

# "ILLUMINATER™ " SERIES SEALED ROCKER SWITCHES

## DESCRIPTION

The new Illuminater series of front panel mounted rocker switches are sealed to meet the watertight requirements of MIL-STD-108E. Product variations are with standard or locking rocker Actuator, and single or double pole switching with multi-circuits. A variety of accessory items are also available. This product is ideally suited for use in harsh environmental applications.

## DESIGN FEATURES

- Front panel mounted
- Totally sealed switching chamber
- Various circuit variations
- Keyed assembly - actuator to bezel and base to connector
- Removable rocker button
- One or two lamp capability
- Full size clear lens with non-glare surface
- Icons located beneath lens surface (high wearability)
- Diffusion lens alters icon background lighting
- Minimum light leakage
- Various locking styles available
- Matte black textured finish on bezel/actuator
- Molded-in terminal identification
- Molded-in orientation mark

## SPECIFICATIONS

- Watertight per MIL-STD-108E
- Temperature range: -40°F to +160°F (-40°C to +71°C)
- Dielectric strength 1800 V RMS @ sea level
- Life: 50,000 cycles min. electrical; 100,000 cycles min. mechanical
- Silver plated contact - standard
- Flame retardant thermoplastic bezel and base
- Stainless steel mounting clips



## ACCESSORIES

- Indicator light assembly (see page C7)
- Filler plug (see page C6)
- Connector (see page C7)
- Gang mounting system

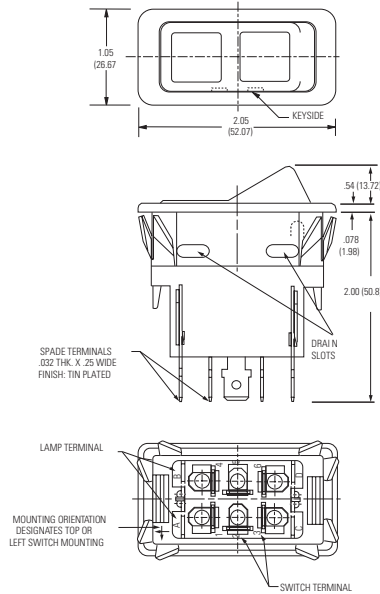
## OPTIONS

- Non-Illuminated switch
- Gold plated contacts

# "ILLUMINATER™" SERIES ENGINEERING DATA

SINGLE POLE ELECTRICAL RATINGS							DOUBLE POLE ELECTRICAL RATINGS						
Type of Operation	6 & 14VDC			28VDC			Type of Operation	6 & 14VDC			28VDC		
	Resistive Load	Inductive Load	Lamp Load	Resistive Load	Inductive Load	Lamp Load		Resistive Load	Inductive Load	Lamp Load	Resistive Load	Inductive Load	Lamp Load
Maintained	25	15	75	20	15	5	Maintained	30	20	10	20	15	7
Momentary	20	10	6	15	10	4	Momentary	25	15	75	18	10	5

## DIMENSIONS



W/O Panel Seal

Note: For recommended panel cutout dimensions, see page C7.

