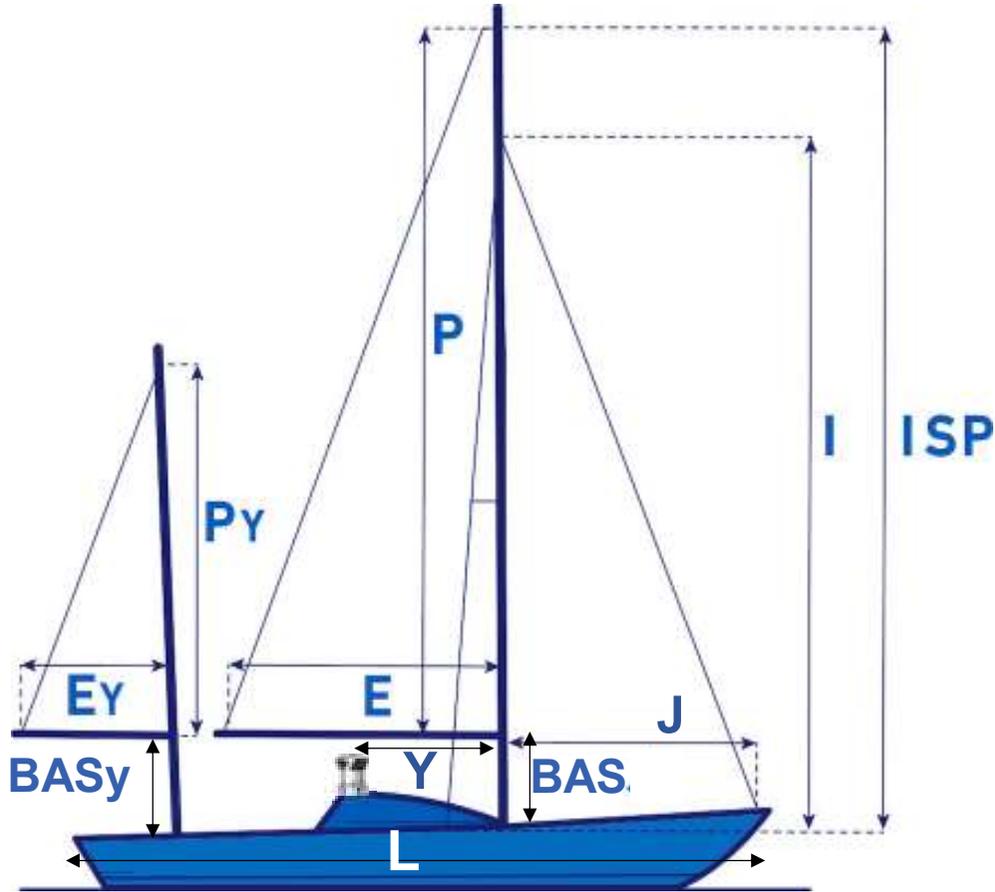


CALCULATING RIGGING LENGTHS

You can choose a suitable rope for your application on Alpha-Ropes website. Go to “By application” on each range of rope

Once you have chosen a suitable rope for your application, you need to know what length to cut your new sheet or halyard. Getting the right length is important!. If your sheet or Halyard is too short, maneuvers can be a nightmare! Also, if the rope is too long, it increases the chances of getting tangle, adds overall weight, and is just a waste of money! The simplest solution is to copy the existing lines in terms of length and terminations, if they are right. This can be an easy task on Sheets, but more difficult on Halyards.

Most of the lines onboard can be determined from basic rig data, that you can find on the boat catalog or rating certificate. Is also commonly used by sailmakers to determine sail sizes. Below you can find a common sail plan, and the formulas to determine the Genoa, Halyards, Reefs and Mooring lengths.



P/Py - Main/Mizzen hoist length

E/Ey - Main/Mizzen Foot Length

$BAS/BASy$ - Main/Mizzen gooseneck to deck level

Y -Hallyard winch to mast

I -Height of forestay above deck

ISP - Height of spinnaker hallyard above deck

J - Front of the mast to the base of the forestay

L - Length overall

Hallyards			
Main 1:1*	$2.1 \times P + BAS + Y + 1$	Main 1:1*	$2.1 \times P + 2$
Main 2:1*	$3.2 \times P + BAS + Y + 1$	Main 2:1*	$3.2 \times P + 2$
Genoa*	$2.1 \times I + Y + 1$	Mizzen 2:1*	$2.1 \times Py + 2$
Spy/Code 0/Gen*	$2.1 \times ISP + Y + 2$	Genoa*	$2.1 \times I + 1$
Staysail*	$2.1 \times I + Y + 1$	Spy/Code 0/Gen*	$2.1 \times ISP + 2$
		Staysail*	$2.1 \times I + 1$
*NP Halyard winch on coach roof		*NP Halyard winch on mast	
Sheets			
Jib	L	Genoa	$1.5 \times L$
Gennaker	$2.5 \times L$	Spinnaker sheet/Guy	$2.1 \times L$
Other			
Main Reef 1*	$0,24 \times P + E + BAS + Y + 2$	Main Reef 2*	$0,48 \times P + E + BAS + Y + 2$
Mizzen Reef 1*	$0,24 \times Py + Ey + BASy + Y + 2$	Mizzen Reef 2*	$0,48 \times Py + Ey + BASy + Y + 2$
Mooring(Bow/stern)	$0.5 \times L$	Mooring(Spring)	L
*N.B. Assumes Reef 1 at 12% of P / Ask your Sailmaker		*N.B. Assumes reef 2 at 24% of P/Ask your Sailmaker	

Each of the above formulas, includes some margin of error, however if in doubt, it is better to add on 1-2 meters, than try to cut it too short!