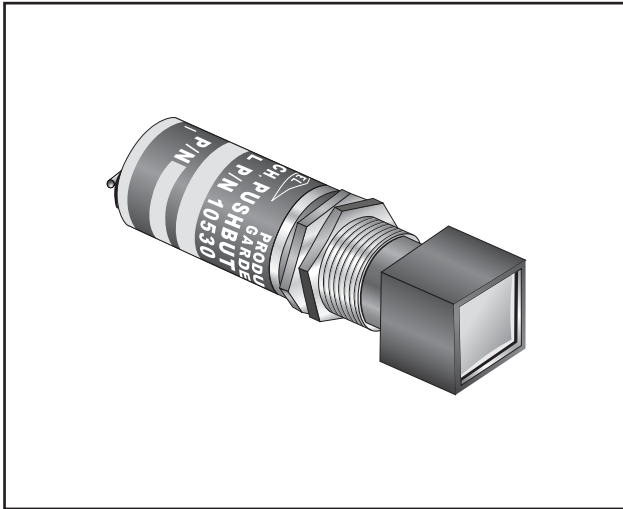
JAY-EL KEYBOARD P/N 10530
ILLUMINATED PUSHBUTTON SWITCH
MIL-S-22885/79 ON THE
QUALIFIED PRODUCTS LIST



Ducommun
Technologies



MIL-S-22885/79 on the Qualified Products List



ENGINEERING SPECIFICATIONS

ELECTRICAL

Switch Contacts: Silver alloy contacts are a standard. Gold contacts are recommended for reliable low level switching below 1.0 amperes.

Switch Ratings:

SILVER CONTACTS Maximum 2/

Load	Sea Level		50,000 FT 28VDC
	28VDC	115VAC, 60Hz	
Resistive	7.0 Amps	7 Amps	4.0 Amps
Inductive	4.0 Amps	7 Amps	2.5 Amps
Lamp 1/	2.5 Amps	2 Amps	2.5 Amps

1/Inrush, 10:1 for 20 milliseconds maximum.

2/ Minimum conditions are dependent on use and atmospheric conditions. Contact Jay-El for Detailed applications information.

GOLD CONTACTS

Gold Contacts: Sea level to 50,000 feet, 28V, 1Amp. Res., .5 Amp Ind.

Contact Resistance: 25 milliohms maximum in accordance with MIL-S-22885 for switch contacts and 1 Ohm maximum in accordance with MIL-S-22885 for lamp contacts.

Electrical Life: Para. 3.6.24 of MIL-S-22885

Lamp Type: T1 3/4 midget flange base incandescent is standard.

DESIGN FEATURES

The Keyboard Switch is an illuminated pushbutton switch designed and qualified for military, airborne and commercial computer applications. Dry circuit or power switch available.

Solder or Printed Circuit Board terminations in single or two pole double throw switching.

Lighting and display techniques are available to meet military and commercial requirements.

Seven different pushbutton sizes Sealed or Un-sealed.

LEGEND REQUIREMENTS

Many combinations of character of background illumination may be accomplished, including sunlight readable Display Type 8. NVIS Compatible lighting contact factory.