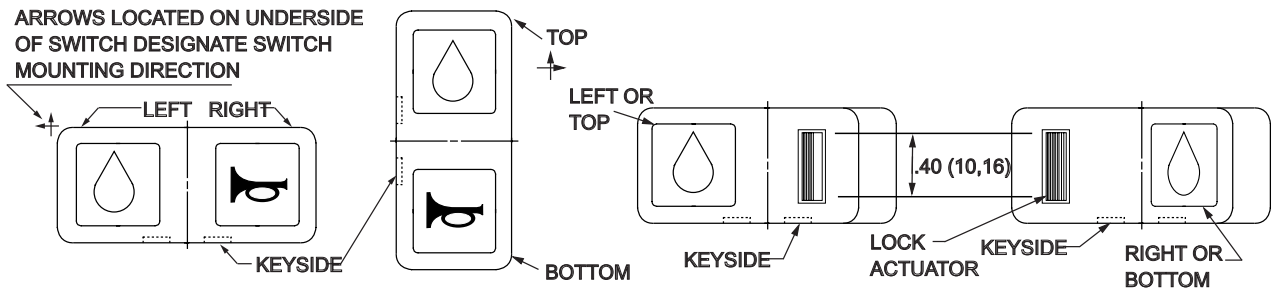


FIGURE 1  
Horizontal Mount

FIGURE 2  
Vertical Mount

FIGURE 3  
Locking Actuator Styles 4, 5, Y, & T

FIGURE 4  
Locking Actuator Styles 6, 7, W, & S

# "ILLUMINATER™" SERIES PART NUMBERING SYSTEM

### ACTUATOR STYLE (See Page C3, Figs 1-4)

Code	Style
1	(1) Lens Top or Left
2	(1) Lens Bottom or Right
3	(2) Lenses
4	Lock in both End Positions w/ Lens (or Plain Surface) Top or Left
5	Lock in Center Position w/ Lens (or Plain Surface) Top or Left
6	Lock in Both End Positions w/ Lens (or Plain Surface) Bottom or Right
7	Lock in Center Position w/Lens (or Plain Surface) Bottom or Right
A	Plain Rocker Button (No Lenses)
S	Lock in (1) End Position w/ Lens (or Plain Surface) Bottom or Right (Lens or Plain Surface Locked in "UP" Position)
T	Lock in (1) End Position w/ Lens (or Plain Surface) Top or Left (Lens or Plain Surface Locked in "UP" Position)
W	Lock in (1) End Position w/ Lens (or Plain Surface) Bottom or Right (Lens or Plain Surface Locked Actuated Position)
Y	Lock in (1) End Position w/ Lens (or Plain Surface) Top or Left (Lens or Plain Surface Locked Actuated Position)

### ICON (Location - Top or Left "only") (See Page C8 for Icon Selection Table)

Code DF	Function
	Oil

(Code "ZZ" = No Icon)

### ICON (Location - Bottom or Right "only") (See Page C8 for Icon Selection Table)

Code BF	Function
	Horn

(Code "ZZ" = No Icon)

### DIFFUSION LENS COLOR (Location - Top or Left "only")

Code	Color
0	None
1	Amber
2	Blue
3	Green
4	Red
5	White
6	Clear

### DIFFUSION LENS COLOR (Location - Bottom or Right "only")

Code	Color
0	None
1	Amber
2	Blue
3	Green
4	Red
5	White
6	Clear

### BAFFLE (Light Intensity Deflector)

Code	Color
A	(1) Top or Left
B	(1) Bottom or Right
C	(2) Baffles
Z	None

### ACTUATOR MOUNTING POSITION & COLOR

Code	Orientation
F	Optional / Black (Plain Actuator no Lenses)
H	Horizontal / Black
V	Vertical / Black

**B 01 A 5 J H 3 DF 2 ZZ 3 Z = B01A5JH3DF2ZZ3Z**

### NO. OF POLES

Code	Selection
A	Single
B	Double

### OPTIONAL FEATURES

Code	Option
A	Silver Contacts
G	Gold Contacts

### ROCKER TYPE

Code	Type
5	Illuminated
6	Non - Illuminated
7	Locking Feature Illuminated
8	Locking Feature Non-Illuminated

### LAMP SELECTION

Code	Voltage	No. Lamps	Location
D	14VDC	1	Top or Left
E	14VDC	1	Bottom or Right
F	14VDC	2	Both Locations
G	28VDC	1	Top or Left
H	28VDC	1	Bottom or Right
J	28VDC	2	Both Locations
K	See⓪	1	Top or Left
L	See⓪	1	Bottom or Right
M	See⓪	2	Both Locations
Z			Non - Illuminating

⓪ Furnished without lamps. Provisions for lamp available as indicated under location.

### CIRCUIT ARRANGEMENT

Code	Top			Available Locking Configuration	Code	Bottom			Available Locking Configuration
	or Left	Center	or Right			or Left	Center	or Right	
01	On	Off	On	4,5,6,7,Y,T,S	* 15	On	On	Mom On	5,7,Y,S
02	Mom On	Off	Mom On	5,7	* 16	Mom On	On	Mom On	5,7
03	On	Off	Mom On	5,7,Y,S	50	Mom On	Off	On	5,7,W,T
04	On	None	On	4,6,Y,W,T,S	51	Mom On	None	On	W,T
05	On	None	Mom On	Y,S	52	None	Off	On	7,W
06	On	Off	None	5,Y	53	Mom On	Off	None	5
07	None	Off	Mom On	7	54	None	Mom Off	On	W
08	On	Mom Off	None	Y	55	Off	None	On	4,6,Y,W,T,S
09	On	None	Off	4,6,Y,W,T,S	56	Mom Off	None	On	W,T
10	On	None	Mom Off	Y,S	57	Mom On	None	Off	W,T
11	Off	None	Mom On	Y,S	58	None	On	Mom On	7
12	Mom On	On	None	5	59	None	On	On	7,W
13	On	On	None	5,Y	* 60	Mom On	On	On	5,7,W,T
* 14	On	On	On	4,5,6,7,Y,W,T,S					

\* Double pole switches only

### PART NUMBER WORKSHEET

No. of Poles	Circuit Arrangement	Bezel Color	Bezel Style	Lamp Selection	Mounting Position	Actuator Style	Icon - Top or Left	Diffusion Lens Color	Icon - Bottom or Right	Diffusion Lens Color	Diffusion Lens Color
B	01	A	5	J	H	3	DF	2	ZZ	3	Z

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# "ILLUMINATER™ " SERIES INDICATOR AND ACCESSORIES

## DESCRIPTION

Along with this new line of illuminated rocker switches, we also offer a line of accessories. General styling and appearance match those of the basic switch, with design features as stated.

