

16MM PILOT LIGHTS



When you need a space-saving pilot light with plenty of special features and flexibility, look to c3controls. Our 16mm pilot lights feature Lexan™ lenses in a variety of colors, and are built to handle even the harshest of environments. Our 100,000-hour LED lamps with leakage protection provide bright light output with superior visibility. And we've increased the range of our Multi-Voltage LED light unit to operate at any voltage from 20V to 277V AC or DC!



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PROVEN



Conformity to Standards:

INDICATING LIGHTS

UL 508
CSA C22.2 No. 14
IEC 60947-1, 60947-5-1

MULTI-VOLTAGE PILOT LIGHTS

UL 508
IEC 60947-1, 60947-5-1

Certifications:

UL File #: E68568 (Guide NKCR, NKCR7)
CSA File #: 47446-9

CE Marked (per EU Low Voltage Directive 2006/95/EC and
RoHS Directive 2011/65/EU)

UL File #: E68568 (Guide NKCR, NKCR7)




CE Marked (per EU Low Voltage Directive 2006/95/EC and
RoHS Directive 2011/65/EU)

Visit www.c3controls.com to download product certifications.

16MM PILOT LIGHTS

Within our extensive product portfolio is our line of 16mm Pilot Lights, just one example of our superior product quality. Each product is designed and manufactured to the needs of the machine builder. Check out all the features of our Series 16 below!

COMPACT LIGHTS SAVE YOU VALUABLE SPACE WHERE YOU NEED IT MOST

✓ Proven	Our 16mm operators are UL Listed, CSA Certified and CE marked meeting global standards requirements.   
✓ Quick and Simple	Front panel mounting for simple installation and lamp replacement.
✓ Environmentally Secure	With 4/4X and IP65 ratings, our 16mm line of pilot lights are built to last and withstand dust, corrosion, ice, and rain.
✓ Long Lasting	Our reflection technology and state-of-the-art LED lamps improve visibility from all angles, and c3controls LED lamps last 100,000 hours—that's 11.4 years!
✓ Light Units Run Cool	With premium engineered thermoplastics the light units run cool while providing extreme light intensity versus competitor units that run hot and produce high heat.
✓ Heavy Duty	Polyester construction provides superior durability, corrosion resistance, moisture rejection and electrical insulation, and encases the resistors to keep heat away from the wires.
✓ Simple Customization	Various lens color options are available for appropriate operator interface and our light units come in incandescent, neon or LED.
✓ Visible Certifications	Our product certifications and electrical ratings are clearly marked on the outside of the operator for easy reference during installation.
✓ Enhanced Safety	Our field-installable IP20 terminal guards are transparent to maintain terminal visibility and they snap securely in place without the use of tools.
✓ Stability	All 16mm lights use a miniature bayonet base to provide reliable security for the lamps.
✓ Lifetime Warranty*	Every product is backed by our lifetime warranty—unmatched in the industry—bringing you quality components that perform in the most demanding applications.
✓ Guaranteed Same-Day Shipping*	Product availability reduces inventory, and improves cash-flow—saving you money. With c3controls any order for standard catalog items received by 6:00pm ET is guaranteed to ship same-day.
✓ Advantage Pricing	Our approach to product development, manufacturing, and focus on servicing the OEM and Electrical Equipment Builder reduces cost. The result—the best value in the industry.

*See c3controls Terms & Conditions

“By utilizing a c3controls pilot light that works in 20V-277V AC and DC terminals, we're able to streamline our inventory requirements because we only need one product for any application.”

Mike Hughes, President • **Packaged Refrigeration Systems**

Full Voltage Indicating Pilot Light



Indicating Pilot Light



Multi-Voltage Pilot Light



UNIQUE PRODUCT LINE FEATURES

EXCLUSIVE MULTI-VOLTAGE LIGHTS



c3controls state-of-the-art multi-voltage light modules—the only U.S. manufactured multi-voltage light in the industry!—operate at any voltage from 20V to 277V AC or DC without losing intensity.

WIDE RANGE OF APPLICATIONS



Multiple light designs (full voltage, transformer, resistor, and dual input) to cover a broad variety of applications up to 600V.

