Littelfuse® | Carling Technologies®
A Littelfuse® Brand

LD-Series

Electronic Dimmer Controls

PRODUCT WEBPAGE

request sample, configure part





The LD-Series represents a dynamic breakthrough in dashboard technology, with its programmable circuitry, superior design, and unparalleled performance that affords seamless integration into most any dash panel. A variety of options, along with superior performance, functionality, and aesthetics assure compliance with the most stringent customer requirements.

1	2-10	12-24
Pole	Amps	VDC

Typical Applications

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

www.carlingtech.com 860.793.9281 sales@carlingtech.com

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Tech Specs

Electrical

Contact Rating	9-16VDC, 2-10Amp.
Terminals	6.3mm (0.250" TAB)
Contacts	solid-state load switching
Output	PWM 200 Hz.
EMI/EMC	SAE J1113 and SAE J1455 Conducted Transient Emissions RF Conducted Emissions Conducted Susceptibility: Test pulse #1 Test pulse #2 Test pulse #3a, #3b Load Dump: Test Pulse #5 Power lead Disturbance (Power Dips) AF Conducted Immunity Direct RF Injection (DRFI) Abnormal Vehicle Operating Conditions RF Radiated Emissions Radiated Immunity-Absorber Lined Chamber Electrostatic Discharge: Shipping / handling Electrostatic Discharge: Human Static Discharge
Dielectric Strength	000V @ 60 Hz was applied for each unit for 1 minute
Reverse Polarity	24VDC for 5 minutes

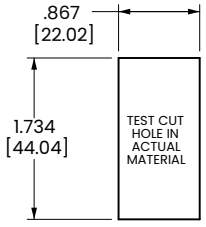
Physical

Function	Incremental for continuous dimming
Operation	Momentary
Lighted	LED's internally dimmed
Base	PBT Polyester V-0 flammability
Rocker	Polycarbonate or Nylon 6/6 Glass filled
Bracket	PBT Polyester V-0 flammability
Connector	Nylon 6/6 toughened
Actuation Force	300 gm ± 50 gm
Weight	52 grams

Environmental

Operating Temp.	-40°C to + 85°C
Vibration	Resonance Search Individual resonance searches were conducted with vibration applied along each of the three mutually perpendicular axes. 24-50 Hz 0.40DA 50-2000 Hz ± 10 G's peak Random Vibration The random vibration endurance test conditions were sequentially conducted in each of the three mutually perpendicular axes, 1hr/axis Freq. (Hz) PSD (G^2/Hz) 9.36 grms 24 Hz 0.06 60 Hz 0.50 100 Hz 0.025 1000 Hz 0.025 2000 Hz 0.025 During the test, all units were operated at a load current of 2A with 12.5VDC.
Salt Spray	Per Mil-Std 202F, Method 101D, Test Condition A. Duration 96 hrs.
Dust	Per Mil-Std 810C, Method 510.2. Air velocity 300 ± 200 Feet/Min., Test Duration 16 Hr.
Moisture Resistance	Per Mil-Std 202F, Method 106E. Test Criteria-pre and post test operation of switch.

Mounting Specifications



MOUNTING HOLE

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

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

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Ordering Scheme

Sample Part Number	LD	3	5	1	C	C	1	-	3	A	A	FE	-	1	FC
Selection	1	2	3	4	5	6	7		8	9	10	11		12	13

1. SERIES

LD Electronic Dimmer Control

2. RATING

1	4A, 12 volts	**A**	2A, 24 volts
2	7A, 12 volts	**C**	5A, 24 volts
3	10A, 12 volts		

3. DIMMING RATE

1	30 - 100% 8 positions	**A**	0 - 100% 11 positions
5	10 - 100% 10 positions		

4. TERMINATION

1 .230 TABS (5.84 mm)

5 & 6. ILLUMINATION

No lamp	**S**			
	Red	Amber	Green	
12V LED	**C**	**N**	**H**	
24V LED	**D**	**P**	**J**	