## DESIGN FEATURES

### Indicator

- Front panel mounted
- Keyed assembly
  - indicator lens assembly to bezel
  - connector to bezel superstructure
- Removable indicator lens assembly
- One or two lamp capability
- Full size clear lens with non-glare surface
- Icons located beneath lens surface
- Diffusion lens alters icon background lighting
- Matte black textured finish on indicator assembly
- Molded-in terminal identification
- Molded-in orientation mark

## SPECIFICATIONS / MATERIALS

- Temperature range: -40°F to +160°F (-40°C to +71°C)
- Flame retardant thermoplastic bezel and base
- Stainless steel mounting clips



## OTHER ACCESSORIES

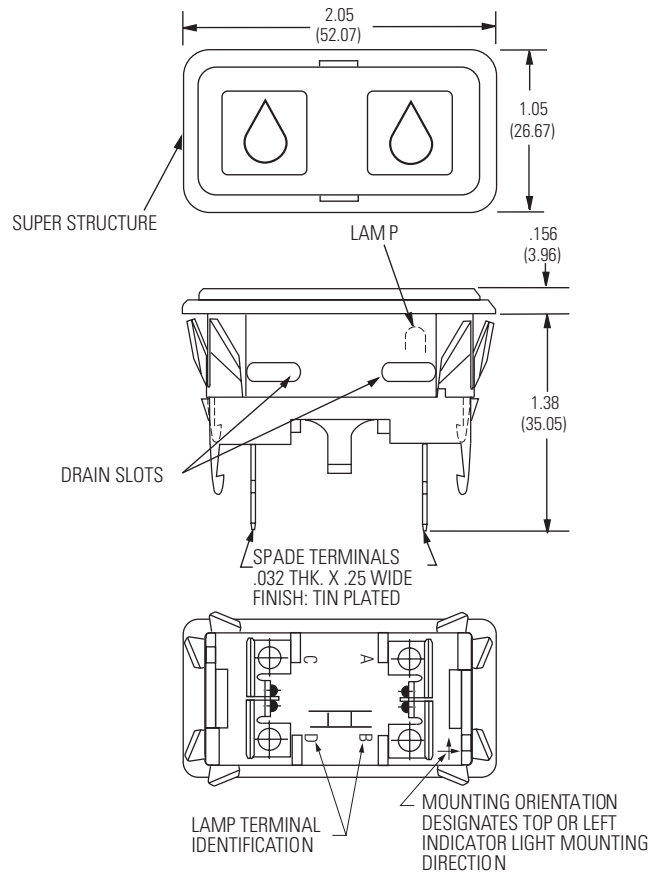
- Connector (see page C7)

## FILLER PLUG

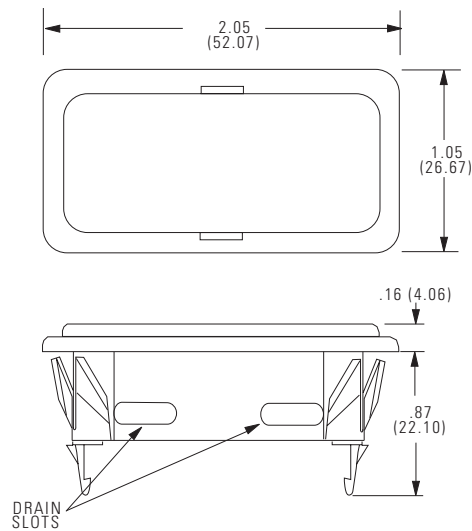
- Front panel mounted
- Accepts - connector/harness assembly
- Matte black textured finish

# "ILLUMINATER™ " SERIES INDICATOR AND ACCESSORIES ENGINEERING DATA

## INDICATOR



## FILLER PLUG - P/N P24010



Note: For recommended panel cutout dimensions, see page C7.