MECHANICAL

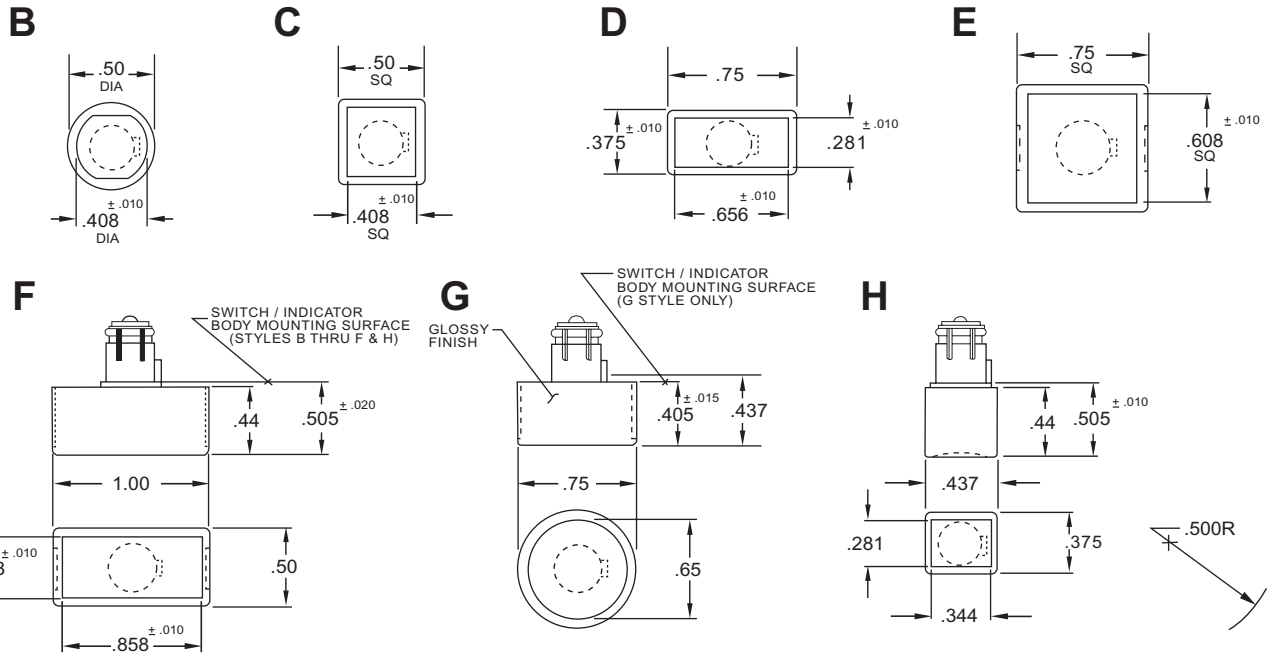
Light Weight : 18.3 grams maximum
 Actuation Force : 22 ± 4 oz.; unsealed
 : 24 ± 8 oz.; sealed
 Pre-travel : .125 ± .060
 Over-travel : .015 minimum
 Switch Action : 1 and 2 pole momentary
 Mounting Torque : 5 ± .5 inch lbs.
 Mechanical Life 100,000 cycles
 Pushbutton Extraction Force : 2 to 8 lbs.

ENVIRONMENTAL

Temperature high: +85° C Low: -55° C
 Humidity: Per MIL-STD-202, Method 106
 Explosion: Per MIL-STD-810, Method 511, Procedure 11
 Shock: 75 G's, 6 milliseconds, Half Sine and MIL-S-901C
 EMI: Per MIL-STD-285
 Vibration: 10 to 500 @ 0.06DA or 10g (peak) which ever is less.
 Basic switch contacts per MIL-S-8805

MAJOR OUTLINE DIMENSIONS

PUSHBUTTON STYLES Lens surface concave approximately .03 inches on B, C & D pushbutton only.
All Display Type 8 lens surfaces are flat.



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 DRIP PROOF SEAL	TABLE 7 RETAINED PUSHBUTTON	TABLE 8 PUSHBUTTON STYLE	TABLE 9 SWITCH POLES	TABLE 10 CONTACTS
10530	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	YES NO	YES NO	NOT APPLICABLE	B C D E F G H	0 INDICATOR 1 1 SPDT 2 2 SPDT	(ABOVE 1 AMP) S SILVER CONTACTS (BELOW 1 AMP) G GOLD CONTACTS

TABLE 11 SWITCH ACTION	TABLE 12 UNLIGHTED BACKGROUND COLOR	TABLE 13 DISPLAY DATA	TABLE 14 * LIGHTED COLOR	TABLE 15 * * DISPLAY TYPE	TABLE 16 CHARACTER SIZE AND PLACEMENT
O INDICATOR M MOMENTARY	BLK BLACK DW DIFFUSED WHITE NG NUETRAL GRAY R RED A AMBER Y YELLOW G GREEN B BLUE	TO BE SPECIFIED ON PRELIMINARY FORM	C CLEAR R RED A AMBER Y YELLOW G GREEN B BLUE DW DIFFUSED WHITE B1 BLUE 1 AG1 AVIATION GREEN1	WL WHITE LIGHT NG NUETRAL GRAY AG AVIATION GREEN AY AVIATION YELLOW AG1 AVIATION GREEN1	SEE CHARACTER INFORMATION CHART
				1. BLACK CHARATERS ON DIFFUSED WHITE BACKGROUND. BACKGROUND ILLUMINATES IN COLOR. 2. REPLACED BY DISPLAY TYPE 7. 3. UNREADABLE 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. 910,000FC) WHEN LIGHTED.	TABLE 17 LAMPS T1 3/4 NUMBER 328 5V 330 12V 387 28V

