

G&O Vibration Compensator ECO Design



– Eliminating the source of vibration

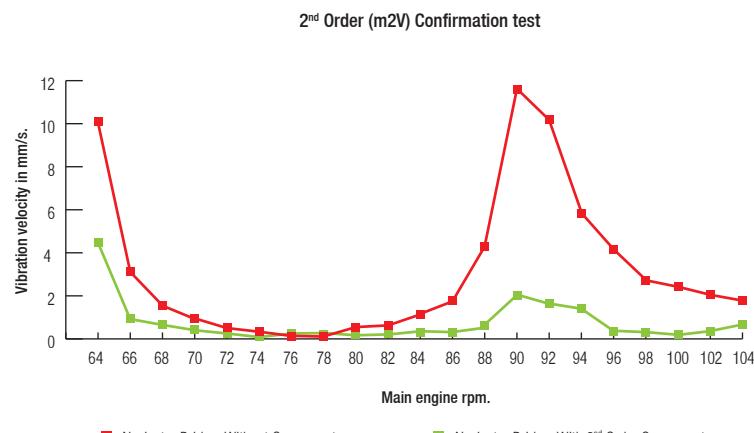
GERTSEN & OLUFSEN



Electrically driven moment compensator



2nd order vibration compensator



Gertsen & Olufsen Vibration Compensators are world leaders in eliminating and reducing unwanted vibrations of ships and diesel power plants, before it is transferred into other elements.

Guide force moments, unbalanced moments, axial thrust, hull beam and propeller induced vibrations are well-known issues related to low speed two stroke diesel engine. Vibrations often lead to limited engine performance, cracking, reduced mechanical strengths, abnormal wear on rotating machinery or failure of electronic components.

The servo driven moment compensator reduces or even eliminates the source of vibration due to the unique technology that creates an exact opposite direction with a counterforce identical to the force induced by the engine. The imbalance is neutralized and no stress or vibrations will be transferred into engine foundations and neighbouring structures.

KEY FEATURES INCLUDES

- Size of force can be adjusted from 0-100%, to get exact counterforce required. Adjustment range 1 kg.
- Direction of force can be adjusted from 0 to 360°, to get precise direction of force +/- 1°.
- Unique frequency controller enables a fast and precise phase synchronization. 3000 pulses per engine rpm.
- Recommended by leading classification societies, ship-owners, engine- and shipbuilders worldwide.
- ECO Design – leading excess and break energy back to the net.

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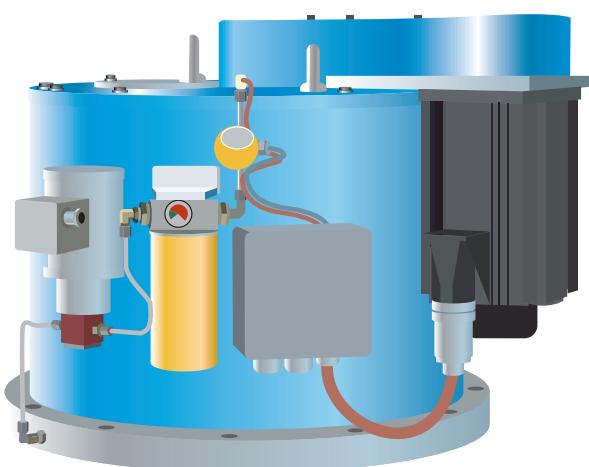
Eliminating unwanted vibrations and improving engine performance and comfort