QUALITY MATERIALS



c3controls selects the highest quality raw materials to ensure our products outlast the competition, including Lexan™ plastic for our lenses—improving visibility and resistance to high impact for reliable performance, even in high ambient temperatures.

**FIND IT
FAST**

16mm Pilot Lights



- Certifications
- Specifications
- Dimension Drawings
- Installation Instructions
- Easy to Buy

www.c3controls.com

IT'S EASY TO BUILD YOUR OWN PILOT LIGHT

Simply pick the code number from each of the sections below and combine them to build your part number.

Indicating Lights



Example: To build one of our most popular Pilot Lights, the part number would be **I + II + MPLL + IV + V** or **MFVL120LG-MPLLGN**



I. LIGHT MODULE TYPE & VOLTAGE

CODE	DESCRIPTION	LIST
FULL VOLTAGE (SHORT CASE)		
MFVL6	6V AC/DC	
MFVL12	12V AC/DC	
MFVL24	24V AC/DC	
MFVL120	120V AC/DC	
TRANSFORMER 50/60 Hz (LONG CASE)		
MTFL120	120V AC	
MTFL240	240V AC	
MTFL480	480V AC	
RESISTOR (CASE SIZE VARIES)		
MRL120*	120V AC/DC	
MRL125D*	125V AC/DC (LED Only)	
MRL240	240V AC/DC	
MRL480	480V AC/DC	
MRL600	600V AC/DC (Neon Only)	
DUAL INPUT REMOTE TEST (LONG CASE)		
MRTL6	6V AC/DC	
MRTL12	12V AC/DC	
MRTL24	24V AC/DC	
MRTL120	120V AC/DC	

*NOTE: MRL120 & MRL125D have grey housings.

II. LAMP TYPE/COLOR

CODE	COLOR	LIST
LED		
LA	Amber	
LB	Blue	
LG	Green	
LR	Red	
LW	White	
INCANDESCENT		
(Blank)	Clear	—
F	Clear Flashing Bulb*	
*NOTE: Incandescent flashing bulbs are available for any 6V full voltage or transformer application.		
NEON†		
NG	Green	—
NR	Red	—
†NOTE: Only available in MFVL120, †MRL240, MRL480 and MRL600.		
NL	No Lamp	

III. LENS TYPE

CODE	DESCRIPTION	LIST
MPLL	Miniature Pilot Light Lens	

IV. LENS COLOR

CODE	COLOR
AR	Amber
BE	Blue
CR	Clear
GN	Green
RD	Red
WE	White
YW	Yellow

V. OPTIONS

CODE	DESCRIPTION	LIST
(Blank)	None	—
IP20	IP20 Guard	

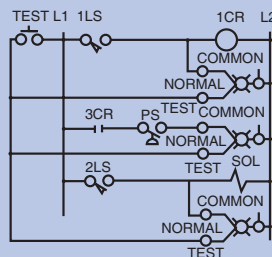
NOTE: IP20 Guards are not an option for MRTL.

SEE PAGE 378 FOR LAMP REPLACEMENT CHART AND PAGE 379 FOR LAMP TECHNICAL DATA.

DISCOUNT SCHEDULE E

DUAL INPUT REMOTE TEST

Our unique Dual Input Remote light unit can be used as a pilot light while also permitting the testing of a number of lights from a single push button. A diode circuit isolates the test supply from the normal supply. The schematic shown represents a typical dual input application.



AVAILABLE LENS COLORS FOR INDICATING PILOT LIGHTS



16MM INDICATING LIGHTS

Our 16mm Indicating Lights feature polyester construction for superior corrosion resistance, moisture rejection and electrical insulation. All units are supplied with #6 terminal screws with self-lifting captive wire clamps to accommodate #22 through two #12 AWG wires (0.5 - 4mm²) per terminal. Nickel plated clamp rings are ideal for corrosive environments. All units mount in a round 5/8" (16mm) hole and are directly interchangeable with competitor units. Units are available in different case depths for easy installation in your control panel – whatever the dimensions. All c3controls 16mm operators are UL Listed and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, light units are also listed for Type 1, 2, 3, 3R, 12, 13 and IP65.