NOTES

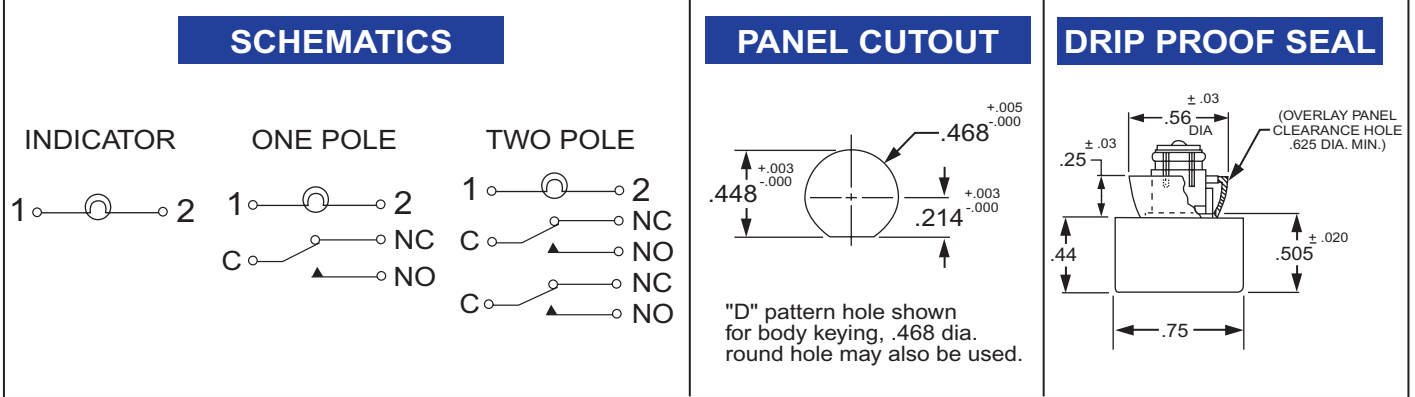
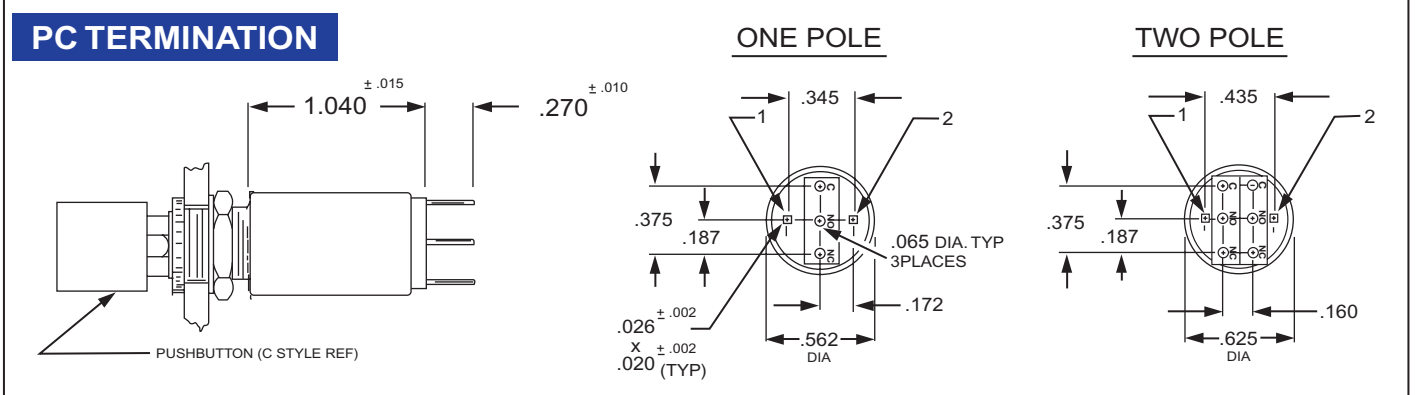
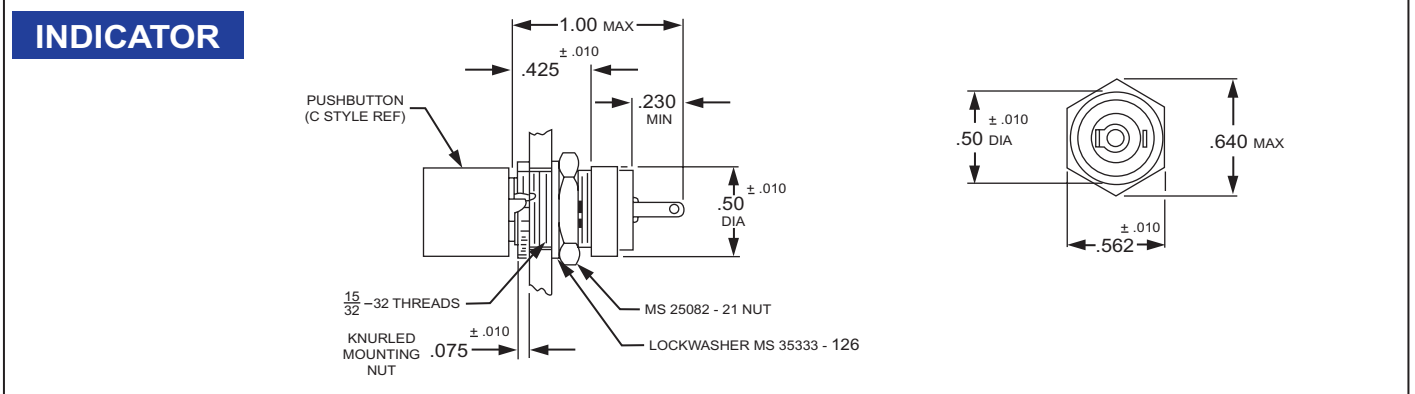
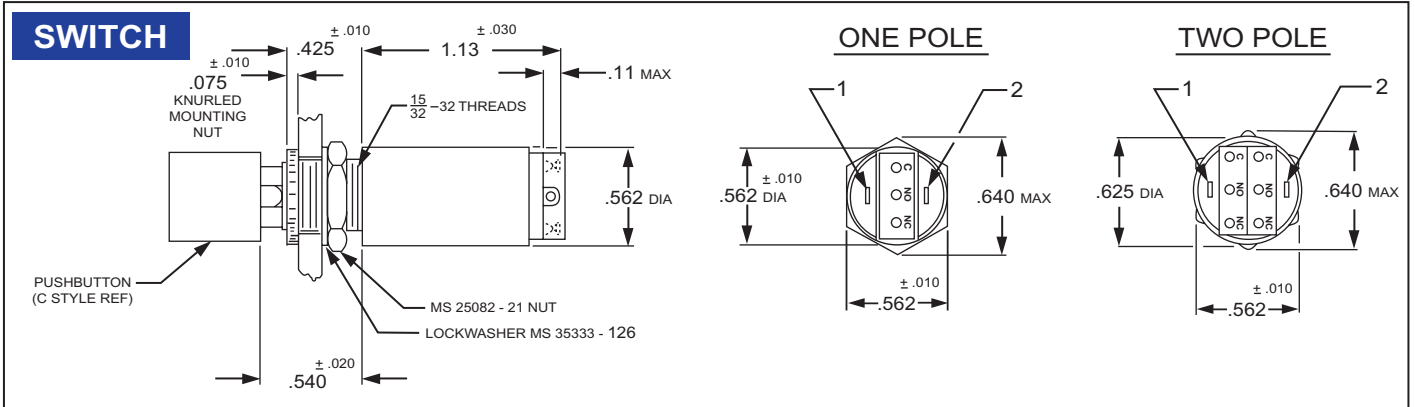
- * AG OR AY SHOULD BE SPECIFIED WHEN GREEN OR YELLOW IS TO MEET MIL - C - 25050 AY APPEARS AMBER WHEN ILLUMINATED.
- * B1 AND AG1 SPECIAL HIGH BRIGHT BLUE & GREEN RECOMMENDED FOR DISPLAY TYPE 8.
- * * DISPLAY TYPE 8 IS AVAILABLE IN .012 STROKE WIDTH ONLY.

CHARACTER INFORMATION (HORIZONTAL DIRECTION ONLY) IF ADDITIONAL CHARACTERS PER LINE ARE REQUIRED SPECIFY FUTURA MEDIUM CONDENSED.

FUTURA MEDIUM CONDESED	SIZE	STROKE	HEIGHT	CHARACTERS PER LINE						
				B	C	D	E	F	G	H
JAY - EL PRODUCTS INC.	-1	.012	.072	6	6	8	8	8	8	5
JAY - EL PRODUCTS INC.	-2	.012	.087	5	5	7	7	7	7	4
JAY - EL PRODUCTS INC.	-3	.012	.109	4	4	5	5	5	5	3
JAY - EL PRODUCTS	-4	.012	.125	3	3	4	4	4	4	3
JAY - EL PRODUCTS	-5	.012	.145	3	3	4	4	4	4	2
JAY - EL PRODU	-6	.012	.175	2	2	3	3	3	3	2
JAY - EL PRO	-7	.012	.222	2	2	2	2	2	2	2



MAJOR OUTLINE DIMENSIONS



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