COMPENSATOR FACTS

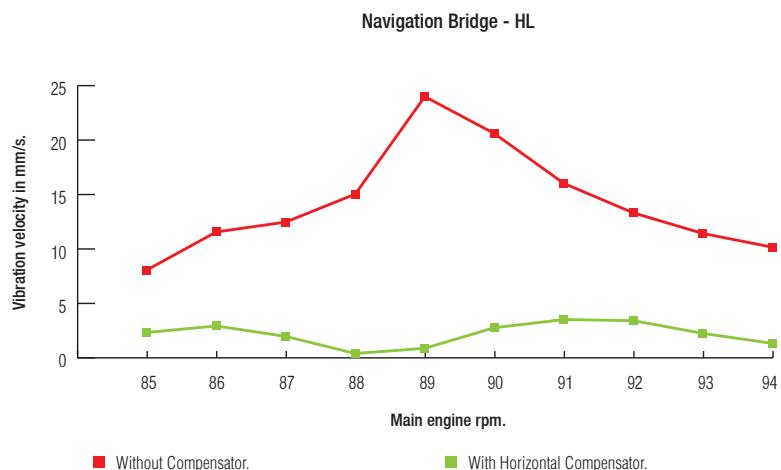
- Improved engine performance and comfort.
- Low energy consumption and a better fuel economy.
- Independent operations – use when needed.
- Easy adjustment of force and direction.
- Easy installation, without operations interference.
- Reduced maintenance costs.
- No change to engine or engine room.

Whether a resonance is present, reduction of external moments and guide force moments means better and smoother running engines. The vibration compensator can be used as a preventive maintenance tool reducing wear on most engine related equipment as well.

Installing the vibration compensator is a relatively simple project that does not interfere with the operation of the vessel. Once installed, no further adjustments or operational attendance are required.



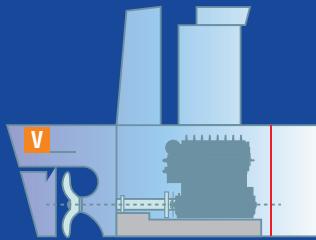
Horizontal vibration compensator



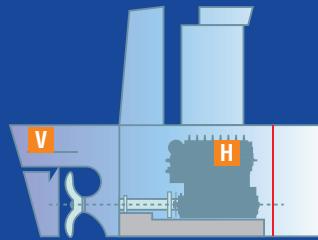
G&O COMPENSATOR RANGE

| Type | Version/Design | Moment |
|---------|-----------------|------------|
| C-125V1 | ECO Design | Vertical |
| C-200V1 | ECO Design | Vertical |
| C-600V1 | ECO Design | Vertical |
| C-10H1 | Standard Design | Horizontal |
| C-20H | Standard Design | Horizontal |
| C-40H | Standard Design | Horizontal |
| C-65H | Standard Design | Horizontal |
| C-90H | Standard Design | Horizontal |

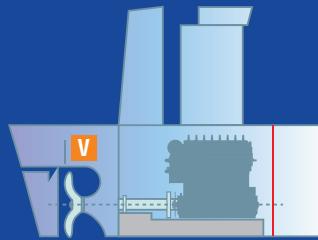
Simple and easy installation where the compensator is needed



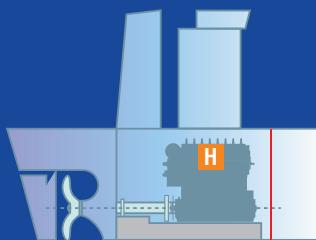
- External 2nd order moment: A vertical compensator is placed in the steering gear room.



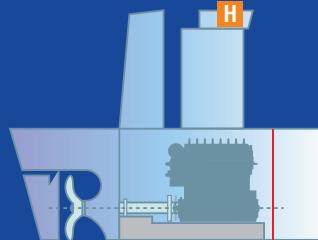
- External 2nd moment and H-moments: 2nd order compensator in combination with horizontal compensator.



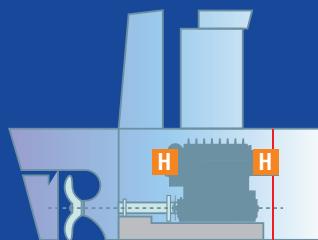
- Propeller induced vibrations: 2nd order compensator above the propeller.



- Guide force H-moments: A horizontal compensator is placed directly on the engine gallery.



- Hull and propeller vibrations: A horizontal compensator is placed in vessel structure.



- X-moment, guide force: 2 counter rotating horizontal vibration compensator.