Product features include:

- All lights use miniature bayonet base lamps to provide reliable lamp secureness.
- Available with Incandescent, Neon or our LED lamps with leakage protection.



16MM PILOT LIGHTS

UNIQUE PRODUCT FEATURES



1. Thin, compact, insulating polyester housing provides added protection for those tight fitting spaces.
2. Premium engineered thermoplastics keep the light units running cool while providing extreme light intensity versus competitor units that run hot and produce high heat.
3. Heavy-duty brass current carrying components for improved conductivity and corrosion resistance.
4. High-tech LED lamps offer the latest and most current technology providing leakage protection, great light output and increased visibility for side views – and lasts up to 100,000 hours!
5. Front of panel lamp change without removing device from panel.
6. Our rugged Lexan™ lenses can resist high impact for reliable performance in most environments – even in high ambient temperatures.
7. Enhanced safety with field installable IP20 terminal guards are transparent to maintain terminal visibility. Their construction provides easy access to the device terminals – making wiring fast and convenient, and they snap securely in place without the use of tools.

For convenient terminal marking our IP20 terminal guards utilize Series WTB2 markers (see page 439), simplifying wiring and troubleshooting.



SOME OF OUR POPULAR CONFIGURATIONS:

16MM INDICATING LIGHTS		
PART NUMBER	DESCRIPTION	LIST
MRL120LR-MPLLRD	120V Resistor w/Red LED and Red Lens	
MRL120LA-MPLLAR	120V Resistor w/Amber LED and Amber Lens	
MFVL120LG-MPLLG	120V Full Voltage w/Green LED and Green Lens	
MTFL120-MPLLRD	120V Transformer w/Incand. Lamp and Red Lens	

IT'S EASY TO BUILD YOUR OWN PILOT LIGHT

Simply pick the code number from each of the sections below and combine them to build your part number.

20-277V Multi-Voltage Pilot Lights

I **II** **III** - **MPLL** **V** - **VI**

Example: To build one of our most popular Pilot Lights, the part number would be **I + II + III + MPLL + V + VI** or **16MV20-277DLW-MPLLGN**



I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
16MV20-277	Non-Relampable Multi-Voltage Pilot Light	
16RMV20-277	Relampable Multi-Voltage Pilot Light	

II. LED LAMP FUNCTION

CODE	DESCRIPTION	LIST
D	Standard	—
F	Flashing	

III. LED LAMP COLOR

CODE	DESCRIPTION	LIST
LED MULTI-VOLTAGE, NON-RELAMPABLE		
LW	White	—
LED MULTI-VOLTAGE, RELAMPABLE		
LA	Amber	
LB	Blue	
LG	Green	
LR	Red	
LT	Translucent White	
LW	White	

IV. LENS TYPE

CODE	DESCRIPTION	LIST
MPLL	Miniature Pilot Light Lens	

V. LENS COLOR

CODE	DESCRIPTION	LIST
AR	Amber	
BE	Blue	
CR	Clear	
GN	Green	
RD	Red	
WE	White	
YW	Yellow	

VI. OPTIONS

CODE	DESCRIPTION	LIST
(Blank)	None	—
IP20	IP20 Guard	



SEE PAGE 378 FOR LAMP REPLACEMENT CHART AND PAGE 379 FOR LAMP TECHNICAL DATA.

c3controls LED lamps last 100,000 hours — that's 11.4 years!

SOME OF OUR POPULAR CONFIGURATIONS:

16MM MULTI-VOLTAGE PILOT LIGHTS

PART NUMBER	DESCRIPTION	LIST
16MV20-277DLW-MPLLAR	Multi-Voltage 20-277V, Non-Relampable w/ White LED and Amber Lens	
16MV20-277DLW-MPLLGN	Multi-Voltage 20-277V, Non-Relampable w/ White LED and Green Lens	
16MV20-277DLW-MPLLRD	Multi-Voltage 20-277V, Non-Relampable w/ White LED and Red Lens	
16RMV20-277DLA-MPLLAR	Multi-Voltage 20-277V, Relampable w/ Amber LED and Amber Lens	
16RMV20-277DLG-MPLLGN	Multi-Voltage 20-277V, Relampable w/ Green LED and Green Lens	
16RMV20-277DLR-MPLLRD	Multi-Voltage 20-277V, Relampable w/ Red LED and Red Lens	

