### 94 / 94LY-Series Alternators





#### 94LY-Series Alternators

Designed expressly for use on Yanmar 6LY diesel engines, these 12-volt and 24-volt alternators are engineered for use with external multi-stage voltage regulation, making it possible to tailor charging voltage to maximize safety and efficiency when replenishing a wide variety of battery types.

A 3.15" I.D. saddle style mount enables the 94LY alternator to replace the standard internally-regulated OEM alternator on Yanmar's 6LY engines, and on other engines with like mounting and belt configurations. Customwound rotor/stator combinations optimize output across the typical diesel powerband.

Isolated ground provides sure continuity to system ground. Included in the 94LY-Series alternator family are: 165-amp/12-volt; 210-amp/12-volt; and 140-amp/24-volt models. All models meet U.S. Coast Guard Title 33 standards for ignition protection.

Balmar's 94-Series, large case alternators deliver the size and charging output required to support battery banks of up to 800 amp hours at 12 volts or 400 amp hours at 24 volts.

Designed expressly for use on diesel engines utilizing a 2" Delco-style single foot mount, these 12-volt and 24-volt alternators are engineered for use with external multi-stage voltage regulation, making it possible to tailor charging voltage to maximize safety and efficiency when charging a variety of battery types.

Custom-wound rotor/stator combinations optimize output across the typical diesel powerband. Isolated ground provides sure continuity to system ground. Included in the 94-Series alternator family are:



165-amp/12-volt; 210-amp/12-volt; and 140-amp/24-volt models. All models meet U.S. Coast Guard Title 33 standards for ignition protection.

Volts	A		
	Amps	Mounting Style	Alternator Profile
12	165A	2" Single Foot (Spindle)	
12	210A	2" Single Foot (Spindle)	
24	140A	2" Single Foot (Spindle)	
	12	12 210A	12 210A 2" Single Foot (Spindle)

94-Series Alternator Models					
Model	Volts	Amps	Mounting Style	Alternator Profile	
94LY-12-165-IG	12	165A	3.15" I.D. Saddle (Hitachi Style)		
94LY-12-210-IG	12	210A	3.15" I.D. Saddle (Hitachi Style)		
94LY-24-140-IG	24	140A	3.15" I.D. Saddle (Hitachi Style)		

## **Balmar**

### 94 / 94LY-Series Alternator Specifications

Alternator Style: Large case, positive field excitation

Regulation: External p-type

Case Construction: Ventilated cast aluminum

Finish: White powdercoating

Cooling: Bi-directional external fan (94-Series), Uni-direction-

al, clockwise rotational fan (94LY-Series)

Bearings: Sealed ball bearing. Heavy duty radial (front).

Heavy duty needle (rear)

Available Outputs: 80A/12V, 110A/12V

Mounting Styles: 3.15" I.D. Saddle (Model 94LY), 2" Single

Foot (Model 94)

Mounting Foot Bore: 10mm (Model 94LY), ½" (Model 94)

**Grounding**: Isolated ground terminal

Positive Output: Threaded stud. Stud dimensions: M8 x 1.25

AC/Stator Output: 12 pulse.