7. BRACKET COLOR

1	Black	**2**	White	**3**	Gray

8. ACTUATOR STYLE / COLOR

	Laser Etched	Black	White	Gray	Red
Rocker	**3**	**A**	**B**	**C**	**D**
Paddle	**4**	**J**	**K**	**M**	**N**

9 & 10. LENS COLOR

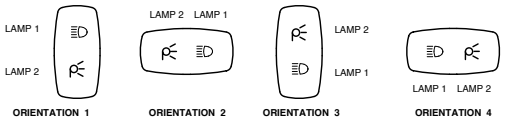
Z	No Lens					
Clear	White	Amber	Green	Red	Blue	Lens Style
1	**-**	**B**	**G**	**M**	**T**	Large Transparent
-	**7**	**C**	**H**	**N**	**U**	Large Translucent
3	**-**	**D**	**J**	**P**	**V**	Bar Transparent
-	**9**	**E**	**K**	**R**	**W**	Bar Translucent
5	**A**	**-**	**-**	**-**	**-**	Laser Etch

11. LEGEND #1

00 No legend **FC** Dim **FE** Bright
For legend options, visit us at carlingtech.com

12. LEGEND ORIENTATION

0 No legend
1 vertical (lamp 1 on top)
2 horizontal (lamp 1 on right)
3 vertical (lamp 1 on bottom)



13. LEGEND #2

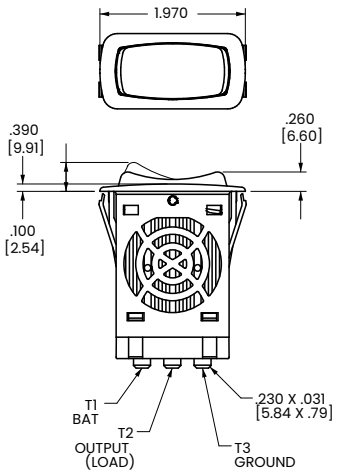
00 No legend **FC** Dim **FE** Bright
For legend options, visit us at carlingtech.com

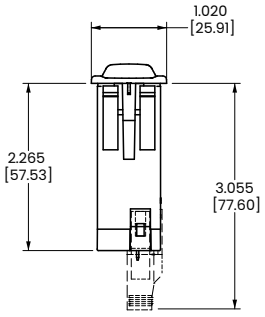
Notes:
1 Custom colors are available. Consult factory.

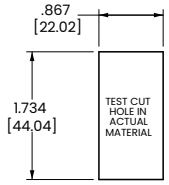
Configure Complete Part Number >

Dimensional Specs

inches [millimeters]

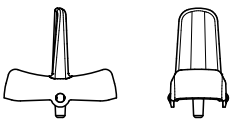




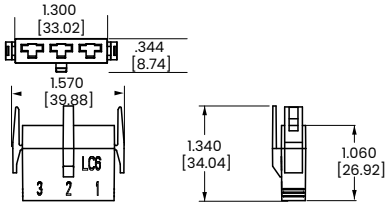


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PADDLE STYLE ACTUATOR



Q.C. SELECTION GUIDE			
COMPANY SERIES	PACKARD PART NO.	WIRE GAGE AWG	WIRE GAGE MM²
PACKARD METRI-PACK 630 SERIES TIN PLATED BRASS	12084590	12	3.0
	12052224	12	3.0
	12015870	16-14	2.0-1.0
	12015869	20-18	1.0-.80
	12020035	22-18 (2 REQ'D)	.80-.50(2 REQ'D)
	12052222	20-22	.50-.35

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About Carling

Founded in 1920, Carling Technologies is a leading manufacturer of electrical and electronic switches and assemblies, circuit breakers, electronic controls, power distribution units, and multiplexed power distribution systems. With six ISO9001 and IATF16949 registered manufacturing facilities and technical sales offices worldwide, Carling Technologies Sales, Service and Engineering teams do much more than manufacture electrical components, they engineer powerful solutions! To learn more about Carling please visit **www.carlingtech.com/company-profile**.

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

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