AVAILABLE LENS COLORS FOR MULTI-VOLTAGE PILOT LIGHTS



16MM MULTI-VOLTAGE PILOT LIGHTS

Our 16mm Multi-Voltage Pilot Lights feature polyester construction for superior corrosion resistance, moisture rejection and electrical insulation. All units are supplied with #6 terminal screws with self-lifting captive wire clamps to accommodate #22 through two #12 AWG wires (0.5 - 4mm²) per terminal. Nickel plated clamp rings are ideal for corrosive environments. All units mount in a round 5/8" (16mm) hole and are directly interchangeable with competitor units. The compact size means you can put more into a smaller panel, lowering your cost while boosting the functionality of your machine.

Product features include:

- Available in non-relampable and relampable constructions.
- UL Listed Type 1, 2, 3, 3R, 4/4X, 12, 13 and IP65 ratings for the most demanding applications—including wash-downs and corrosive environments.
- Heavy-duty brass current carrying components for improved conductivity and corrosion resistance.
- Bi-polar design means functionality is independent of which lead is connected to each terminal.
- Rugged Lexan™ lenses resist high impact for reliable performance in most environments—even in high ambient temperatures.
- Superior performance even in applications with shock and vibration.
- Enhanced safety with field installable IP20 terminal guards are transparent to maintain terminal visibility. Their construction provides easy access to the device terminals—making wiring fast and convenient, and they snap securely in place without the use of tools.

For convenient terminal marking our IP20 guards utilize Series WTB2 markers (see page 439), simplifying wiring and troubleshooting.



UNIQUE PRODUCT FEATURES

c3
Exclusive!

ELIMINATE THE HEADACHE OF MULTIPLE LIGHTS TO MATCH MULTIPLE VOLTAGES!

Our state-of-the-art, super bright LEDs and printed circuit boards allow you to operate this light at any voltage from 20V to 277V AC or DC without losing light intensity or consuming a lot of power. We offer the same range in our flashing light as well. One light unit covers a lot of applications, reducing your inventory! All you have to do is choose your lens color.

- Wider operating voltage range of 20V-277V AC or DC.
- Depth behind the panel at 1-23/32" / 43.6mm.
- Integrated light circuit protection. We included a fusible link in the electronic circuit, resulting in predictable failure mode (open circuit) and improving reliability.
- A redesigned circuit allows you to use the light unit in a wider range of applications, including electronic and coil applications where leakage current and voltages may exist.



IT'S EASY TO BUILD YOUR OWN LEGEND PLATE

Simply pick the code number from each of the sections below and combine them to build your part number.

Legend Plates



All legend plates are a 2-ply laminated plastic, laser engraved for a permanent and quality appearance. Uppercase is standard unless specified.



I. LEGEND PLATE TYPE

CODE	DESCRIPTION	LIST
MLLP	Standard 2"h x 2"w	
MLLPH	Horizontal 1"h x 2"w	
MLLPV	Vertical 2"h x 1"w	

Legend plates feature 4 lines of text with approximately 7 characters per line.

II. FACE AND LETTER COLOR

CODE	FACE COLOR	LETTER COLOR
AL	Aluminum	Black
(Blank)	Black	White
BE	Blue	White
GN	Green	White
RD	Red	White
WE	White	Black
YW	Yellow	Black

III. LEGEND DESIGNATION

CODE	DESCRIPTION
00	(BLANK)
01	AUTO
02	CLOSE
26	MOTOR RUN
12	OFF
13	ON
14	OPEN
27	OVERLOAD
15	POWER OFF
16	POWER ON
18	RESET
20	RUN
24	TEST
29	TRIP

NOT FINDING WHAT YOU NEED IN A STANDARD PLATE?

We offer Special and Custom Engraving up to 12" x 24" (304.8mm x 609.6mm). Consult factory or see page 376 for details.

