

LP-Series

ILLUMINATED INDICATORS

The LP-Series Illuminated Indicators are the perfect complement to the aesthetics, reliability and performance of our L-Series rocker switches. As a critical safety feature, the illumination alerts the operator of essential system functions or malfunctions, such as: Oil Pressure, High Temperature, Transmission or other fluid levels, Parking Brake or General System confirmations. The L-Series styling assures seamless integration into most any dashboard panel.



Product Highlights:

- Vibration, Shock, and Thermoshock Resistant
- 12 or 24 Volts
- Laser Etched or Lens Illumination
- IP67 Sealing

Typical Applications:

- On/Off-Highway Equipment
- Agricultural Equipment
- Construction Equipment



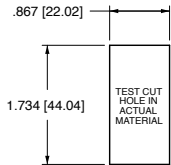
Electrical

Terminals	Brass or copper/silver plate 3/16" (4.76mm) & 1/4" (6.3mm) Quick Connect terminations standard.
Lighted	Incandescent - rated 10,000 hours LED - rated 100,000 hours 1/2 life (LED is internally ballasted for voltages to 24VDC)

Physical

Seals	Insert, base & bracket are sealed.
Base	Nylon 66 GF rated to 85°C with a flammability rating of 94VO.
Insert	Polycarbonate rated at 100°C.
Connector	Nylon 66 rated at 85°C. Polarized
Markings	Over 1000 pad printed or laser etched legends available
Bracket	Nylon 66 GF rated to 85°C

Mounting Specifications



MOUNTING HOLE

Panel Thickness Range
 Acceptable Panel Thickness
 .030 to .156 (.76mm to 3.96mm)
 Recommended:
 .030, .062, .093, .125 and .156

Environmental

Environmental	IP67, representing an index of protection as applied to electrical equipment in accordance with IEC 529, BS 5490, DIN 400 50 & NFC 20 010.
Corrosion Resistance	Mixed Flowing Gas MFG Class III per ASTM B-827 & B-845, Method H, with 3 years exposure.
Operating Temperature	-40°C to +85°C
Vibration 1	Per Mil-Std 202F, Method 204D Test Condition A 0.06 DA or 10G's 10- 500 Hz. Tested with VCH connector. Test criteria - No loss of circuit during test and pre and post test contact resistance.
Vibration 2	Resonance search 24-50 Hz 0.40 DA 50-2000 ±10 G's peak Results Horizontal Axis 3-5 G's max. Random 24 Hz 0.06 PSD-Gsq/Hz 60 Hz 0.50 100 Hz 0.50 200 Hz 0.025 2000 Hz 0.025 No loss of circuit during test; <10µ chatter.
Shock	Per Mil-Std 202F, Method 213B, Test Condition K @ 30G's. Tested with VCH connector. Test criteria - No loss of circuit during test, pre, and post test contact resistance.
Salt Spray	Per Mil-Std 202F, Method 101D, Test Condition A, 48 Hrs.
Thermal Shock	Per Mil-Std 202F, Method 107F, Test Condition A, -55°C to 85°C. Test criteria - pre and post test contact resistance.
Moisture Resistance	Per Mil-Std 202F, Method 106F, Test Criteria - pre and post test contact resistance.

*Manufacturer reserves the right to change product specification without prior notice.



1 SERIES

LP L-Series Illumination Plug

2 TERMINATION ³

- 1** .250 (8.35) x .032 (0.51) Quick Connect
- 3** .187 (4.75) x .032 (0.51) Quick Connect

3 ILLUMINATION

	LAMPS	ILLUMINATION	LAMP WIRED TO TERMINALS
A	1	—	10 (+) 8 (-)
B	1	—	10 (+) 8 (-)
	2	—	12 (+) 11 (-)
C	1	—	10 (+) 8 (-)
	2	—	12 (+) 8 (-)
E	1 & 2	Parallel	10 (+) 8 (-)
	1 & 2	Series	10 (+) 8 (-)

LAMP 1 LOCATED ABOVE TERMINALS 9 & 10 END OF BRACKET.
 LAMP 2 LOCATED ABOVE TERMINALS 11 & 12 END OF BRACKET.
 POSITIVE (+) AND NEGATIVE (-) SYMBOLS APPLY TO LED LAMPS ONLY.

