

## Harken Re-designing The Mega Yacht G Vang Line

Harken introduced the G style Mega Yacht vangs as a way to solve the issue of buckling as the compression load have increased over time with the use of heavier furling and park avenue booms on Mega Yachts. Harken engineers solved this issue by eliminating the load on the rod and transferring it to an outer housing tube, therefore significantly increasing the push force for each size vang.

The new design incorporates a more streamlined look. The original design included a bulbus lower end consisting of the inner and outer housing tubes, the new design streamlines the tubes to make the whole package basically the same diameter.

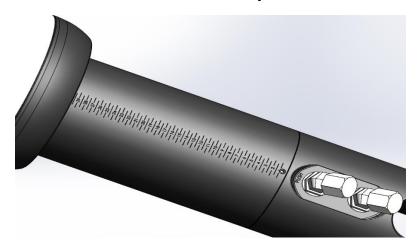




The new design is based around the standard 250 bar working pressure of most modern superyacht hydraulic systems, it has a max pressure of 275bar. The Mega Yacht vangs have the same theoretical push and pull load, so we have sized then new vangs based on these loads. So, our 65T vang can generate 65T of both push and pull load. The max push may be limited based on the PCLC as longer PCLCs will bring into play the buckling of the extension tube, which can limit the max push load Harken allows.

The new Mega Yacht vang has two methods of position indicating that can be added as options. The first is a laser PI built into the vang. This option allows for an electronic solution that can be read through the yacht's instrumentation. The second method is a manual ruler engraved into the lower end. This option allows a crew member to stand at the base of the mast and manually monitor position while furling.

## **Manual Ruler Option**



The standard finish on these vangs is a black alloy hard coat, but Harken does offer painting options to match mast and boom paint color. We are also currently design carbon extension tubes and will be supplying two vangs with carbon extension tubes in 2021.

Standard end fittings are clevis, but Harken can customize ends to optimize to mast maker's boom and mast attachments. All mega yacht vangs come with the boom end fitting having a +/- 25mm adjustment to the PCLC.

Please contact Harken hydraulic department for more information on these vangs for your specific project.