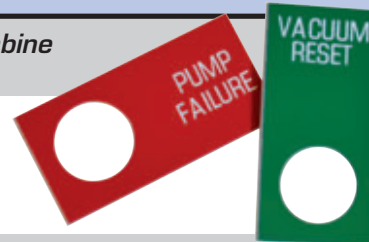
While our standard legend plates are available for same day shipping, our special and custom legend plates are not.

DISCOUNT
SCHEDULE **E**

Simply pick the code number from each of the sections below and combine them to build your part number.

SP

All legend plates are a 2-ply laminated plastic, laser engraved for a permanent and quality appearance. Uppercase is standard unless specified.



CODE	DESCRIPTION	LIST
MLLP	Standard 2”h x 2”w	
MLLPH	Horizontal 1”h x 2”w	
MLLPV	Vertical 2”h x 1”w	

Legend plates feature 4 lines of text with approximately 7 characters per line.

CODE	DESCRIPTION	LIST
SP	Special Legend	

NOTE: \$6.00 each when ordering 3 or more of the same exact legend plate.

Upon receipt of your order, legend plates will be set-up as specified and a proof will be sent to you prior to production to ensure accuracy.

To order, submit your drawing to:

Mail: c3controls
Attn: Customer First
PO Box 496
Beaver, PA 15009

Fax: 724.775.5283

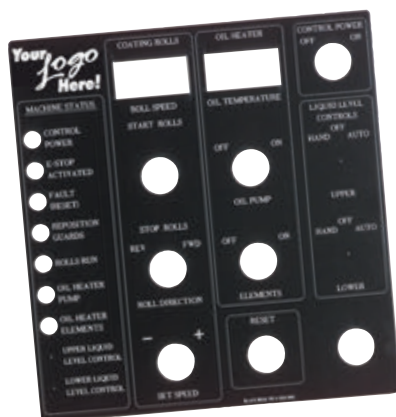
Email: legendplates@c3controls.com

To help simplify your order process, templates are available by calling our factory at 724.775.7926 or reference one of the drawings shown on page 380.

Special legend plates are not available for same day shipping.

CODE	FACE COLOR	LETTER COLOR
AL	Aluminum	Black
(Blank)	Black	White
BE	Blue	White
GN	Green	White
RD	Red	White
WE	White	Black
YW	Yellow	Black

DISCOUNT SCHEDULE



(Sample custom plate)

- **Add your Corporate Logo!** Send us your corporate logo electronically to promote your company image in a clean professional legend plate.
- Available in 2-ply 12" x 24" (304.8mm x 609.6mm) sheets of laminated plastic for custom laser engraving.
- To order, specify part number MLLP-CP.
- Initial Set-Up Fee Per Legend Plate: \$50/hour (minimum fee \$50.00).
- \$2.00/Square Inch (minimum \$18.00).
- Design services available. Consult factory for details and hourly rate.
- Custom legend plates are not available for same-day shipping.

To order, submit your drawing to:

Mail: c3controls
Attn: Customer First
PO Box 496
Beaver, PA 15009

Fax: 724.775.5283

Email: legendplates@c3controls.com

LED, INCANDESCENT & NEON REPLACEMENT LAMPS

c3controls offers a full range of lamp options in a miniature bayonet base for direct interchangeability which provides flexibility in choosing the best lamp for each installation application. Multiple voltage options in Incandescent, LED and Neon lamps are available. Refer to the chart on page 378 to determine the appropriate replacement lamp based on your operator voltage. For lamp technical data, see page 379.

LED Lamps (for use with 16mm indicating lights)

LED **I** **II** **III**

To order LED Lamps, the part number would be **LED + II + III**



I. LAMP TYPE

CODE	DESCRIPTION	LIST
LED	LED Lamp	

Our LED lamps feature built-in leakage protection.

II. VOLTAGE

CODE	DESCRIPTION
6	6V
12	12V
24	24V
130	130V

NOTE: Not for use with 16RMV20-277 Relampable Multi-Voltage Pilot Lights.