# "ILLUMINATER™" SERIES INDICATOR PART NUMBERING SYSTEM

**INDICATOR STYLE** (See Page C7, Figs. 1&2)

Code	Style
1	Lens Top or Left
2	Lens Bottom or Right
3	Two Lenses

**ICON** (Location - Top or Left "only")  
(See Page C8 for Icon Selection Table)

Code	Function
DF	Oil

(Code "ZZ" = No Icon)

**ICON** (Location - Bottom or Right "only")  
(See Page C8 for Icon Selection Table)

Code	Function
BF	Horn

(Code "ZZ" = No Icon)

**MOUNTING POSITION/COLOR**

Code	Color
D	Horizontal/ Black
E	Vertical/ Black

**DIFFUSION LENS COLOR**  
(Location - Top or Left "only")

Code	Color
0	None
1	Amber
2	Blue
3	Green
4	Red
5	White
6	Clear

**DIFFUSION LENS COLOR**  
(Location - Bottom or Right)

Code	Color
0	None
1	Amber
2	Blue
3	Green
4	Red
5	White
6	Clear

**ROO B 5 J D 3 DF 2 ZZ 3 Y = ROOB5JD3DF2ZZ3Y**

**INDICATOR SUPERSTRUCTURE**

**BEZEL COLOR**

Code	Color
B	Black

**BEZEL STYLE**

Code	Style
5	W/O Panel Seal

**LAMP SELECTION**

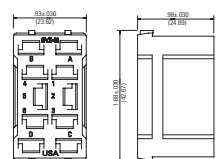
Code	Voltage	No. Lamps	Location
D	14VDC	1	Top or Left
E	14VDC	1	Bottom or Right
F	14VDC	2	Both Locations
G	28VDC	1	Top or Left
H	28VDC	1	Bottom or Right
J	28VDC	2	Both Locations
K	SeeⓄ	1	Top or Left
L	SeeⓄ	1	Bottom or Right
M	SeeⓄ	2	Both Locations

Ⓞ Furnished without lamps. Provisions for lamp available as indicated under location.

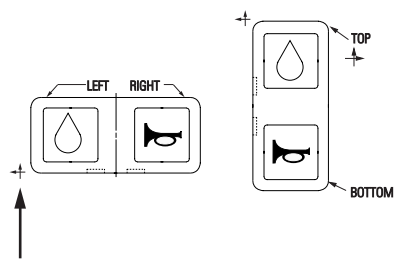
**PART NUMBER WORKSHEET**

	Indicator Superstructure	Bezel Color	Bezel Style	Lamp Selection	Mounting Position	Indicator Style	Icon - Top or Left	Diff. Lens Color	Icon - Bot. or Right	Diff. Lens Color	Lamp Selection
ROO	B	5	J	K	3	DF	2	ZZ	3		Y
ROO											Y
ROO											Y
ROO											Y

## ACCESSORY ITEM      INDICATOR STYLE      RECOMMENDED PANEL CUTOUT



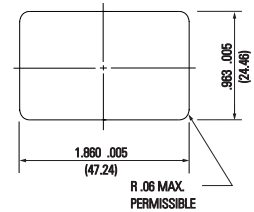
Connector Shell P/N 17-19388.



**Figure 1** Horizontal Mount.      **Figure 2** Vertical Mount

Mounting orientation shown on bottom of base designates top or left indicator light mounting direction.

## DIMENSIONS AND PANEL THICKNESS



Recommended Metal Panel Thickness .040 (1.02) to .140 (3.56)

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# "ILLUMINATER™ " SERIES ICON SELECTION TABLE

Code		Description	SAE Spec. No. J1632	Code		Description	SAE Spec. No. J1632
-DF		Oil	1056	-AX		Headlights - High/Upper Beam	0082
-CW		Level Indicator	0159	-AY		Headlights - Low/Dipped Beam	0083
-DG		Temperature	0034	-AZ		Work Light	1204
-DA		On/Start	5007	-DK		Parking Lights	0240
-DB		Off/Stop	5008	-CJ		Hazard Warning Lights	0085
-BF		Horn	0244	-BB		Interior Dome Light	1421
-BT		Fast	None	-BC		Beacon	1141
-BV		Slow	None	-DL		Turn Signals	0084
-CN		Lock	1656	-DM		Front Fog Lights	0633
-CR		Unlock	None	-CE		Rear Fog Lights	0634
-DH		Rearward Moving Machine Alarm	None	-BA		Instrument Illumination	1556
-DJ		Rearward Moving Machine Alarm-CANCEL	None	-BG		Windshield-Wiper	0086
-BU		Engine-Basic Symbol	1156	-BH		Windshield Washer	0088
-CK		Engine-Electrical Preheat (Low Temperature Start Aid)	1704	-CU		Windshield - Washer & Wiper	0087
-AJ		Engine-Gas Injection (Low Temperature Start Aid)	1547	-BJ		Rear Window - Wiper	0097
-BZ		Transmission-Basic Symbol	1166	-BK		Rear Window - Washer	0099
-BL		Fuel or Fuel System Basic Symbol	0245	-DN		Rear Window - Washer & Wiper	0098
				-AA		Heater/Interior Heating	0637
				-BE		Air Conditioning/Cooling System	0027
				-BD		Ventilating/Air Circulating Fan	0089

Typical icons illustrated are per SAE Pub No.s: J-107, J-1048, and J-1449. Additional icons are available upon request.

**Note: If no icon is required, enter code "ZZ".**