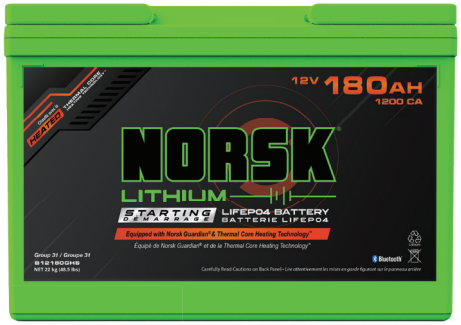
NORSK LITHIUM

THE CLEAR CHOICE FOR MERCURY® MOTORS

Norsk Lithium™ Marine Starting batteries have been evaluated and found to meet, and in some cases significantly exceed, all performance requirements for lithium starting batteries outlined in the Mercury® Marine Performance Bulletin 2022-19R1 released November, 2022.



ELECTRICAL SPECIFICATIONS	MERCURY® REQUIREMENTS FOR LITHIUM BATTERIES	NORSK LITHIUM™ 12.8V 180AH 1200MCA STARTING BATTERY	MEETS	EXCEEDS
Reserve Capacity (RC25 @ 80° F)	135 Minutes	**432 Minutes**		✓
DISCHARGE SPECIFICATIONS				
Minimum Marine Cranking Amps (MCA) Rating	800A for 8 sec, at 20°F (-7°C)	**800A for 10 Sec, at 20 F. / -7C**		✓
CHARGE SPECIFICATIONS				
Peak Charge Acceptance Rate	165A 20 – 130°F (-7 –55°C) for one minute	**165A 20 – 130°F (-7 –55°C) for one minute**	✓	
Maximum Engine Alternator Size	150A 20 – 130°F (-7-55°C)	**150A 20 – 130°F (-7-55°C)**	✓	
BMS Charge Voltage Cut-Off	14.8V	**14.8V**	✓	
MECHANICAL SPECIFICATIONS				
Ingress Protection (IP) Rating	IP67 or greater	**IP67**	✓	
Chemistry / Format	Lithium Iron Phosphate Designed for Marine Cranking Use	**Lithium Iron Phosphate (LiFeP04) Designed for Marine Cranking Use**	✓	

MERCURY

Service Bulletin

Bulletin No. 2022-19R1

Circulate to: ☑ Sales Manager ☑ Accounting ☑ Service Manager ☑ Technician ☑ Parts Manager

Lithium-Ion Use Approval for Outboards

NOTICE
Revised November 2022. This bulletin supersedes the previous bulletin number 2022-19 September 2022.
This bulletin revision adds the V10 Verado outboard to the models affected.

Scope

Worldwide

Models Affected

Models Covered	Serial Number
2.1L 75-115hp FourStroke, Pro XS®, and SeaPro™	All
3.0L 150hp FourStroke, Pro XS, and SeaPro	All
4.6L V8 and 3.4L V6 175-300hp FourStroke, Pro XS, SeaPro, and Verado®	All
2.6L L6 200-400hp Pro and Verado	All
7.6L V12 500-600hp SeaPro and Verado	All
5.7L V10 350-400hp SeaPro and Verado	All

Situation

The engine models listed above will be permitted to use a lithium iron phosphate battery designed for engine cranking. The battery used must meet the following specifications.

Chemistry/format	Lithium iron phosphate designed for marine cranking use
Minimum cranking amps	800 A for 8 second minimum at 20 °F (-7 °C)
Peak charge acceptance	165 A 20-130 °F (-7-55 °C) for one minute
Max charge/alternator size	150 A 20-130 °F (-7-55 °C)
Max charge voltage/alternator output	14.8 V
Reserve Capacity (RC25 @ 80 °F)	135 minutes
Ingress Protection (IP) rating	IP67 or greater

NOTE: *Use at temperatures below 32 °F (0 °C) may require optional equipment such as a battery heater not supplied by Mercury. Consult the battery manufacturer for assistance with cold weather use.*

RELiON's® RB100-HP battery has been evaluated and meets these requirements for lithium-ion engine starting batteries.

https://relionbattery.com/products/lithium/rb100-hp

Other lithium-ion cranking batteries may be used if their battery ratings and data sheet meet these specifications. Please contact the battery manufacturer for more information.

Frequently Asked Questions

1. Can I use a lithium-ion cranking battery with current product outboard models not listed?