III. LAMP COLOR

CODE	COLOR
AR	Amber
BE	Blue
GN	Green
RD	Red
WE	White

LED Lamps (for use with 16mm relampable multi-voltage pilot lights)

RMVLED1 **I** **II**

To order LED Lamps, the part number would be **RMVLED1 + II**



I. LAMP TYPE

CODE	DESCRIPTION	FOR USE WITH	LIST
RMVLED1	LED Lamp	16RMV20-277 Relampable Multi-Voltage Pilot Lights	

II. LAMP COLOR

CODE	COLOR
AR	Amber
BE	Blue
GN	Green
RD	Red
TW	Translucent White
WE	White

Incandescent Lamps



CODE	VOLTAGE	LIST
FVB6	6V	
FVB12	12V	
FVB24	24V	
FVB55	55V	
FVB120	120V	
FVB6F	*6V Flashing	

*NOTE: There may be a 5-15 second delay before flashing begins.

Neon Lamps



CODE	VOLTAGE	COLOR	LIST
FVB120NG	120V	Green	
FVB120NR	120V	Red	

DISCOUNT
SCHEDULE **E**

LAMP REMOVAL TOOL

Used to facilitate the removal of lamps.

CODE	DESCRIPTION	LIST
LRT	Lamp Removal Tool	

CLAMP RING WRENCH

To simplify tightening and loosening of standard clamp rings. Won't scratch your lens or panel.

CODE	DESCRIPTION	LIST
16CRW	16mm Clamp Ring Wrench	

IP20 TERMINAL GUARD

Our IP20 terminal guard protects against accidental contact with live parts and can be ordered separately as an accessory or factory installed providing the convenience of a single catalog number. NOTE: For factory installed guards, refer to the operator page to determine the appropriate part number. For convenient terminal marking our IP20 terminal guards utilize Series WTB2 markers (see page 439), simplifying wiring and troubleshooting.

CODE	FOR USE WITH	LIST
MLIP20	All 16mm Light Modules	

DISCOUNT
SCHEDULE **E**

16MM REPLACEMENT LAMP REFERENCE CHART (FOR REFERENCE ONLY - USE CHARTS ON PAGE 377 TO ORDER)

OPERATOR CODE	OPERATOR VOLTAGE	LED (ALL COLORS)	INCANDESCENT	NEON
MFVL6	Full Voltage 6V AC/DC	LED6	FVB6 or FVB6F	—
MFVL12	Full Voltage 12V AC/DC	LED12	FVB12	—
MFVL24	Full Voltage 24V AC/DC	LED24	FVB24	—
MFVL120	Full Voltage 120V AC/DC	LED130	FVB120	FVB120NG or FVB120NR
MTFL120	Transformer 120V AC	LED6	FVB6 or FVB6F	—
MTFL240	Transformer 240V AC	LED6	FVB6 or FVB6F	—
MTFL480	Transformer 480V AC	LED6	FVB6 or FVB6F	—
MRL120L	Resistor 120V AC/DC*	LED24	—	—
MRL120I	Resistor 120V AC/DC*	—	FVB55	—
MRL125DL	Resistor 125V DC*	LED24	—	—
MRL240L	Resistor 240V AC/DC*	LED24	—	—
MRL240I	Resistor 240V AC/DC*	—	FVB120	—
MRL240N	Resistor 240V AC/DC*	—	—	FVB120NG or FVB120NR
MRL480I	Resistor 480V AC/DC*	—	FVB120	—
MRL480N	Resistor 480V AC/DC*	—	—	FVB120NG or FVB120NR
MRL600N	Resistor 600V AC/DC*	—	—	FVB120NG or FVB120NR
MRTL6	Dual Input 6V AC/DC	LED6	FVB6	—
MRTL12	Dual Input 12V AC/DC	LED12	FVB12	—
MRTL24	Dual Input 24V AC/DC	LED24	FVB24	—
MRTL120	Dual Input 120V AC/DC	LED130	FVB55	—
16RMV	Multi-Voltage 20-277V AC/DC	RMVLED1	—	—

*NOTE: Lamps are unique to Resistor Light Units. Refer to side of light unit for correct replacement lamp part number.

