

# MOTOR SIZE

To choose a trolling motor, determine how much power you need (thrust level and voltage) and what size shaft you need.

## › Thrust

How much power do you need? Trolling motor power is measured in pounds of thrust, and boat weight is key when determining how much thrust you need.

### RECOMMENDATION:

You need at least 2 pounds of thrust for every 100 pounds of fully loaded boat weight (people and gear included). If things like wind or current are major factors where you fish, you'll want a little extra thrust.

## › Voltage

Our trolling motors require one to three batteries on your boat based on their power level. You'll need one battery for every 12 volts in your trolling system.

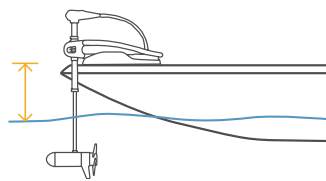
### USE THIS CHART TO HELP DETERMINE HOW MUCH POWER YOU NEED.

BOAT WEIGHT (LB)	MAX BOAT LENGTH (FT)	RECOMMENDED MINIMUM THRUST LEVEL (LB OF THRUST)	BATTERIES NEEDED
1,500 or less	14'	30	1 battery (12v)
2,000	17'-18'	40-45	1 battery (12v)
2,500	20'-21'	50-55	1 battery (12v)
3,000-3,500	23'	70	2 batteries (24v)
4,000	25'	80	2 batteries (24v)
4,500 or more	25'+	101-112	3 batteries (36v)

## SHAFT LENGTH

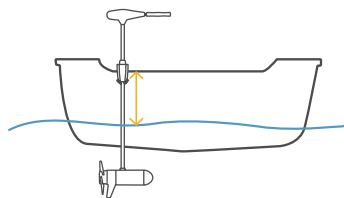
Choosing the proper shaft length is important; if it's too short, the prop won't be sufficiently submerged. We recommend submerging the center of the motor section at least 12 inches.\*

### › Bow Guide



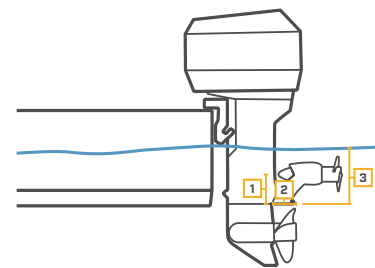
BOW TO WATERLINE	RECOMMENDED SHAFT LENGTH
0" to 10"	36"
16" to 22"	42" to 45"
22" to 28"	48" to 52"
28" to 44"	54" to 72"
45"+	87"

### › Transom Guide



TRANSOM TO WATERLINE	RECOMMENDED SHAFT LENGTH
0" to 10"	30"
10" to 16"	36"
16" to 22"	42"
Over 22"	Consult Factory

## ENGINE MOUNT GUIDE



- Cavitation plate to waterline 13" (minimum)
- The cavitation plate must be at least 4.5" long and 6" wide in order to accommodate an Engine Mount motor

**1** = 7-1/4"

**2** = 3" (80EM/101EM/160EM) | 3-3/4" (55EM)

**3** = 13" minimum

\* Add 5" to waterline measurement for fishing in rough water. Optimal operating mode is with engine trimmed all the way down.

Add 9" for bow-mount Hand Control motors.

We recommend that the propeller tip is submerged at least 12" below the water line to avoid churning or agitation of water surface.

TO LEARN MORE ABOUT WHAT TROLLING MOTOR IS RIGHT FOR YOU, PLEASE VISIT OUR [TROLLING MOTOR BUYING GUIDE](#) FOR MORE INFORMATION ON BATTERIES AND BATTERY CHARGERS VISIT [MINNKOTAMOTORS.COM](#)