Normal/Maximum Operating Temperature: 180°F/82°C /

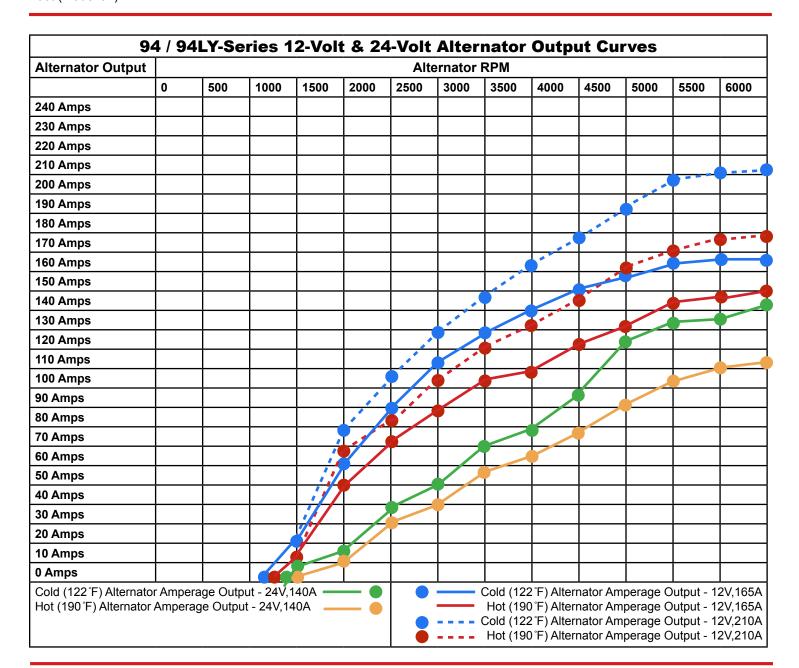
225°F/108°C

Low RPM Cut-In/Maximum Alternator RPM: 1320rpm /

15000rpm

Diodes +/-: 6 (positive), 6 (negative); 50A/200V

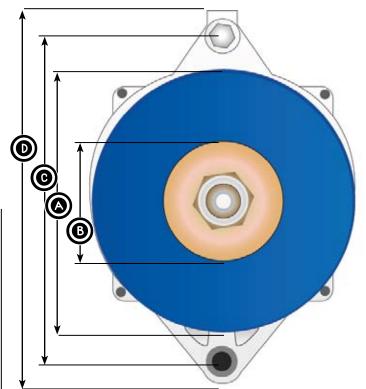
**Ignition Protection Rating: USCG Title 33** 

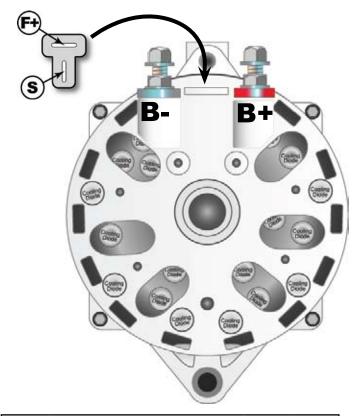


# **SERIES 94 ALTERNATOR DIMENSIONS**



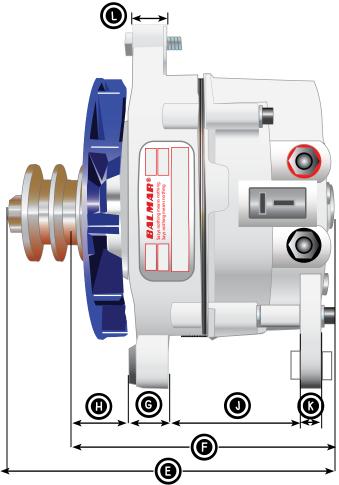
ITEM	DESCRIPTION	IN.	MM		
Α	Case Diameter	6.0	152.4		
В	Std. Pulley Diameter	2.9	73.7		
С	Bolt-to-Bolt Center	8.0	203.2		
D	Overall Height	9.0	228.6		
E	Overall Length	7.0	177.8		
F	Inside sheave center to case rear	6.0	152.4		
G	Mounting Foot Width	2.0	50.8		
Н	Inside sheave to mounting foot	1.0	25.4		
I	Front to inside sheave center	1.0	25.4		
J	Mounting foot to case rear	3.0	76.2		
K	Tensioning arm width	1.0	25.4		
ADDITIONAL ALTERNATOR MEASUREMENTS					
Dimension					
Mounti	ng Foot Bore	1/2" / 12.7mm			
Tension	ning Arm Bore	5/16" / 7.9mm			
Positive	e Output Post	5/16" x 18			
Field In	put Terminal	1/4" spade			
Ground	Post	5/16" x 18			
Stator/	Tach Output Terminal	1/4" spade			

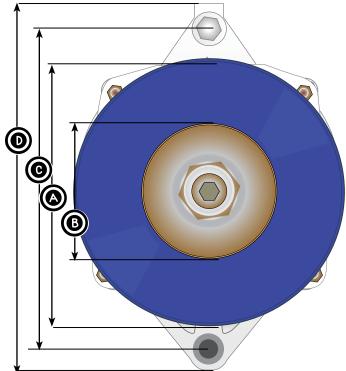


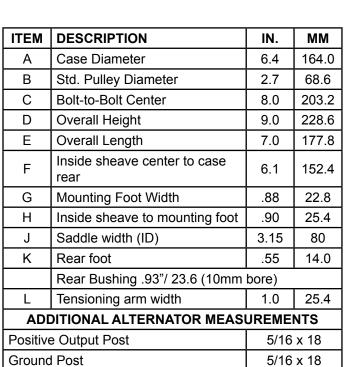


TERMINAL CONNECTION LOCATIONS			
B+	Positive Output Terminal		
S	Stator/Tach Output Terminal		
F+	External Field Input Terminal		
B-	Case Ground Terminal		

#### **SERIES 94LY ALTERNATOR DIMENSIONS**

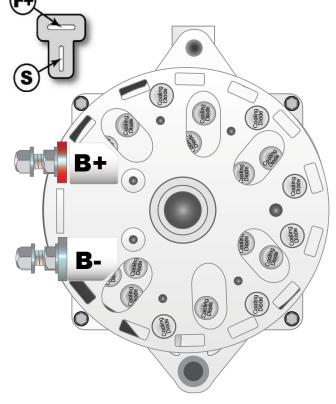






1/4" spade

Stator/Tach Output Post



TERMINAL CONNECTION LOCATIONS			
B+	Positive Output Terminal		
S	Stator/Tach Output Terminal		
F+	External Field Input Terminal		
B-	Isolated Ground Terminal		