SPECIFICATIONS:

16MM PILOT LIGHTS

ELECTRICAL RATINGS								
Lamp	Industry Number	Rated Volts	Lumens (MSCD)	Design Life (Hrs.)	Current Draw (mA)	Lamp Type	Shock & Vibration	Leakage Protection
FVB6	1866	6.3V	0.65	5,000	250	Incandescent	Very Good	N/A
FVB12	756	14V	0.31	15,000	80	Incandescent	Good	N/A
FVB24	757	28V	0.62	7,500	80	Incandescent	Good	N/A
FVB55	1835	55V	1.1	5,000	50	Incandescent	Good	N/A
FVB120	**	130V	0.36	10,000	20	Incandescent	Good	N/A
LED6	**	6V	Varies w/ Color 2000 mcd Typical	100,000	50	LED*	Excellent	14 mA
LED12	**	12V		100,000	<20	LED*	Excellent	4 mA
LED24	**	24V		100,000	<20	LED*	Excellent	4 mA
LED130	**	120/130V		100,000	<10	LED*	Excellent	2 mA
FVB120NG		95-135V	Typical (Glow)	25,000	<5	Neon/Green	Very Good	N/A
FVB120NR		95-135V	Typical (Glow)	25,000	<5	Neon/Red	Very Good	N/A
RMVLED1	***	20-277V	Varies w/ Color 2000 mcd Typical (white 6000 mcd)	100,000	See Multi-Voltage Chart Below	LED	Excellent	N/A

MULTI-VOLTAGE POWER CONSUMPTION & CURRENT DRAW

System Voltage	AC Current Draw (mA)	DC Current Draw (mA)	Power Consumption (W)
24V	21	20	AC: <1 DC: <1/2
48V	17	7	
120V	3.5	—	
125V	—	3	
240V	2.5	—	
250V	—	2	
277V	2.5	—	

FLASHING RATE (Flashing board only)

40-50 ops/min

PROTECTION FEATURES

Fused to Fail Open

Yes

TRANSFORMER INDICATING LIGHTS

System Voltage	c3 Lamp	Industry Number	Secondary Volts	Expected Lamp Life (Hrs.)	Transformer Burden	Lamp Type	Shock & Vibration
120	FVB6	1866	6.3V	5,000	2 VA	Incandescent	Very Good
240	LED6	**	7V	100,000		LED	Excellent
480							

* Specify Lamp color when ordering

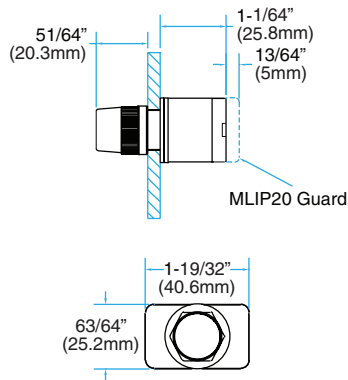
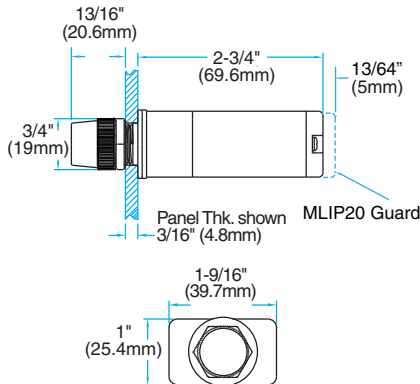
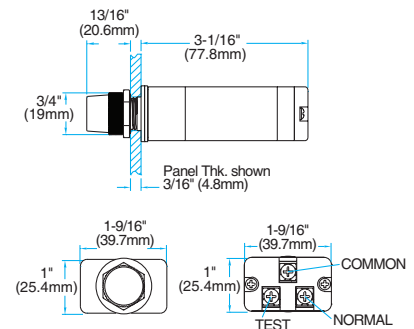
** Designates a "Special Order" lamp that is not readily available on the open market