4,5 LAMP (same coding for both selections) ²

Selection 4: specifies lamp 1 located above terminals 10 (+) & 9 (-).
 Selection 5: specifies lamp 2 located above terminals 12 (+) & 11 (-).

No lamp	0 (position 5 only)		6 12V	7 18V	8 24V
Incandescent	4 3V	5 6V	Red		
LED	Amber	Green	Red		
2VDC	L	F	R		
6VDC	M	G	S		
12VDC	N	H	T		
24VDC	P	J	V		

6 BRACKET COLOR

5 Black

7 INSERT COLOR ^{1,2}

- 9** Painted Black - Laser Etch
- A** Clear (Transparent)
- B** White (Translucent)
- C** Red (Translucent)
- D** Amber (Translucent)
- E** Green (Translucent)
- F** Blue (Translucent)

8, 9 STYLE (same coding for both selections)

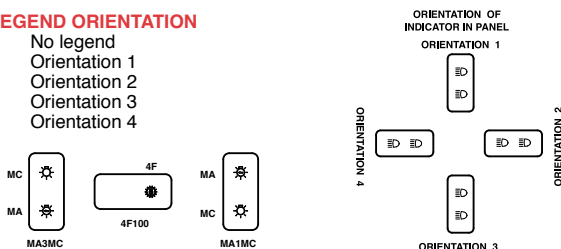
- Z** Not Painted (used with Insert Colors A-F)
- 5** Clear Laser Etch Background Color (used with Insert Color 9)
- A** White Laser Etch Background Color (used with Insert Color 9)

10 LEGEND OVER LAMP ¹

- 00** No legend
 - Laser Etched or Body Legends
- For legend options, visit us at carlingtech.com

11 LEGEND ORIENTATION

- 0** No legend
- 1** Orientation 1
- 2** Orientation 2
- 3** Orientation 3
- 4** Orientation 4

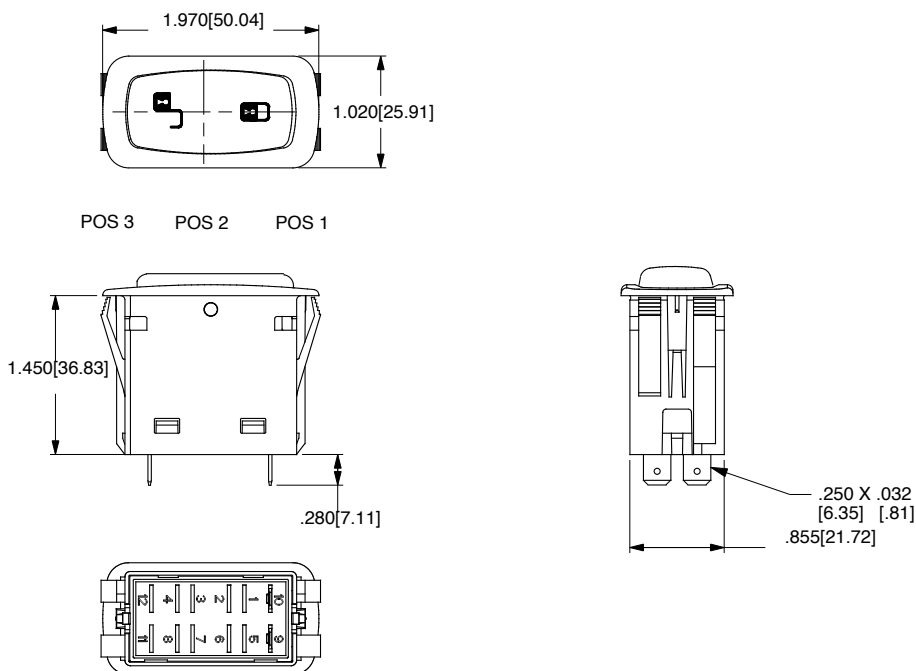


12 LEGEND OVER LAMP ²

- 00** No legend
 - Laser Etched or Body Legends
- For legend options, visit us at carlingtech.com

Notes:

- 1 To order separately, specify LPC and selection 7 code. Ex LPC-9
- 2 For LEDs, insert color must be clear, white or match color of LED.
- 3 For connector, specify part number LC2-01 (.187 tabs), LC3-01 (.250 tabs).



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To view all of Carling's environmental, quality, health & safety certifications please visit www.carlingtech.com/environmental-certifications

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