*** Specifications for both integral and relampable multi-voltage lights

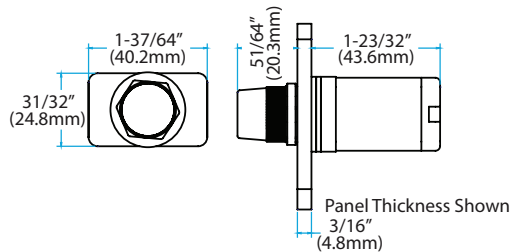
	UNITS	
DIELECTRIC STRENGTH (TERMINAL TO GROUND)		2200V for 1 Minute
ENVIRONMENTAL RATINGS		
Operators		Rated and Certified for use in Type 1, 2, 3, 3R, 4/4X, 12 & 13, and IP65
Operating Temperature	°F / °C	-40 to +131 / -40 to +55
Storage Temperature	°F / °C	-40 to +185 / -40 to +85
TERMINAL & WIRING CONSIDERATION		
AWG Conductor		22-12 CU (Copper Only)
Solid Strand Conductor†	mm²	.5 ~ 4
Fine Strand Conductor†	mm²	.5 ~ 4
Recommended Torque	Lb-in.	7 – 10
	Nm	0.8 – 1.0

†One or Two wires permitted per termination

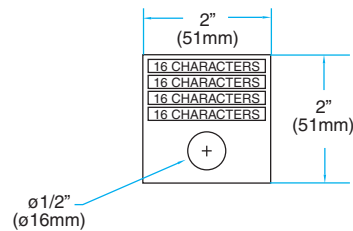
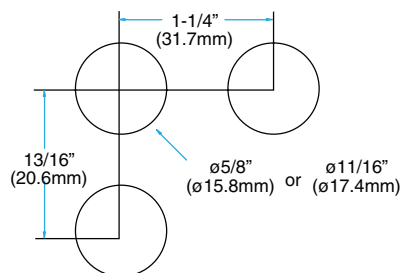
MATERIALS		
Operator Housings		Thermoplastic Polyester and Polyester Blends (UV Stabilized for outdoor use)
Structural Parts		Thermoplastic Polyester and Polyester Blends (UV Stabilized for outdoor use)
Terminal Supports		Thermoplastic Polyester and Polyester Blends (UV Stabilized for outdoor use)
Pilot Light Lens		High Impact Polycarbonate (UV Stabilized for outdoor use)
Seals		Neoprene Gaskets
Front Mounting Nut/Clamp Ring		Brass (Plated and Unplated)
Light Terminations		Brass (Plated and Unplated)
Terminal Screws		Plated Steel - Self Lifting Clamps
ROHS COMPLIANCE		For RoHS compliance documentation by product, refer to www.c3controls.com

**FULL VOLTAGE/RESISTOR
INDICATING PILOT LIGHT
(SHORT CASE)**

**RESISTOR/TRANSFORMER
INDICATING PILOT LIGHT
(LONG CASE)**

**DUAL INPUT INDICATING
PILOT LIGHT (LONG CASE)**

**120V & 125V RESISTOR
MULTI-VOLTAGE PILOT LIGHT**

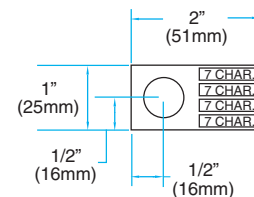
NON-RELAMPABLE & RELAMPABLE


LEGEND PLATE TEMPLATES

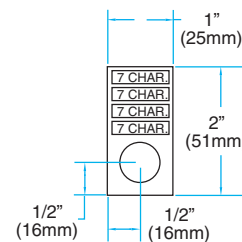
STANDARD 2" X 2" (MLLP)


MOUNTING HOLE PATTERN


HORIZONTAL 1" X 2" (MLLPH)



VERTICAL 2" X 1" (MLLPV)


MOUNTING GASKETS

PANEL THICKNESS IN DECIMALS	# OF GASKETS NEEDED 3/16" & 1/16" (4.8mm) (1.6mm)
less than .06	1 2
.06 - .120	1 1
.120 - .180	1 0
.180 - .240	0 2
.240 - .300	0 1

NOTE: Remove one 1/16" (1.6mm) gasket when using a legend plate.

- Mounting Hole in Panel - 5/8" (16mm).
- Fully-assembled operators come standard with one 3/16" (4.8mm) and two 1/16" (1.6mm) gaskets.